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2 December 2022

Sally Monk
Principal Planner – Industry Assessments
Department of Planning and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Dear Sally

**Subject: Woodlawn Advanced Energy Recovery Centre (SSD 21184278)
Submission on the Environmental Impact Statement**

A review of the Environmental Impact Statement for the proposed Woodlawn Advanced Energy Recovery Centre been undertaken and a report was considered at an Extraordinary meeting of Council held 29 November 2022. At this meeting, Council resolved:

Council makes a written submission to the NSW Department of Planning and Environment in relation to Development Application SSD-21184278 requesting that the following actions be undertaken by the applicant prior to an assessment being finalised:

- a. In accordance with the NSW EPA's Energy from Waste Policy Statement, the applicant must demonstrate how "community acceptance to operate such a process has been obtained". The EIS in its current form does not demonstrate how this has been achieved, which has been echoed by submissions provided to Council by the community. The proposal is therefore not in accordance with the Policy.***
- b. Further details are to be furnished in relation to odour management for existing operations, in particular a demonstrated period of substantial longevity (i.e. at least 12 months) of reduced odour complaints, as well as a demonstration of how historic complaints compare to complaints currently being received (eg. frequency, number of complaints, etc.).***
- c. The project must be assessed in its entirety, which should include all ancillary infrastructure such as transmission lines.***
- d. All available performance data for the Staffordshire reference plant is to be made available, for the period commencing at the commissioning of the plant through to the most recent return period. In addition to making this data available, an accompanying report should also be provided that assesses the theoretical compliance of the Staffordshire plant against the performance thresholds of the NSW EfW Policy Statement.***
- e. Further information is required in order to demonstrate the absolute capacity of the proposed plant.***
- f. Further information is required demonstrate how chlorine levels will be minimised in waste feedstock.***

- g. Further details are to be provided in relation to processes that will be put in place to manage waste received at the transfer stations in Sydney and to remove contaminants that would affect the EfW process.***
- h. Full details are to be provided in relation to the required emissions monitoring system.***
- i. Full details are to be provided in relation to the cumulative impacts of emissions compared with background conditions.***
- j. Further detail is required on how negative pressure will be maintained and not impacted by required operational processes, such as waste being brought into the tipping hall, and therefore prevent the escape of additional odour into the atmosphere.***
- k. The results of DPE's independent public health assessment must be known prior to making any further assessment in relation to public health. Council also believes that it is entirely appropriate to reexhibit the EIS upon completion of the assessment, with the amended documentation to contain the results of the independent assessment***
- l. Further information is required in order to demonstrate how compliance with the EfW Policy Statement will be monitored and managed.***
- m. Better justification is required in order to demonstrate to the community why the emission of any pollutants into the local atmosphere as a by-product of the EfW process is reasonable.***
- n. Full and specific details in relation to air quality monitoring, including the number and location of air quality monitoring stations is required.***
- o. A commitment from the applicant is required that would make all air quality monitoring data readily available to the public in real time.***
- p. The Greenhouse Gas Assessment must be revised to identify and include all onsite processes that contribute to greenhouse gas emissions, including the production and transport of chemical additives used to support the proposed EfW process, such as ammonia and Portland cement.***
The revised assessment should also consider the impact of greenhouse gas emissions at a local level compared to current operational conditions.
- q. The Noise Impact Assessment be reviewed with respect to the impact of temperature inversions on construction noise, and the ability for this noise to be conveyed to "downstream" sensitive receivers including the village of Tarago.***
- r. The Noise Impact Assessment must be reviewed to contain a commitment for noise minimisation and impact mitigation for the local community. It is unacceptable to state that feasible and reasonable mitigation options will be considered where practicable.***
- s. In recognition of the broad impact to road maintenance and safety being caused by current operations, Veolia consider entering into a Planning Agreement with Council that reflects the true cost of maintenance and renewal of its local road assets, including any additional costs borne by Council as a result of construction traffic. The fundamental aspects of a Planning Agreement shall be identified by an independent expert with appropriate qualifications and experience.***

- t. *The traffic data utilised within the Traffic Impact Assessment is flawed and must be reviewed to utilise current data that is not affected by external influences such as COVID-19 lockdowns and restrictions. The review must also address the identified need for the climbing lane between Crisps Creek and Collector Road, as well as any ancillary heavy vehicle traffic, such as the importation of cover material and the potential export of bottom ash products.*
- u. *Further investigation of construction traffic alternatives must be undertaken, including the use of the Crisps Creek Intermodal Facility to facilitate the movement of construction materials and heavy infrastructure to site.*
- v. *A further traffic impact assessment is required in order to identify the cumulative impact of additional construction traffic on the local and regional road networks.*
- w. *Prior to any work being undertaken with respect to access and/or works in the Collector Road road reserve, an approval under s138 of the Roads Act must be obtained from Council. Alternatively, Council would prefer to see the existing main entry to the Eco Precinct upgraded for use by all users of the site, including Bioreactor and ARC feedstock deliveries.*
- x. *Details of the Engineering specification for the proposed encapsulation cell liner are to be provided for further assessment.*
- y. *Detailed actions are to be outlined in relation to the event of private neighbours' bores being impacted by increased water use from the proposal.*
- z. *Provide a water balance to demonstrate that reducing the capacity of ED1 will allow continued management of surface water on site.*
- aa. *A comprehensive and region-wide monitoring system is required across soil, water and air quality should the project proceed.*
- bb. *The applicant is to provide a photographic record of the site that includes buildings and artefacts such as the site machinery. The photographic record is to be in accordance with the NSW Heritage Office guidelines "Photographic recording of heritage items using film or digital capture."*
Hard and soft copies of the photographic record are to be provided to Goulburn Mulwaree Library
- cc. *The plant species used for screening purposes should be selected from the Native Plant community found in the vicinity of the site.*
A mixture of trees, shrubs and groundcovers should be used. This will provide an additional environmental benefit as well as screening the development.
- dd. *A long term planting maintenance schedule should be provided and adhered to. The maintenance plan should contain a schedule of works that includes an annual time line for weed management, plant replacement where needed, monitoring for pests and diseases, and watering etc.*
- ee. *The context should be considered beyond the boundary of the Veolia owned land.*

- ff. View analysis should be undertaken which adequately considers the visual impact of the design and the view points from which it could be observed within the wider landscape.**
- gg. That the Accommodation Strategy be prepared and considered with the EIS prior to approval of the project. That the Accommodation Strategy is to include options and feasibility in relation to the provision of housing for construction workers to be purchased or erected by the proponent (whether on or off site) to avoid placing additional stress on the local short term or private rental accommodation markets. Options could include the development of boarding house type accommodation or group homes for construction workers in Goulburn, which would have the added benefit of providing additional social infrastructure once the project is completed.**
- hh. The independent assessment of health impacts undertaken as a part of the State's EIS assessment be published and included with a re-exhibition of the EIS to reassure the public that a thorough assessment of all health impacts has been undertaken.**
- ii. The proponent work in consultation with Council and the existing Tarago Community towards identifying local projects for funding from the Veolia Trust and assist the local community in relation to preparing grant applications.**
- jj. As a minimum a Section 7.12 levy be applied to the project under the provisions of the Goulburn Mulwaree Local Infrastructure Plan 2021. Should the proponent consider entering into a Planning Agreement with Council possible additional maintenance or upgrade of Collector Road and Bungendore Road be considered.**
- kk. The project is likely to have an impact on house rentals given the size of the construction workforce and the three-year construction period. The economic assessment should consider the impact of the project on the availability and affordability of private rental accommodation and the impact that this may have on other significant employment sectors/industries and their ability to attract/house employees. Consideration should also be given to the cumulative impact on housing affordability and availability resulting from concurrent State significant projects.**
- ll. Appendix E relies on statements and assumptions that are unsupported by reference material. To enable a thorough and complete peer review to be undertaken Appendix E is to be properly and correctly referenced in order to establish how the author has arrived at the conclusions asserted. Furthermore, all unsupported arguments and discussion must be removed.**
- mm. Appendix E makes assumptions on the likely waste outputs based on the comparison with other EfW plants, however, data used to justify the argument that the "input waste stream will be generally the same" in fact demonstrates that the reference data is dissimilar. Consequently, a different waste input stream would result in a different waste output. Therefore, Appendix E cannot be used to support the likely waste outputs because it is modelling different data. A reevaluation of the waste input model is required.**
- nn. Appendix E establishes that the preferred immobilisation technique is mixing the Hazardous Waste with Portland Cement, however, Appendix E**

has not established the likely number of trucks required to deliver to site the necessary Portland Cement quantities to immobilise the five day best and worst case average. Therefore, without this information the traffic impact assessment is not properly informed.

- oo. While Appendix E discusses APCr, it does not discuss the operation of air pollution control systems or the input quantities of chemicals and liquids required to scrub the exhaust gases before being ejected into the atmosphere. The input chemicals and liquids contribute to the APCr waste outputs. However, Appendix E has not established the likely number of trucks required to deliver to site the necessary chemical sand liquids. Therefore, without this information the traffic impact assessment is not properly informed.*
- pp. Appendix E is concentrated solely on ash management. There is no assessment of the waste gases that are not captured by the APCr, therefore, ejected into the surrounding atmosphere. The EIS needs to include an evaluation of the efficiency of the APCr and the percentage of gases that will not be captured by the APCr.*
- qq. The use of Portland cement as a binding agent is still to be confirmed subject to the completion of trials. This demonstrates that not all processes associated with the project have been soundly proven. The applicant must therefore either demonstrate that the proposed process works, or alternatively find other means (that are demonstrated to be safe and environmentally neutral) of managing the ACPr.*
- rr. If consent is granted to the proposed development, a condition is imposed in accordance with the section 7.2.1 of the Fire and Rescue NSW fire safety guideline "Fire safety in waste facilities" that clause E1.10 and E2.3 of the National Construction Code is to be complied with to the satisfaction of Fire and Rescue NSW.*
- ss. If consent is granted to the proposed development, that the consent document includes the recommendations of the Fire Safety Study prepared by Riskcon Engineering Pty Ltd dated 10/06/2022 found in Appendix FF of the EIS.*
- tt. If consent is granted to the proposed development, a condition is imposed that a Bushfire Emergency Management and Evacuation Plan is prepared by the operator and is consistent with the NSW RFS publication A Guide to Developing a Bush Fire Emergency management and Evacuation Plan and AS3745:2010 - Planning for emergencies in Facilities.*
- uu. If consent is granted to the proposed development, a condition is imposed that includes the recommendations of the Bushfire Protection Assessment prepared by Travers Bushfire & Ecology dated 14 July 2022 found in Appendix X of the EIS.*
- vv. The EIS fails to properly or adequately address Clause 2.19(2) of State Environmental Planning Policy (Resources and Energy) 2021 in relation to the compatibility of the proposal with the existing adjacent Develop mine. Proper consideration is required to be demonstrated*
- ww. Further consideration of the following provisions of the Goulburn Mulwaree Local Environmental Plan 2009 is required to be demonstrated:*

- a. ***IN3 zone objectives - In particular concern is raised regarding the objectives 'To minimise any adverse effect of heavy industry on other land uses' and 'To provide suitable areas for those industries that need to be separated from other land uses.'***
- b. ***Clause 7.1A Earthworks – the reference in Appendix J (8 Assessment of impacts) doesn't discuss earthworks.***
- c. ***clause 7.2 Terrestrial biodiversity – the EIS or BDAR do not properly or sufficiently address clause 7.2(4). The consent authority cannot grant development consent (jurisdictional requirement).***
- xx. ***Meaningful commentary towards Section 4.15(1)(e) of the Environmental Planning & Assessment Act 1979 (public interest) is required***
- yy. ***Appendix R relies on recommendations derived from modeling the Life Cycle Analysis against the guidelines for bio-energy projects, however, the proposal does not meet the definition of a bioenergy facility per se as it relies solely on burning MSW. The proposal by definition is an EfW facility and not a bioenergy facility, therefore, it is inappropriate to assess the proposal against the guidelines for bioenergy. Furthermore, there are no comparable operations currently operational in the region. Accordingly, Council requires a new Life Cycle analysis to be prepared based upon the local context and under the definition of an EfW facility, not a bioenergy facility.***
- zz. ***The proponents should identify cleared and degraded areas on other parts of the site that could be restored to PCT 1191. There are ample opportunities for this to occur, which would not only mitigate the proposed loss of native vegetation but would also result in a long term overall gain in biodiversity values in the local area.***
- aaa. ***The proposed ARC is located within Lot 2 DP 1179305 and it appears that there is an area comprising approximately 20 hectares in the eastern part of the lot (see diagram next page) that would be suitable for rehabilitation and restoration of native vegetation. A project such as this would also assist with screening the proposed ARC from the Collector Road.***
- bbb. ***Suitable alternatives to the project must be identified, thoroughly assessed and genuinely considered, and the EIS consequently re-exhibited with the findings prior to any assessment being completed.***

A copy of the staff report is attached to this letter. Please note a separate letter has been prepared to specifically advise of Council's objection to the proposal.

If you require any further information, please contact me on (02) 4823 4486.

Yours sincerely



Aaron Johansson
Chief Executive Officer
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Mobile 0448 666 800
Email council@goulburn.nsw.gov.au

7.1 VEOLIA ADVANCED ENERGY RECOVERY CENTRE - COUNCIL SUBMISSION TO THE ENVIRONMENTAL IMPACT STATEMENT

Authors: Director Planning & Environment

Director Utilities

Authoriser: Aaron Johansson, Chief Executive Officer

Attachments: Nil

Link to Community Strategic Plan:	4. Our Environment EN4 Maintain a balance between growth, development and environmental protection through sensible planning.
Cost to Council:	Nil
Use of Reserve Funds:	Nil

RECOMMENDATION

That:

1. The report of the Director Planning & Environment and the Director Utilities be received.
2. Council provide a letter to the NSW Department of Planning and Environment that states its formal objection to the proposed Veolia Advanced Energy Recovery Centre to be constructed at 619 Collector Road, Tarago.
3. Council makes a written submission to the NSW Department of Planning and Environment in relation to Development Application SSD-21184278 requesting that the following actions be undertaken by the applicant prior to an assessment being finalised:
 - a. *Further details are to be furnished in relation to odour management for existing operations, in particular a demonstrated period of substantial longevity (i.e. at least 12 months) of reduced odour complaints, as well as a demonstration of how historic complaints compare to complaints currently being received (eg. frequency, number of complaints, etc.).*
 - b. *The project must be assessed in its entirety, which should include all ancillary infrastructure such as transmission lines.*
 - c. *All available performance data for the Staffordshire reference plant is to be made available, for the period commencing at the commissioning of the plant through to the most recent return period. In addition to making this data available, an accompanying report should also be provided that assesses the theoretical compliance of the Staffordshire plant against the performance thresholds of the NSW EfW Policy Statement.*
 - d. *Further information is required in order to demonstrate the absolute capacity of the proposed plant.*
 - e. *Further information is required demonstrate how chlorine levels will be minimised in waste feedstock.*
 - f. *Further details are to be provided in relation to processes that will be put in place to manage waste received at the transfer stations in Sydney and to remove contaminants that would affect the EfW process.*
 - g. *Full details are to be provided in relation to the required emissions monitoring system.*
 - h. *Full details are to be provided in relation to the cumulative impacts of emissions compared with background conditions.*

- i. *Further detail is required on how negative pressure will be maintained and not impacted by required operational processes, such as waste being brought into the tipping hall, and therefore prevent the escape of additional odour into the atmosphere.*
- j. *The results of DPE's independent public health assessment must be known prior to making any further assessment in relation to public health. Council also believes that it is entirely appropriate to reexhibit the EIS upon completion of the assessment, with the amended documentation to contain the results of the independent assessment*
- k. *Further detail is required on how negative pressure will be maintained and not impacted by required operational processes, such as waste being brought into the tipping hall, and therefore prevent the escape of additional odour into the atmosphere.*
- l. *Further information is required in order to demonstrate how compliance with the EfW Policy Statement will be monitored and managed.*
- m. *Better justification is required in order to demonstrate to the community why the emission of any pollutants into the local atmosphere as a by-product of the EfW process is reasonable.*
- n. *Full and specific details in relation to air quality monitoring, including the number and location of air quality monitoring stations is required.*
- o. *A commitment from the applicant is required that would make all air quality monitoring data readily available to the public in real time.*
- p. *The Greenhouse Gas Assessment must be revised to identify and include all onsite processes that contribute to greenhouse gas emissions, including the production and transport of chemical additives used to support the proposed EfW process, such as ammonia and Portland cement.*

The revised assessment should also consider the impact of greenhouse gas emissions at a local level compared to current operational conditions.

- q. *The Noise Impact Assessment be reviewed with respect to the impact of temperature inversions on construction noise, and the ability for this noise to be conveyed to "downstream" sensitive receivers including the village of Tarago.*
- r. *The Noise Impact Assessment must be reviewed to contain a commitment for noise minimisation and impact mitigation for the local community. It is unacceptable to state that feasible and reasonable mitigation options will be considered where practicable.*
- s. *In recognition of the broad impact to road maintenance and safety being caused by current operations, Veolia consider entering into a Planning Agreement with Council that reflects the true cost of maintenance and renewal of its local road assets, including any additional costs borne by Council as a result of construction traffic. The fundamental aspects of a Planning Agreement shall be identified by an independent expert with appropriate qualifications and experience.*
- t. *The traffic data utilised within the Traffic Impact Assessment is flawed and must be reviewed to utilise current data that is not affected by external influences such as COVID-19 lockdowns and restrictions. The review must also address the identified need for the climbing lane between Crisps Creek and Collector Road, as well as any ancillary heavy vehicle traffic, such as the importation of cover material and the potential export of bottom ash products.*
- u. *Further investigation of construction traffic alternatives must be undertaken, including the use of the Crisps Creek Intermodal Facility to facilitate the movement of construction materials and heavy infrastructure to site.*
- v. *A further traffic impact assessment is required in order to identify the cumulative impact of additional construction traffic on the local and regional road networks.*
- w. *Prior to any work being undertaken with respect to access and/or works in the Collector*

Road road reserve, an approval under s138 of the Roads Act must be obtained from Council. Alternatively, Council would prefer to see the existing main entry to the Eco Precinct upgraded for use by all users of the site, including Bioreactor and ARC feedstock deliveries.

- x. Details of the Engineering specification for the proposed encapsulation cell liner are to be provided for further assessment.
- y. Detailed actions are to be outlined in relation to the event of private neighbours' bores being impacted by increased water use from the proposal.
- z. Provide a water balance to demonstrate that reducing the capacity of ED1 will allow continued management of surface water on site.
- aa. A comprehensive and region-wide monitoring system is required across soil, water and air quality should the project proceed.
- bb. The applicant is to provide a photographic record of the site that includes buildings and artefacts such as the site machinery. The photographic record is to be in accordance with the NSW Heritage Office guidelines "Photographic recording of heritage items using film or digital capture."

Hard and soft copies of the photographic record are to be provided to Goulburn Mulwaree Library

- cc. The plant species used for screening purposes should be selected from the Native Plant community found in the vicinity of the site.

A mixture of trees, shrubs and groundcovers should be used. This will provide an additional environmental benefit as well as screening the development.

- dd. A long term planting maintenance schedule should be provided and adhered to. The maintenance plan should contain a schedule of works that includes an annual time line for weed management, plant replacement where needed, monitoring for pests and diseases, and watering etc.
- ee. The context should be considered beyond the boundary of the Veolia owned land.
- ff. View analysis should be undertaken which adequately considers the visual impact of the design and the view points from which it could be observed within the wider landscape.
- gg. That the Accommodation Strategy be prepared and considered with the EIS prior to approval of the project. That the Accommodation Strategy is to include options and feasibility in relation to the provision of housing for construction workers to be purchased or erected by the proponent (whether on or off site) to avoid placing additional stress on the local short term or private rental accommodation markets. Options could include the development of boarding house type accommodation or group homes for construction workers in Goulburn, which would have the added benefit of providing additional social infrastructure once the project is completed.
- hh. The independent assessment of health impacts undertaken as a part of the State's EIS assessment be published and included with a re-exhibition of the EIS to reassure the public that a thorough assessment of all health impacts has been undertaken.
- ii. The proponent work in consultation with Council and the existing Tarago Community towards identifying local projects for funding from the Veolia Trust and assist the local community in relation to preparing grant applications.
- jj. As a minimum a Section 7.12 levy be applied to the project under the provisions of the Goulburn Mulwaree Local Infrastructure Plan 2021. Should the proponent consider entering into a Planning Agreement with Council possible additional maintenance or upgrade of Collector Road and Bungendore Road be considered.

- kk. *The project is likely to have an impact on house rentals given the size of the construction workforce and the three-year construction period. The economic assessment should consider the impact of the project on the availability and affordability of private rental accommodation and the impact that this may have on other significant employment sectors/industries and their ability to attract/house employees. Consideration should also be given to the cumulative impact on housing affordability and availability resulting from concurrent State significant projects.*
- ll. *Appendix E relies on statements and assumptions that are unsupported by reference material. To enable a thorough and complete peer review to be undertaken Appendix E is to be properly and correctly referenced in order to establish how the author has arrived at the conclusions asserted. Furthermore, all unsupported arguments and discussion must be removed.*
- mm. *Appendix E makes assumptions on the likely waste outputs based on the comparison with other EfW plants, however, data used to justify the argument that the “input waste stream will be generally the same” in fact demonstrates that the reference data is dissimilar. Consequently, a different waste input stream would result in a different waste output. Therefore, Appendix E cannot be used to support the likely waste outputs because it is modelling different data. A reevaluation of the waste input model is required.*
- nn. *Appendix E establishes that the preferred immobilisation technique is mixing the Hazardous Waste with Portland Cement, however, Appendix E has not established the likely number of trucks required to deliver to site the necessary Portland Cement quantities to immobilise the five day best and worst case average. Therefore, without this information the traffic impact assessment is not properly informed.*
- oo. *While Appendix E discusses APCr, it does not discuss the operation of air pollution control systems or the input quantities of chemicals and liquids required to scrub the exhaust gases before being ejected into the atmosphere. The input chemicals and liquids contribute to the APCr waste outputs. However, Appendix E has not established the likely number of trucks required to deliver to site the necessary chemical sand liquids. Therefore, without this information the traffic impact assessment is not properly informed.*
- pp. *Appendix E is concentrated solely on ash management. There is no assessment of the waste gases that are not captured by the APCr, therefore, ejected into the surrounding atmosphere. The EIS needs to include an evaluation of the efficiency of the APCr and the percentage of gases that will not be captured by the APCr.*
- qq. *The use of Portland cement as a binding agent is still to be confirmed subject to the completion of trials. This demonstrates that not all processes associated with the project have been soundly proven. The applicant must therefore either demonstrate that the proposed process works, or alternatively find other means (that are demonstrated to be safe and environmentally neutral) of managing the ACPr.*
- rr. *If consent is granted to the proposed development, a condition is imposed in accordance with the section 7.2.1 of the Fire and Rescue NSW fire safety guideline “Fire safety in waste facilities” that clause E1.10 and E2.3 of the National Construction Code is to be complied with to the satisfaction of Fire and Rescue NSW.*
- ss. *If consent is granted to the proposed development, that the consent document includes the recommendations of the Fire Safety Study prepared by Riskcon Engineering Pty Ltd dated 10/06/2022 found in Appendix FF of the EIS.*
- tt. *If consent is granted to the proposed development, a condition is imposed that a Bushfire Emergency Management and Evacuation Plan is prepared by the operator and is consistent with the NSW RFS publication A Guide to Developing a Bush Fire Emergency management and Evacuation Plan and AS3745:2010 - Planning for emergencies in Facilities.*

- uu. *If consent is granted to the proposed development, a condition is imposed that includes the recommendations of the Bushfire Protection Assessment prepared by Travers Bushfire & Ecology dated 14 July 2022 found in Appendix X of the EIS.*
- vv. *The EIS fails to properly or adequately address Clause 2.19(2) of State Environmental Planning Policy (Resources and Energy) 2021 in relation to the compatibility of the proposal with the existing adjacent Develop mine. Proper consideration is required to be demonstrated*
- ww. *Further consideration of the following provisions of the Goulburn Mulwaree Local Environmental Plan 2009 is required to be demonstrated:*
 - a. *IN3 zone objectives - In particular concern is raised regarding the objectives 'To minimise any adverse effect of heavy industry on other land uses' and 'To provide suitable areas for those industries that need to be separated from other land uses.'*
 - b. *Clause 7.1A Earthworks – the reference in Appendix J (8 Assessment of impacts) doesn't discuss earthworks.*
 - c. *clause 7.2 Terrestrial biodiversity – the EIS or BDAR do not properly or sufficiently address clause 7.2(4). The consent authority cannot grant development consent (jurisdictional requirement).*
- xx. *Meaningful commentary towards Section 4.15(1)(e) of the Environmental Planning & Assessment Act 1979 (public interest) is required*
- yy. *Appendix R relies on recommendations derived from modeling the Life Cycle Analysis against the guidelines for bio-energy projects, however, the proposal does not meet the definition of a bioenergy facility per se as it relies solely on burning MSW. The proposal by definition is an EfW facility and not a bioenergy facility, therefore, it is inappropriate to assess the proposal against the guidelines for bioenergy. Furthermore, there are no comparable operations currently operational in the region. Accordingly, Council requires a new Life Cycle analysis to be prepared based upon the local context and under the definition of an EfW facility, not a bioenergy facility.*
- zz. *The proponents should identify cleared and degraded areas on other parts of the site that could be restored to PCT 1191. There are ample opportunities for this to occur, which would not only mitigate the proposed loss of native vegetation but would also result in a long term overall gain in biodiversity values in the local area.*
- aaa. *The proposed ARC is located within Lot 2 DP 1179305 and it appears that there is an area comprising approximately 20 hectares in the eastern part of the lot (see diagram next page) that would be suitable for rehabilitation and restoration of native vegetation. A project such as this would also assist with screening the proposed ARC from the Collector Road.*
- bbb. *Suitable alternatives to the project must be identified, thoroughly assessed and genuinely considered, and the EIS consequently re-exhibited with the findings prior to any assessment being completed.*
- 4. *In the event that consent is granted against the wishes of Council and the community, Council make representation to the relevant NSW Government authorities seeking that a maximum of one (1) Energy from Waste facility be allowed in each Waste Priority Infrastructure Area, as identified in the NSW Energy from Waste Infrastructure Plan, at an annual processing limit not exceeding 380,000 tonnes.*
- 5. *In the event that the project will proceed against the wishes of Council and the community, the Chief Executive Officer be given delegation to negotiate the provision of additional community benefits to the Goulburn Mulwaree LGA, and in particular, the Tarago and Lake Bathurst district, prior to a consent being issued.*

Section 375A of the Local Government Act 1993 requires General Managers to record which Councillors vote for and against each planning decision of the Council, and to make this information publicly available.

BACKGROUND

The Veolia Woodlawn Eco-Precinct is located at 619 Collector Road, Tarago and is located on land that was previously a copper, lead and zinc mine with both open cut and underground operations. Following the closure of the mine in the 1990's, approval was obtained to utilise the former open cut void for the disposal of municipal solid waste. Waste is received from both Sydney and regional sources.

Waste from Sydney is transported via rail to the Crisps Creek intermodal facility located on Bungendore Road south of Tarago, before being transferred to site via road (approximately 8km), whilst regional waste is received completely by road from adjoining LGA's and the ACT via Braidwood Road and Bungendore Road.

The precinct covers approximately 6000 hectares, although most activities relating to waste management take place within a 35-50 hectare zone immediately surrounding former mine infrastructure, with the remainder of the precinct predominantly used for agriculture and a de facto buffer to sensitive land uses, such as the village of Tarago.

In addition to landfilling, the site also comprises an energy plant utilising gas captured from the landfill, aquaculture and horticulture processes utilising heat captured from the energy plant, a mechanical and biological treatment facility to extract organic matter and produce compost (used to assist with rehabilitating former mine land), a wind farm, a solar farm and extensive agriculture based predominantly on livestock production.

In early-2021, Veolia advised of its plans to develop an Advanced Energy Recovery Centre, more commonly referred to as an energy-from-waste (EfW) facility. The project is considered State Significant Development in accordance with State Environmental Planning Policy (Planning Systems) 2021, via Schedule 1, Section 20 – *Electricity generating works and heat or co-generation*. According to the Environmental Impact Statement (EIS), there is potential for the need for additional components of the development to be assessed separately to the primary development application, specifically in relation to electrical distribution infrastructure that would ultimately connect the generator to the NSW electricity grid.

The complete EIS and its associated documents can be located on the NSW Planning Portal's Major Projects website at:

<https://www.planningportal.nsw.gov.au/major-projects/projects/woodlawn-advanced-energy-recovery-centre>.

Following a previous proposal for an EfW facility in the Goulburn Mulwaree Local Government Area (GMLGA) (Jerrara Power), Council resolved it's "total opposition to Energy from Waste within the Goulburn Mulwaree LGA" on 22 September 2021, and subsequently reaffirmed this position on 15 March 2022. Regardless, the NSW Government has nominated the "South Goulburn Mulwaree Precinct" (i.e. Woodlawn) as one of four selected precincts to accommodate EfW proposals in the State via the Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2021; the others being Lithgow, Parkes and the Northern Rivers, however it is noted that as of October 2022, the Lithgow precinct has since been removed via gazettal.

As a result of both the Jerrara Power and Veolia ARC proposals, Council has observed overwhelming community opposition to EfW facilities, both in this LGA and from nearby residents of adjoining LGA's.

Introduction

On 26 October 2022, the EIS and its accompanying documents were placed on public exhibition. During the intervening period, Council Officers have been reviewing the contents of the EIS with the intention of providing the basis for a Council-endorsed submission. The following report outlines the key considerations that have arisen from the review process and seeks to combine the findings of a technical review with the sentiments of the community.

Key Matters for Consideration

1. Project Engagement

The project engagement has been undertaken in accordance with the NSW Department of Planning, Industry and Environment's *Undertaking Engagement Guidelines for State Significant Projects* (DPIE 2021).

The key messages identified in the engagement strategy for this project are:

- *Veolia is proposing to build a new facility at Woodlawn Eco Precinct that will help transform household and commercial waste into energy.*
- *Using state-of-the-art technology, the proposed Advanced Energy Recovery Centre will take waste that cannot be recycled and turn it into electricity; enough to power 40,000 homes.*
- *Building on the success of the existing precinct, the new facility will be a major investment for regional NSW, creating hundreds of local jobs and driving economic growth in the area.*
- *The facility will be an important part of the emerging circular economy for NSW, helping to divert waste from landfill and reduce carbon emissions.*
- *Veolia is a world leader in sustainable waste management. Energy from waste technology is being used safely in many countries; Veolia owns and operates more than 65 energy recovery facilities globally.*
- *There are strict rules on managing any environmental impacts from energy recovery facilities.*
- *Veolia is a global expert in the field and will meet the stringent environmental standards set by the NSW Environment Protection Authority.*
- *Veolia has been a part of the local community for nearly twenty years and takes pride in being a trusted and valuable contributor to the area. We listen to feedback and act on what the community tells us.*
- *Veolia has a strong track record of support for the local community economically, environmentally and socially. This includes through the Veolia Mulwaree Trust and the rehabilitation of the former mining site.*

Feedback themes from engagement relating to odour are identified as “Odour from existing landfill and how odour will be managed as part of the ARC.” (p.34)

The Veolia response is more detailed:

Veolia recognises that odour from existing operations is and has been an issue for some people living nearby and is committed to reducing odour impacts. Odour management is a high priority for both Veolia and the community.

Veolia has a Woodlawn Eco Precinct Odour Management Strategy that is regularly updated through community consultation, independent expert input and results from the landfill gas monitoring program. The strategy includes routine odour audits and recommendations for odour management upgrades. Examples include the installation of additional landfill gas capture infrastructure, odour treatment technology trials and innovative odour monitoring

equipment. Regular updates are provided to the community through a range of media including the ARC website, newsletter, CLC and published updates in the Tarago Times.

Current and upcoming odour reduction works involve:

- Drone surveillance at six monthly intervals to measure landfill gas capture across the landfill waste surface. The surveillance identifies areas where methane is emitting across the landfill waste surface and provides findings used for planning improvement activities.
- Expansion of the landfill gas capture infrastructure in low gas capture locations. 36 new gas wells have been installed this year.
- Reducing the active tipping face surface area to reduce potential for odour emissions.
- Optimisation of the biofiltration system, a system which filters the landfill gas that escapes through the rock wall/waste interface, reducing the odorous compounds.
- Maintaining evaporation of stored treated leachate on site through installation of additional evaporation units.
- Installation of a hydrogen sulphide sensor and meteorological station in Tarago. Data will be correlated against instances of odour.

These planned works, improved monitoring techniques, and installation of additional gas extraction technology in areas identified by drone surveillance, has achieved the highest gas capture records to date. Latest records show a 40% increase in captured gas (in July 2022 compared with the yearly average to date).

The improvements to gas capture identified above are very recent given the long history of odour complaints in relation to this facility. Whilst the improvements are promising, Council would like to see longevity in these results in order to demonstrate that the odour mitigation measures are in fact working as intended.

ACTION: Further details are to be furnished in relation to odour management for existing operations, in particular a demonstrated period of substantial longevity (i.e. at least 12 months) of reduced odour complaints, as well as a demonstration of how historic complaints compare to complaints currently being received (eg. frequency, number of complaints, etc.).

2. Assessment of all project aspects to be considered

According to the Environmental Impact Statement (EIS), there is potential for the need for additional components of the development to be assessed separately to the primary development application, specifically in relation to electrical distribution infrastructure that would ultimately connect the generator to the NSW electricity grid.

The site is currently connected to the Essential Energy electrical distribution network with electricity generated at BioEnergy Power Station at the Eco Precinct exported to the grid via an existing substation and electrical infrastructure network.

Energy recovery from the facility will generate up to 240,000 MWh of electricity per annum of which up to approximately 220,000 MWh will be exported to the grid. Export to the grid is proposed via Essential Energy's existing managed electrical infrastructure network – Line 850:GOU, a 66kV transmission line from a substation at the Eco Precinct to Essential Energy's Goulburn substation, 37.5km to the north, located on Memorial Drive, Eastgrove.

Veolia is liaising with Essential Energy to understand the potential modifications or upgrades that may be required to the existing electrical infrastructure network to facilitate export of electricity generated at the ARC to the grid. Veolia is preparing a Detailed Enquiry for Essential Energy to further understand the detailed design and other development requirements. It is Veolia's intention that any upgrades to the existing transmission would be undertaken by or on behalf of Essential Energy and would constitute an activity under Part 5 of the Environmental Planning & Assessment

Act 1979. An environmental impact assessment will be prepared for these works and will evaluate the impacts of any upgrade works and detail any required mitigation measures.

The works required will be determined by Essential Energy and Veolia is working to have any modifications or upgrades that may be required to the 66kV transmission line, made with the capacity of the existing line where possible. Restrunging of the line could potentially be required, with the intention of working within the easements that facilitate the current infrastructure.

Council disagrees with the notion of this aspect of the project being subject to a separate assessment and approval process. It is the view of Council that any additional or ancillary infrastructure that the project relies upon to be fully functional or operational should be included as part of the current application and be assessed accordingly. The cumulative impact of additional or ancillary infrastructure can be just as detrimental to a community, and in many respects, have far wider impacts than the parent project.

For example, to legitimise the project as an energy generator, it is imperative for the applicant to be able to connect the facility to the grid. Without such a connection, the facility would simply be a waste incinerator that would place the process at the bottom of the waste management hierarchy.

The construction of transmission lines can have numerous impacts, both environmentally and socially. These include the need to remove or impact upon endangered ecological communities and increased visual impact. Community safety can also be compromised through increased fire risk from transmission lines, noting that the cause of the nearby 2017 Currandooley/Taylors Creek Rd Fire was from transmission lines servicing Infigen's Woodlawn Wind Farm.

The existing transmission line traverses predominately rural and agricultural land uses and is located primarily within a 10m wide existing easement. Approximately 16km or 42% of the transmission alignment has been identified within existing road reserves. The transmission line bypasses the townships of Lake Bathurst and Tarago and has 21 dwellings within 500m, nine of which were identified as being within 50m of the transmission line. Other sensitive land uses identified include:

- Saint Andrew's Anglican Church setback approximately 110m;
- Tirranna Public School setback approximately 10m; and
- Holy Cross Seminary.



The Transmission line environmental and social sensitivity analysis has considered the environmental risk and constraints within or near the existing transmission line and concluded that the constraints do not pose a significant risk to upgrading the existing electrical infrastructure network or the project, however it warrants further consideration in a separate environmental impact assessment to be undertaken under Part 5 of the EP&A Act.

Veolia intends to complete the required modifications or upgrades to the existing Essential Energy Infrastructure network as part of the project's construction phase.

Any activity to upgrade Essential Energy's existing electrical infrastructure network will be subject to Essential Energy's standards, assessment, design and easement requirements.

In terms of maintenance, the transmission line asset is owned and maintained by Essential Energy.

The required infrastructure upgrades are unknown at this stage and therefore an environmental assessment of these works including management and mitigation measures has not been completed. Council disagrees with the notion of this aspect of the project being subject to a separate assessment and approval process. It is the view of Council that any additional or ancillary infrastructure that the project relies upon to be fully functional or operational should be included as part of the current application and be assessed accordingly.

Therefore in order to ensure that the full impacts of the proposal in its entirety are known, Council requires this component of the project to be assessed as part of this application.

ACTION: The project must be assessed in its entirety, which should include all ancillary infrastructure such as transmission lines.

3. Staffordshire reference plant data

In accordance with requirements of the NSW EfW Policy Statement, the proposal must demonstrate the capability and environmental performance of the chosen technology by way of a "reference facility". For the purposes of meeting the policy objectives, Veolia have elected to utilise their "W2R Staffordshire Energy Recovery Facility" (Staffordshire Plant) located near Wolverhampton in the United Kingdom. The Staffordshire Plant commenced operations in 2014 and was chosen due to its use of similar technology and its "rural setting".

The reference data for the Staffordshire plant was included as Appendix GG to the EIS, and is based on the 2017 Annual Performance Report, which was in fact "the facility's fifth complete annual report". A review has demonstrated that Staffordshire Plant met operational and environmental targets during the reporting period. However, Council is concerned that the use of a single reporting period minimises the sample size, and therefore does not provide a true indication of the Plant's long-term performance, and just as importantly, the performance of the plant through its commissioning phase, which it could be argued is a point in time in which the risk for non-compliance would be at its greatest.

In order to provide the community with complete transparency, Council believes that it is not unreasonable to request the complete performance history of the reference plant. Additionally, a further assessment should be made utilising this data that demonstrates 100% theoretical compliance against the parameters outlined in the NSW EfW Policy Statement. If the request cannot be accommodated, both Council and the community will not have been provided with the conclusive evidence it requires that would otherwise demonstrate the long-term safety to the environment and public health, which should be the number one priority.

ACTION: All available performance data for the Staffordshire reference plant is to be made available, for the period commencing at the commissioning of the plant through to the most recent return period. In addition to making this data available, an accompanying report should also be provided that assesses the theoretical compliance of the Staffordshire plant against the performance thresholds of the NSW EfW Policy Statement.

4. Absolute capacity of proposed facility

The document does not appear to detail the design capacity of the plant. The document states that 380,000 tonnes per annum will be processed through the plant and that the plant will be operational for 8,000 hours per year.

It is not clear however if the 380,000 tonne volume is an absolute design capacity for the plant, or simply a nominal figure for which an initial operational licence will be sought.

Veolia currently has the contract for around 40% of Sydney's Waste. Council is concerned that in the event that Veolia enters into additional contracts with Sydney Councils this may trigger further applications for the expansion of operations at the Eco Precinct, including the ARC EfW facility (if approved). The recent merger with Suez demonstrates Veolia's intent on growth, therefore Council and the community must be informed on whether the plant can accept further waste or not, or whether additional volumes would be landfilled using the capacity that would have been made available by the waste being diverted to the ARC.

ACTION: Further information is required in order to demonstrate the absolute capacity of the proposed plant.

5. Monitoring of feedstock and compliance with EfW Policy Statement

With the widespread collection catchment of Metropolitan Sydney, Council is concerned that the management of feedstock thresholds for Council customers will be compromised. Table 4 of the NSW EfW Policy Statement provides minimum resource recovery criteria for Council's that generate municipal waste intended for destruction via the EfW process. For example, a Council without a Food and Green Waste (FoGo) collection may only dispose of 10% of their waste to EfW. Further information is required in order to demonstrate how this process will be monitored and managed, and ultimately prevent metropolitan Council's with good resource recovery policies compensating for those with poor policies.

In this regard it is well known that many metropolitan Councils have poor waste management policies or are less advanced than many rural Council's in terms of the uptake of FoGo and recycling initiatives. For example, the EIS states that at least 20% of Sydney Council's will need to transition to a FoGo collection by 2025 in order to have a feedstock that qualifies for EfW treatment prior to commissioning. If these Council's cannot transition in the required timeframe, there does not appear to be any guarantees or disincentives in place to drive better policy initiatives or environmental outcomes that don't involve either landfilling or incineration.

Furthermore, it is unclear as to how Veolia either currently or proposes to monitor/audit incoming waste streams, and how regularly this would occur. In addition to this, further clarity is required in relation to how Veolia manages "quality control" of incoming waste with its customers. Council believes this is extremely important to ensure the consistency of the feedstock entering the facility, which would equate to consistency in operations and therefore consistency in emissions.

Fundamentally however, at the very least this would allow all stakeholders to demonstrate how they are complying with the NSW EfW Infrastructure Plan and Policy Statement.

ACTION: Further information is required in order to demonstrate how compliance with the EfW Policy Statement will be monitored and managed.

Appendix I(ii) provided details on the chlorine content analysis of waste samples. One of the samples had a chlorine content of 21% due to an inflatable boat being included in the sample. Given that PVC is in domestic and commercial and industrial (C&I) waste, what processes will be in place to ensure loads with high PVC contents are not received in the feedstock.

ACTION: Further information is required demonstrate how chlorine levels will be minimised in waste feedstock.

The Staffordshire reference plant had 10 process blockages that affected their operations in 2017. Better sorting of waste would appear to alleviate this issue. The EIS mentioned sorting at the Sydney transfer sites is completed by using the bucket of the front-end loader when loading the waste into the containers.

This would not seem agile enough to sort through the large loads of waste received and remove contaminants not suitable for Energy from Waste processing. What process will be in place to manage the waste received at the transfer stations.

ACTION: *Further details are to be provided in relation to processes that will be put in place to manage waste received at the transfer stations in Sydney and to remove contaminants that would affect the EfW process.*

6. Air Quality and odour

Air Quality has been assessed as being compliant with the NSW EfW Policy, and meeting European Union *Best Available Techniques* directives. Upon review of the EIS, including Appendix O – Air Quality Impact Assessment, the predicted impacts upon air quality have been identified as being beneath all impact assessment criterion, and that “the cumulative impact results for the three project scenarios are *not significantly different* from the results presented for existing operations at the Eco Precinct”.

However, regardless of the above, it is the view of Council that no matter how large or small the significance in difference is, the fact remains that particulate matter and specific compounds such as sulphur dioxide, ammonia, dioxins and furans will be emitted into the local atmosphere. In effect this will ultimately result in the emission of compounds that are not currently emitted from the site and expose the community to a risk that is not present at this time. Whilst ever this is the case, Council will not be in a position to support either the Air Quality Impact Assessment or simply the proposal itself.

For example, when looking at the data supplied for the Staffordshire reference facility in Appendix GG, the following quantities of various compounds were released via the stack in the local atmosphere in 2017:

	NOx	CO	SO2	HCl	VOC	NH3	Dust
Tonnes/annum	186.730	2.857	26.619	11.424	0.225	3.764	0.184

In light of this, Council does not consider it acceptable for approximately 186 tonnes of nitrogen oxides, or close to 27 tonnes of sulphur dioxide to be discharged into an environment that is not already being exposed to such emissions. Additionally, given that the feedstock may not be entirely reflective of Staffordshire, it is possible that the above outputs may increase based upon the Woodlawn-specific feedstock.

Furthermore, the EIS states that an air monitoring system will *likely* be established with the operation of a minimum of three ground level ambient air quality monitoring stations. For such a project of this size, and potentially the first of its kind in NSW, a more extensive system should be required and not be a “likely” build. Additional and significant detail is required in order to better gain an understanding of the necessary air monitoring regime to ensure that the applicant is held accountable for all outputs from the plant, and in the event of a system failure, any environmental or public health impacts.

The EIS states that emission details will be publicly available within 24 hours from the end of a weekday or the following weekday after weekends or public holidays. The NSW EPA Energy from Waste Statement requires that this detail be made available publicly through an online portal in “near real time”. While the statement in the guideline is not clear (i.e. what exactly is “near real time”), Council believes that if the project was to proceed, data should be made readily available in real time.

There are no details provided in the EIS in regard to the actual emissions monitoring system, other than the specifications of the system will be determined in accordance with the EfW policy statement.

This information should be detailed in the EIS, along with the proposal and mitigation measures for assessment as part of the EIS exhibition period given the EIS policy statement already exists and provides the detail on the requirements.

The EIS has provided information that the particulate matter PM2.5 is higher in the winter months in Tarago due to the use of wood hearing. It is also detailed that Woodlawn mine continues to produce lead emissions from ore and waste rock on site. What is the cumulative impact of these predicted emissions?

ACTION: Better justification is required in order to demonstrate to the community why the emission of any pollutants into the local atmosphere as a by-product of the EfW process is reasonable.

ACTION: Full and specific details in relation to air quality monitoring, including the number and location of air quality monitoring stations is required.

ACTION: A commitment from the applicant is required that would make all air quality monitoring data readily available to the public in real time.

ACTION: Full details are to be provided in relation to the required emissions monitoring system.

ACTION: Full details are to be provided in relation to the cumulative impacts of emissions compared with background conditions.

Odour

Whilst odour is not predicted to increase as a result of the ARC project, odour impacts upon the Tarago village from the Eco Precinct have been a longstanding matter that continues to be an issue, and therefore must be considered as part of any assessment that is considering an extension to site operations, including the ARC EfW project.

In relation to the ARC, the EIS states that up to 4 days worth of waste feedstock will be stored, in an area outside of the ARC building, to ensure continued operations of the plant. The waste stored outside in containers has significant potential to contribute to the odour being generated at the site. More detail is required in relation to what processes will be implemented to reduce the impact of odour from this stored waste.

Veolia have stated that odour generation from the tipping hall will be managed by the use of negative pressure, achieved via the use of the tipping hall as the induction point for air entering the combustion chamber. Council has however identified the likely continual need for entry to the tipping hall to be opened to allow feedstock movement into the building and is concerned that the constant pressure changes that would result could lead to process or system failure resulting in fugitive odours.

ACTION: More detail is required in relation to what processes will be implemented to reduce the impact of odour from this stored waste.

ACTION: Further detail is required on how negative pressure will be maintained and not impacted by required operational processes, such as waste being brought into the tipping hall, and therefore prevent the escape of additional odour into the atmosphere.

7. Public Health

The EIS details that the population of the Southern NSW health district is vulnerable to project related impacts due to higher mortality rates from respiratory disease, high blood pressure and asthma in adults. The community cannot be certain that there is negligible or acceptable risk from the large number of exposure pathways. This demonstrates that the project will detrimentally impact upon the health of such an already vulnerable population.

Appendix P further explores the impact on public health. The document details that sulphur dioxide has a short-term effect on the respiratory system with children and people over 65 years of age as well as people with existing health conditions. The document then states that evidence for long term health effects is “weak” noting limited available data. Without sufficient data, there would appear to be an unknown level of risk to the community which needs to be further explored and ultimately known.

Council would like to see the results of DPE’s independent public health assessment prior to making any further assessment in relation to public health. Council also believes that it is entirely appropriate to reexhibit the EIS upon completion of the assessment, with the amended documentation to contain the results of the independent assessment.

ACTION: *The results of DPE’s independent public health assessment must be known prior to making any further assessment in relation to public health. Council also believes that it is entirely appropriate to reexhibit the EIS upon completion of the assessment, with the amended documentation to contain the results of the independent assessment.*

8. Greenhouse gas and climate change

A Greenhouse Gas (GHG) Assessment was provided as Appendix Q to the EIS and is intended to address specific requirements provided as part of the Secretary’s Environmental Assessment Requirements (SEARs).

Council is concerned that the assessment does not provide an accurate representation of the site in its entirety. For example, it is not clear whether the current estimate of greenhouse emissions from the site relates only to landfilling operations, or whether the Mechanical Biological Treatment (MBT) Facility has been included as well. This is important given the fact that the MBT is likely to be a significant contributor to GHG emissions from the site.

The Greenhouses Gases scope three assessment should also be inclusive of chemical production and transportation of chemicals used and stored onsite and used through the process. These chemicals include ammonia, activated carbon and lime and are a necessary pollution control additive for the site. There also is no assessment of the Portland cement production and transport to site for the APCr. This assessment appears to be missing key components of the process.

Further details need to be provided to compare the baseline GHG production (i.e. current site operations) to the anticipated future GHG production if the ARC is approved and becomes operational.

Finally, it appears to Council that a large portion of the justification being provided for not only the anticipated GHG output, but justification for the project in its entirety, is based around a continued claim that EfW has less emissions than coal-fired power stations. This may well be the case; however, it must be noted that there are currently no coal-fired power stations in the LGA or wider region, therefore it must be acknowledged that the project will have a detrimental impact on local greenhouse conditions compared to the status quo.

ACTION: *The Greenhouse Gas Assessment must be revised to identify and include all onsite processes that contribute to greenhouse gas emissions, including the production and transport of chemical additives used to support the proposed EfW process, such as ammonia and Portland cement.*

The revised assessment should also consider the impact of greenhouse gas emissions at a local level compared to current operational conditions.

9. Noise and vibration

The EIS predicts that all construction noise will fall within regulated noise limits. However, construction is expected to take place 24 hours a day, 7 days per week.

The applicant needs to be aware that the same temperature inversions that contribute to odour complaints in Tarago will assist in the conveyance of noise to the same locations. Accordingly, the noise assessment is not thorough enough in this respect.

The EIS states that if Noise Maximum Limits are exceeded, Veolia will identify feasible and reasonable mitigation measures to reduce construction noise to or below NML's "*where practical*". "Where practical" does not seem sufficient to protect the ongoing amenity of the local community.

ACTION: *The Noise Impact Assessment be reviewed with respect to the impact of temperature inversions on construction noise, and the ability for this noise to be conveyed to "downstream" sensitive receivers including the village of Tarago.*

ACTION: *The Noise Impact Assessment must be reviewed to contain a commitment for noise minimisation and impact mitigation for the local community. It is unacceptable to state that feasible and reasonable mitigation options will be considered where practicable.*

10. Traffic and transport

Council is concerned that elements of the current traffic and transport operations associated with the broader Eco Precinct do not function as intended or contribute to road maintenance or safety as intended.

Council strongly disagrees with the assertion in the EIS that the current maintenance contribution is adequate (Section 4.11 of Appendix T). There is no evidence provided in the EIS to support this assertion and the current maintenance contribution is totally inadequate, as can be seen at the present point in time by the state of the road network, including the haulage route used by Veolia and its contractors.

The EIS proposes for Veolia to compensate Council for "emergency repair" see section (see section 4.11 of Appendix T). What constitutes an "emergency repair" is not described in the EIS but does not adequately consider the damage that the construction traffic will cause to the road pavements, the additional maintenance costs it will cause, or the most importantly, the depreciation and the reduction in the useful remaining life of the asset.

There are discrepancies between Veolia weighbridge data, Council's tube counts for Collector Road and the approved number of heavy vehicles carrying waste to the site. The tube counts indicate that there are approximately 30% more heavy vehicles than that which can be attributed to waste. The only explanation that Council can deduce is that the additional heavy traffic is likely from fill for the capping or cover material for the bioreactor and other ancillary operations and services.

The traffic generated from the covering operation or ancillary operations is not described or quantified in the report. This additional heavy vehicle traffic causes substantial wear and tear on the road network but it does contribute to the calculation for maintenance.

The current rate of contribution is insufficient to fund renewal of the pavement and also maintenance of the currently inadequate pavement. The current contribution is based on a set of simplified assumptions that do not apply to the overall development or the specific ARC project. The existing road pavement is simply not adequate for the volume of traffic and the high proportion of heavy vehicles that use the site. Additional pavement is required to provide a meaningful pavement design life, a lower lifecycle cost and a more sustainable maintenance and renewal program.

Council recommends that a new methodology is adopted to calculate what the maintenance contribution should be. An independent expert should be appointed to determine the appropriate contribution rate. The expert should have regard to determining the lowest lifecycle costs for Veolia and Council. The expert should consider what pavement upgrades, scheduled maintenance, reactive maintenance and renewal is required to maintain the road in an economically sustainable manner and calculate contribution rates based on actual lifecycle costs.

The expert should consider all traffic that uses the Veolia site and make recommendations for what pavement upgrades are required prior to commencement of the project. These recommendations could then be used as a basis for Planning Agreement between Veolia and Council.

Council and the community are of the opinion that a climbing lane is already required between the Intermodal Facility and Collector Road given existing traffic volumes, the number of slow trucks climbing the hill and the delays this is causing.

The proposed development will create additional unacceptable delays and safety risks. The EIS indicates that during the construction period, the *Level of Service* in the morning will be *LOS E* (predicted peak capacity) on the climbing lane, which is at the limit of stable flow. This is a modelled average and is not during peak events such as major concrete pours or when oversize or overmass vehicles will need to use the roads. During any peak events the level of service will be unsatisfactory. These delays and low speed of travel on a high speed rural road is dangerous, will cause frustration and likely cause accidents.

The EIS traffic counts were undertaken during periods of Covid lockdown in the ACT and Covid restrictions in NSW. To compensate for this a growth factor was applied to the data. Council is of the opinion that the growth factors are not sufficient and that there is uncertainty in the data. As the EIS indicates that modelled behaviour in the road is at the limit of stable flow, any increase in traffic above that modelled in the EIS will result in unstable flow and unacceptable delays. Council data indicates a 14% per annum growth in traffic on Bungendore Road. Given the uncertainty in the data and modelling results, Council is of the opinion that the modelling indicates the climbing lane is necessary.

Some aspects of the ARC operation are not included in the EIS, such as export of incinerator bottom ash aggregates (IBAA). The EIS traffic study therefore is not a complete indication of the traffic impacts of the full incinerator project. A cumulative increase in traffic from incremental development applications have reached a tipping point where the climbing lane is required. The climbing lane should be constructed and completed before commencement of the ARC project.

As is currently evident on our local and regional roads, the prolonged period of La Nina conditions has taken an unprecedented toll on road conditions. Liaison and advocating for road maintenance and improvement, as indicated by the EIS, is not enough. As a result, Council would like to see further detail in relation to proposed routes and impact mitigation, including investigations with respect to construction transport alternatives, as well as a dilapidation report and proposed contributions to address the additional wear and tear associated with construction traffic.

For example, one such alternative could be to utilise rail and the Crisps Creek Intermodal Facility (IMF) to facilitate the movement of construction materials and heavy infrastructure to site. The project is in a unique position in having access to an intermodal facility in close proximity and could potentially utilise the IMF during off-peak periods (i.e. overnight).

The cumulative impact on the road network during construction must be considered both in terms of road condition and additional conflict between light and heavy vehicles, which has been a source of long-term community distress, particularly within the village of Tarago as well as the length of the Bungendore Road. Whilst it is recognised that Veolia is not responsible for all vehicles utilising this route, there are known constraints that have been identified in previous traffic studies which will create additional hazards and consequent risk for existing road users.

One such example, which was identified in an April 2019 traffic assessment undertaken by Consulting firm Ontoit (commissioned for Heron prior to the commencement of mining operations) demonstrates that the geometry of the Braidwood Road and Wallace Street intersection within Tarago cannot facilitate the complete movement of a B-Double specification vehicle without the vehicle crossing into the path of oncoming vehicles.

Council is therefore concerned that if additional heavy vehicles were to utilise a route through Tarago throughout construction, especially given the likelihood of oversize vehicles, current road users would be exposed to an unnecessary level of risk.

Finally, a new site access is also proposed on Collector Road, located between the current Eco-precinct access and the entrance to the Develop mine site. This is a change to existing haulage operations and goes against the narrative that has been provided by Veolia that “transport processes will not change externally to the site”. The reality is that an additional heavy vehicle entrance will be required which will result in three heavy vehicle entrances in quick succession on a local road with a sign posted speed limit of 100km/h. Prior to any work being undertaken with respect to access and/or works in the Collector Road road reserve, an approval under s138 of the Roads Act must be obtained from Council to ensure that appropriate traffic controls are in place, the appropriate construction standards are met and road user safety is maintained. Alternatively, Council would prefer to see the existing main entry to the Eco Precinct upgraded for use by all users of the site, including Bioreactor and ARC feedstock deliveries.

ACTION: *In recognition of the broad impact to road maintenance and safety being caused by current operations, Veolia consider entering into a Planning Agreement with Council that reflects the true cost of maintenance and renewal of its local road assets, including any additional costs borne by Council as a result of construction traffic. The fundamental aspects of a Planning Agreement shall be identified by an independent expert with appropriate qualifications and experience.*

ACTION: *The traffic data utilised within the Traffic Impact Assessment is flawed and must be reviewed to utilise current data that is not affected by external influences such as COVID-19 lockdowns and restrictions. The review must also address the identified need for the climbing lane between Crisps Creek and Collector Road, as well as any ancillary heavy vehicle traffic, such as the importation of cover material and the potential export of bottom ash products.*

ACTION: *Further investigation of construction traffic alternatives must be undertaken, including the use of the Crisps Creek Intermodal Facility to facilitate the movement of construction materials and heavy infrastructure to site.*

ACTION: *A further traffic impact assessment is required in order to identify the cumulative impact of additional construction traffic on the local and regional road networks.*

ACTION: *Prior to any work being undertaken with respect to access and/or works in the Collector Road road reserve, an approval under s138 of the Roads Act must be obtained from Council. Alternatively, Council would prefer to see the existing main entry to the Eco Precinct upgraded for use by all users of the site, including Bioreactor and ARC feedstock deliveries.*

11. Water Management

- **Groundwater Assessment**

The report details that the evaporation dams have been shown to leak via the underlying colluvium with the hydraulic loading impacting the ground water conditions around the dams. A multi-layer liner is proposed for the encapsulation cell however no details are provided on the geofabric proposed or the resultant permeability. Appendix EE also suggests that the

geofabric could be replaced with clay if suitable clay is available on site. This will not create an impervious layer for the dam suitable for the disposal of hazardous waste while protecting the groundwater.

The EfW process will rely on bore water from the Willersoo borefield especially in a drought. Extraction during a drought may impact nearby groundwater resources. The EIS states that it is unlikely that neighbours will be impacted. What actions will be taken if neighbours are affected?

ACTION: Details of the Engineering specification for the proposed encapsulation cell liner are to be provided for further assessment.

ACTION: Detailed actions are to be outlined in relation to the event of private neighbours' bores being impacted by increased water use from the proposal.

- **Surface Water Assessment**

The plans included in the EIS show that ED1 has considerable water contained within the dam. Operating requirements for the dam have not been provided in relation to how water levels within the dam will be managed to enable the encapsulation cell to be developed, operated and expanded as the operations of the proposed facility occur. It is proposed that evaporation will be used to treat and remove water in the storage. The applicant should demonstrate how evaporation will keep up with the treatment and disposal of the APCr disposed in the encapsulation cell.

ACTION: Provide a water balance to demonstrate that reducing the capacity of ED1 will allow continued management of surface water on site.

12. Contamination

Council's review of the EIS has not been able to locate any baseline soil, water or air quality sampling either locally (e.g. in Tarago) or more widely across the region. Without this information, it is unclear how the long-term accumulation of contaminants, pollutants and toxins will be monitored and therefore provide the community with assurance as to the safety of the project.

A comprehensive and region-wide monitoring system is required across soil, water and air quality should the project proceed.

ACTION: A comprehensive and region-wide monitoring system is required across soil, water and air quality should the project proceed.

13. Heritage

- **Aboriginal heritage**

Fourteen registered Aboriginal parties were consulted as part of the preparation of an Aboriginal cultural heritage assessment. The assessment identified no Aboriginal objects, places or deposits within the development footprint. It further determined that the potential for encountering cultural material is considered unlikely given the historical and modern activities that have occurred.

The project was identified as being within a broader cultural landscape that encompasses important cultural places such as Lake George and Lake Bathurst. However, the project is not in close proximity, nor within sight, of these places. No cultural materials or site-specific intangible or cultural values were identified.

If there are unexpected finds within the development footprint, they will be managed in accordance with an Aboriginal Cultural Heritage Management Plan.

The EIS finds that there is little likelihood of significant remnant archaeology being found on the development site. It seems likely from the evidence provided that this is the case. The management and mitigation measures proposed make recommendations for unexpected finds.

ACTION: *No further action required.*

- **Historic Heritage (European)**

A historical archaeological assessment found that the level of excavation and disturbance which has previously occurred at the development footprint will have removed or moved any remnants of relics prior to the development of the project. If there are unexpected finds within the development footprint, they will be managed in accordance with an unexpected finds protocol.

There is no listed built heritage within the development footprint, and it does not meet the criteria for a heritage site. Accordingly, the project will not impact any items of heritage significance.

Section 8.12.3 states that there's likely to be nil potential archaeological impacts. The level of previous excavation and disturbance that has previously occurred on site will have removed any relics (page 261). There is no listed built heritage on the development footprint. Some residual machinery and buildings associated with mining operations are retained within the development footprint. The machinery is not complete, operable or in its original location. The machinery is not representative and does not hold historical significance.

NSW Heritage Council advice is that "the site contains no known archaeology or State listed heritage items."

The EIS finds that there is little likelihood of significant remnant archaeology being found on the development site and that no items of heritage significance are present. As for Aboriginal Heritage it seems likely from the evidence provided that this is the case. The management and mitigation measures proposed make recommendations for unexpected finds.

Action: *The applicant is to provide a photographic record of the site that includes buildings and artefacts such as the site machinery. The photographic record is to be in accordance with the NSW Heritage Office guidelines "Photographic recording of heritage items using film or digital capture."*

Hard and soft copies of the photographic record are to be provided to Goulburn Mulwaree Library

14. Landscape and Visual Impact Assessment

A landscape and visual impact assessment considered the potential for visual impacts arising from the construction and operation of the project upon fourteen viewpoints. These viewpoints included nearby rural residences, roadways and highways, the Kevin Wheatley VC rest area, the Weereewa Lookout, and the locality of Tarago.

The assessment found that one of the fourteen receiver viewpoints would likely experience a 'moderate to low' visual impact (Collector Road, north of the development footprint) and all other viewpoints would likely experience a 'negligible' visual impact. The project was also considered to have a limited potential to increase the significance of cumulative visual impact considering the presence of existing large scale visual elements (e.g. wind turbines) and due to visual screening surrounding the Eco Precinct for most receiver viewpoints.

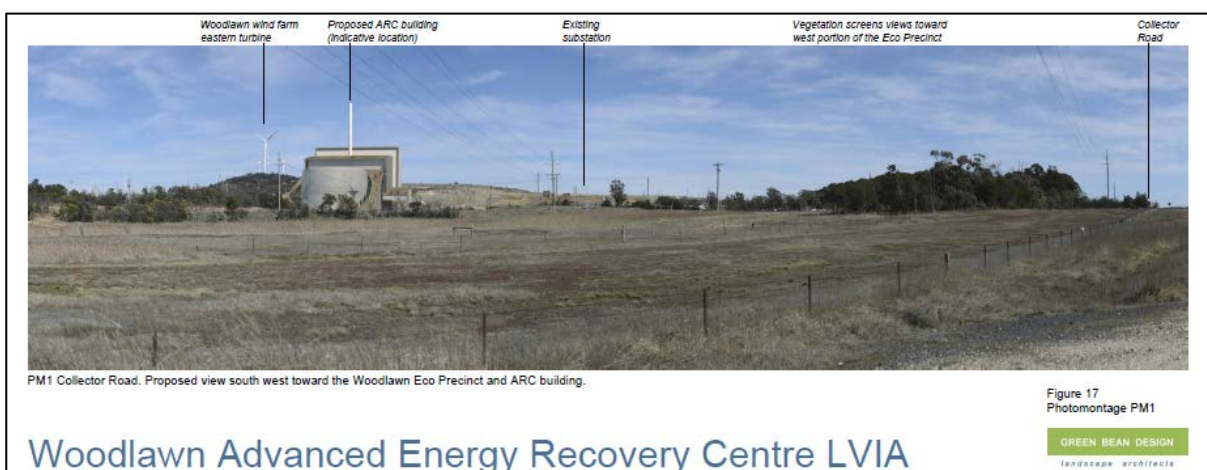


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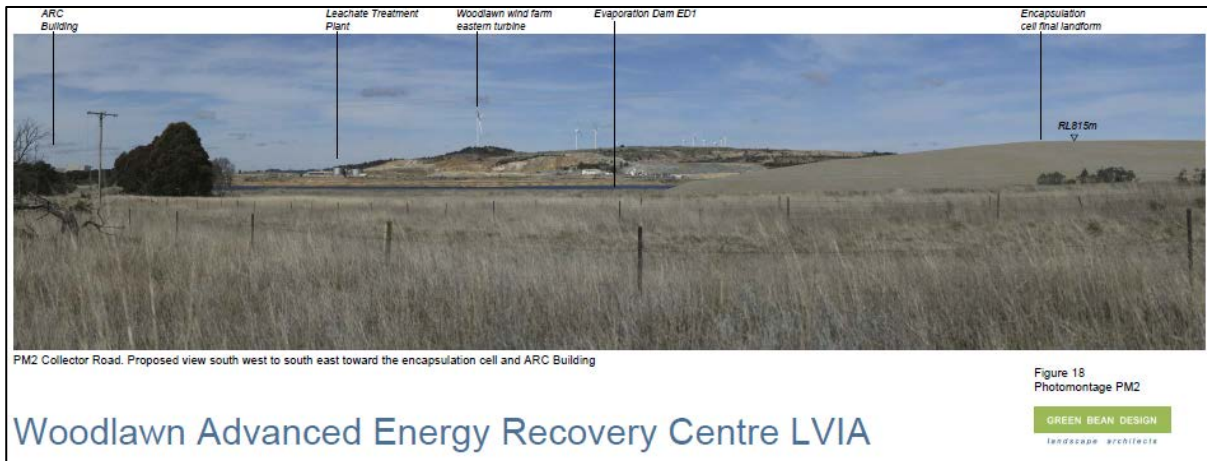
The ARC building is 54m high (see above). The emission stack is 85m high. By comparison the existing wind turbines at Woodlawn are 80m high to the hub (centre of the blades) and 124m at the highest point of the blades (noting that the base of the turbines is also at a higher elevation). The encapsulation cell is 30m high.

The most relevant photomontages from Appendix BB Landscape and Visual Impact Assessment are reproduced below. The most significant visual impact can be seen in the first image PM1 Collector Road. Screen planting in this area will reduce the visual impact. The same goes for the second image PM2 Collector Road, but the visual impact is less, given the increased distance from the development.

PM1 Collector Road



PM2 Collector Road



PM4 Weereewa Lookout – located on the western shore of Lake George



Planting will not be able to completely screen the development given the scale of the emissions stack and buildings, however it will reduce its visual impact. The area planted will have to be substantial to have a significant screening effect. When mature (after 50-100 years) certain Eucalypts found locally will reach a height of 25-30 metres, however this would only be achieved well beyond the anticipated life of the plant.

Light spill is identified as a possible visual impact. This has the potential to be significant. The landscape and visual impact assessment recommendations include that the lighting be in accordance with the Australian Standard AS 4282-2019, Outdoor lighting obtrusive effects, which should be acceptable.

ACTION: *The plant species used for screening purposes should be selected from the Native Plant community found in the vicinity of the site.*

A mixture of trees, shrubs and groundcovers should be used. This will provide an additional environmental benefit as well as screening the development.

ACTION: *A long term planting maintenance schedule should be provided and adhered to. The maintenance plan should contain a schedule of works that includes an annual timeline for weed management, plant replacement where needed, monitoring for pests and diseases, and watering etc.*

15. Design Report

Appendix C of the EIS considers the Architectural Design report. It is the opinion of Council that the *Precinct Context* does not adequately consider the context of the development site beyond the precinct site boundaries. In other words, the design report is inward looking and does not consider the visual aspects of the proposed development beyond the Veolia owned land boundaries, such as at the Weereewa Lookout on the Federal Highway, for example.

The lack of visual analysis as a starting point for the design development is alarming and calls into question the adequacy of analysis undertaken and the design response conceived.

ACTION: *The context should be considered beyond the boundary of the Veolia owned land.*

ACTION: *View analysis should be undertaken which adequately considers the visual impact of the design and the viewpoints from which it could be observed within the wider landscape.*

16. Social Impact

• Housing

The Social Impact Assessment (SIA) did not identify the construction period timeframe, or the number of construction workers associated with the project. The construction period as specified in the EIS is 3 years and the total number of construction workers is 297.

The main impact from the development would appear to be the impact of worker accommodation during the construction period. The community has identified (Table 4.3 p. 34) that housing availability is a vulnerability. Additionally, sections on local housing and the market (Section 3.5, p.22) also identify low vacancy rates for residential of 0.9%. The SIA also then considers vulnerable groups in Section 3.6 (p.23 onwards). In relation to rental housing the SIA (Section 5.9.4) notes:

Increased demand for skilled workforce and trades skills more generally, may arise with the construction and operation of concurrent SSD projects. This may cause potential impacts on the availability of skilled workforce in the local area, requiring additional project workforce to be sourced from outside the local and regional areas, which may increase demand on rental housing within the local and regional areas (further discussed in Sections 5.3.1 and 5.3.2).

This has significant potential consequences for persons currently at risk of financial hardship, housing instability and homelessness, particularly in the context of COVID-19, which has further contributed to increased rents and lower rental availability in regional areas of Australia, including the Goulburn Mulwaree area, due to migrations from urban centres to more regional and rural areas (Anglicare 2021, Goulburn Post 2021). Commitments to local hiring, provision of training and apprenticeship opportunities for local workers, and partnership with local employment and training services could reduce the need for outsourcing of workers.

The SIA recommends that this issue can be addressed with an Accommodation Strategy to be undertaken as a condition of approval including local procurement of workers/services. Table 5.4 below still indicates a negative impact despite mitigation in relation to short term accommodation.

Table 5.4 Accessibility impacts related to capacity and availability of short-stay accommodation

Social impact	Issue	Affected parties	Duration	Extent	Unmitigated	Mitigated
Accessibility	Accessibility related to capacity and availability of short-stay accommodation.	Short-stay accommodation providers; and general population within 1 hour drive project area.	Short term – construction phase	Local area and regional area	Medium (negative)	Medium (negative)

Table 6.1 p.68 does not include the housing related impacts.

The SIA fails to address the social impact of the housing for construction workers adequately. It clearly sets out that there is a significant issue with a shortage of short-term accommodation and that the local community is relatively disadvantaged and therefore vulnerable.

The amount of construction housing required will vary over the period of construction, but this is not broken down further in the EIS with the staging for construction phases. Whilst the procurement of local services/workers may reduce the number of additional beds required, given the scale and nature of the project it is quite likely that a significant number of more specialised workers from outside the local area will be required. There is also the matter of cumulative impact on housing affordability and availability given the other State Significant Projects which may occur within the LGA concurrently.

Given the potential for a high level of impact on housing availability and affordability more needs to be done in this area prior to approval of this project. It is not considered to be appropriate to leave this matter to the post consent phase of the approval process.

In recent discussions on other SSD projects a more meaningful response to the housing issues has been suggested. One potential option would be the construction of group homes or boarding houses for workers which once redundant for this project could add to the area's supply of affordable housing and make a meaningful difference to a vulnerable community. Alternatively temporary onsite housing for construction staff could be considered.

- **Community engagement**

It appears that an appropriate community consultation strategy has been implemented for this project with a wide range of engagement activities undertaken in the relevant locations. There would appear to be a high level of community awareness of this project.

From the survey undertaken, key local concerns identified are health, odour, air quality and traffic. Section 5.4.5 of the SIA discusses identified trust issues that exist within the community towards Veolia:

Tarago has a strong farming history, with many nearby residences detailing their tenancy and farming activities dating back to World War II. Many nearby neighbours have been residents and farmers in the area for 10–70+ years and are familiar with the context of the local area prior to the development of the Woodlawn Eco Precinct. Some stakeholders who participated in the SIA communicated a lack of trust in Veolia resulting from a perceived lack of open communication and responsiveness to their concerns related to the Bioreactor. Participants in the SIA reported experiencing significant impacts from the Bioreactor, such as odour and traffic, and felt that Veolia has not sufficiently addressed local community concerns.

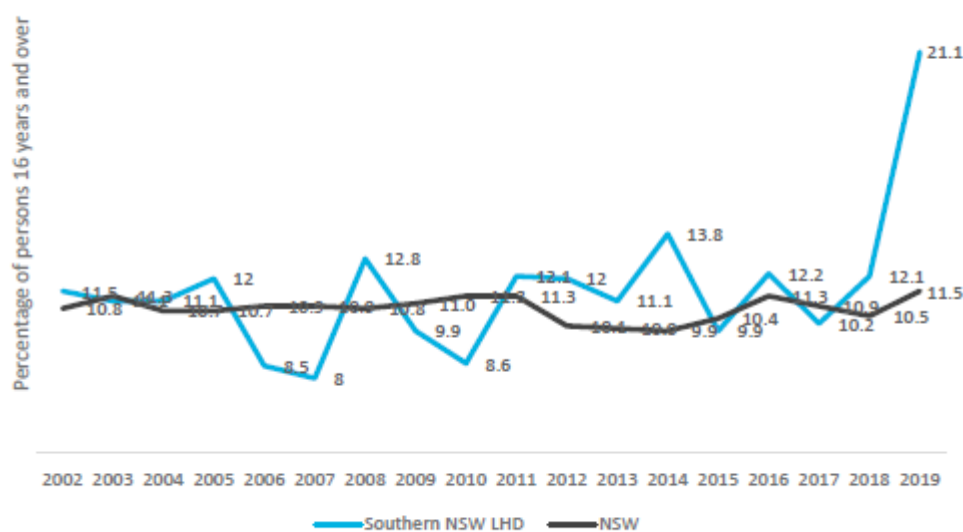
These issues are also reflective of Council's interactions with the public in relation to this project. There is a general theme of frustration expressed in the various findings of the SIA in relation to the existing situation which is informing concerns about the project. This is an understandable concern for the community as historical and current behaviours/issues are typically good predictors of future behaviours /issues. It may be that more targeted attention/commitment to addressing current issues such as road conditions and odour would go some way towards mitigating community concerns. The SIA recommends enhanced engagement with the community to mitigate trust issues, however this must also be met with a responsiveness from Veolia to genuinely address issues raised through engagement.

- **Health and Wellbeing (air quality)**

The ongoing issues with odour generated by the existing Veolia facility creates a trust issue with the community both in relation to Veolia and the EPA's capacity to monitor and control this issue. This project is proposing to incinerate waste which will generate emissions into the air. Again, fears around this are quite natural and to be expected. The SIA identifies existing community health issues (taken from Southern NSW LHD data – so broader than GMC), respiratory health (asthma) as per the following extract from Section 3.4.1 p.20 of the SIA:

*Within the Southern NSW LHD persons aged 16 and over saw an increase in those who suffered from asthma from 11.5% in 2002 to 21.1% in 2019 which is significant increase when compared to the prevalence of asthma for greater NSW which remained relatively steady during the same period, 10.8% in 2002 to 11.5% in 2019 as shown in **Figure 3.2** (NSW Health 2020). The increase in prevalence of asthma from 2018–2019 correlates with the prevalence of bushfires throughout the region during this time and the impacts of smoke exposure on respiratory health (Duckett, Mackey & Stobart 2020; Asthma Australia 2020). However, prior to this increase, rates of asthma in Southern NSW LHD were similar to the rates across NSW, with some slight variation year on year (NSW Health 2020).*

Asthma is an indicator of respiratory health of the community and vulnerability to dust and other air impacts. People suffering from asthma in the local area may be more vulnerable to impacts resulting from any project-related emissions. Trends of asthma were not available at the SSC or LGA level. Asthma trends throughout Southern NSW LHD are assumed to reflect trends within the local and regional areas.



Source: NSW Health 2020, Health Statistics NSW.

Figure 3.2 – Persons with Asthma (16 years and over) Southern NSW LHD vs NSW

The State will need to undertake a very active role should this facility be approved to monitor, publish, and communicate results with the community in relation to the management of this facility.

- **Road Safety**

The use of local roads for haulage of waste and construction raises community concern in relation to safety (due to deteriorated road conditions/ intersection safety) and is a point of concern and contention. As stated in Section 5.6.5:

Participants in the SIA expressed serious concern for public safety given the current conditions of the roads, specifically Tarago-Bungendore Road, which was reflected in the community survey with 14 out of 18 respondents rating traffic as a negative or very negative potential impact. Project-related traffic and perceived poor conditions of the roads were consistently raised as a concern and identified as a vulnerability within the local area during the SIA field study. Specific concerns were raised about public safety, including apprehension that project-related truck movements may further deteriorate road conditions. Stakeholders felt that Tarago Road and Bungendore Road are currently unsuitable for heavy vehicle traffic due to narrow lanes and single lane roads. Multiple nearby neighbours recounted experiences of dangerous driving from heavy vehicles, such as driving in the middle of the road and material spillage.

It is understood that the project at this stage is not seeking to increase the volume of waste being transported to the facility, however there will be additional construction traffic.

Notwithstanding the above, there are issues with Collector and Bungendore Road in relation to maintenance (damage to pavement and potholes) which has been exacerbated by the recent heavy rainfall and use for heavy haulage. Whilst contributions are made under current approvals towards road maintenance, these contributions do not factor in matters such as extreme weather events such as those currently be experienced. Therefore, the contributions are not considered sufficient to address the regularity of the current damages occurring.

In addition to the Appendices above it is noted that p. 85 of the EIS states that:

The development is likely to be subject to the Goulburn Mulwaree Local Infrastructure Contributions Plan 2021, or alternatively under a Voluntary Planning Agreement (VPA). Veolia is currently in discussions with Goulburn Mulwaree Council about contributions required for the project.

The project should have a Section 7.12 levy imposed of 1% of the cost of the development, in accordance with Council's adopted *Local Infrastructure Contributions Plan 2021*. Should a Planning Agreement (PA) be proposed then some discussion around this should have occurred with the Council prior to lodgement of the application. Obviously, should the State consider approving this application then any discussion about the content of a PA or at least a letter of offer should be submitted to Council for consideration. Should such an offer be made, additional improvements to Collector and Bungendore Roads could be considered.

It is noted that developer contributions are not mentioned in Appendix J – Statutory Compliance Table.

- **General Comment**

Social impact is in many ways the cumulative effect of several different factors. For instance, the impact of the development on the affordability and availability of housing is exacerbated if the population is already vulnerable and there is existing housing stress. Additional factors which add to vulnerability extend beyond the financial and into other areas such as respiratory health and relative mental health etc. The SIA is demonstrating that there are several existing factors in the mix in relation to health and wellbeing which will exacerbate the social impact of the proposal.

- ACTION:** *That the Accommodation Strategy be prepared and considered with the EIS prior to approval of the project. That the Accommodation Strategy is to include options and feasibility in relation to the provision of housing for construction workers to be purchased or erected by the proponent (whether on or off site) to avoid placing additional stress on the local short term or private rental accommodation markets. Options could include the development of boarding house type accommodation or group homes for construction workers in Goulburn, which would have the added benefit of providing additional social infrastructure once the project is completed.*
- ACTION:** *The independent assessment of health impacts undertaken as a part of the State's EIS assessment be published and included with a re-exhibition of the EIS to reassure the public that a thorough assessment of all health impacts has been undertaken.*
- ACTION:** *The proponent work in consultation with Council and the existing Tarago Community towards identifying local projects for funding from the Veolia Trust and assist the local community in relation to preparing grant applications.*
- ACTION:** *As a minimum a Section 7.12 levy be applied to the project under the provisions of the Goulburn Mulwaree Local Infrastructure Plan 2021. Should the proponent consider entering into a Planning Agreement with Council possible additional maintenance or upgrade of Collector Road and Bungendore Road be considered.*

17. Economic Assessment

Characterisation of the region is based on 2016 census data, however, the 2021 data is now available.

Section 3.2 Input-Output (IO) Analysis (p.11)

The IO method is based on a number of assumptions that are outlined in Attachment 2. Most notably IO analysis assumes that the regional economy has access to sufficient labour and capital resources (from both inside and outside the region) so that an individual project does not result in any regional price changes e.g., wages in other industries or house rentals, which would lead to contractions ("crowding out") of economic activity in other sectors in the same region. It is also based on average rather than marginal effects. A dynamic computable general equilibrium modelling approach may overcome the limitation of IO analysis but is unlikely to be warranted at local or regional scale with small scale impacts.

The consequence of the assumptions of IO analysis, is that IO modelling results provide an upper bound economic activity impact estimate. Notwithstanding, it provides some indication of relative positive and negative impacts.

There may be an issue in relation to assumptions for IO analysis in this LGA. Goulburn Mulwaree LGA (GM LGA) has a relatively high unemployment rate (6.8% in the June 22 quarter), but despite an available workforce there is potential for a lack of skills to match the positions available (for example, does the GM LGA actually have a suitably qualified work force). Furthermore, given the SEIFA indices and vulnerability of the population (mental health etc.), it could be that there is a range of factors which contribute to the relatively high unemployment rate in comparison to State and National rates. This could mean that increased housing stress for a vulnerable population is an outcome if the introduction of a higher paid construction work force is introduced associated with this project and other concurrent State significant projects, then crowding out of the rental accommodation market is likely:

The average annual construction workforce required for the project during construction is estimated by Veolia at 200 in 2023, 300 in 2024, and 150 in 2025. Based on the IO coefficients of the three construction sectors, the level of construction expenditure required to generate this level of employment across the three construction sectors is \$87M, \$131M, and \$66M, respectively.

The Economic Assessment makes no assessment of negative economic impacts on the rental housing market. If the pay rate of project construction or permanent workers exceeds that available to other locals seeking housing in the rental market it may take up all available rental accommodation and may also start affecting the ability of other businesses to bring in technical or professional staff. In consultation undertaken by the Department of Regional NSW with businesses in Goulburn Mulwaree, Yass Valley, and Upper Lachlan Councils, one of the key areas identified as a potential barrier for business was availability and affordability of housing being a significant factor impacting upon accommodation of workers and the ability to attract workers due to housing issues.

ACTION: The project is likely to have an impact on house rentals given the size of the construction workforce and the three-year construction period. The economic assessment should consider the impact of the project on the availability and affordability of private rental accommodation and the impact that this may have on other significant employment sectors/industries and their ability to attract/house employees. Consideration should also be given to the cumulative impact on housing affordability and availability resulting from concurrent State significant projects.

18. Onsite Management of Residual Waste

Appendix E of the EIS (Ash Management Study) is a report that deals with the likely composition scenarios of byproducts created in the Energy from Waste (EfW) process. It makes assumptions based on overseas data because there is no local data available, however, each international jurisdiction has different requirements and environmental laws meaning the report is only able to derive the likely outputs.

The report does not discuss the gases produced during the process or consider if all those gases are sufficiently scrubbed from the air before the exhaust gases are ejected into the atmosphere. The report merely, focuses on the fact the Advanced Energy Recovery Centre (ARC) will generate three types of waste output from the Energy from Waste (EfW) process namely-

- Incinerator bottom ash (IBA);
- Boiler ash; and
- Air Pollution Control residues (APCr).

The ARC will process up to 380,000 tonnes of feedstock waste per annum which will produce the following IBA and APCr waste outputs. Figure one also displays the likely waste classifications and disposal options discussed later.

PARAMETER	IBA	APCR
Waste classification	General solid waste	Hazardous waste (restricted solid waste following stabilisation)
Required disposal facility	Licensed GSW landfill (existing Bioreactor Landfill)	Licensed RSW encapsulation cell (doubled lined)
Annual mass produced	76,000 tpa	15,200 tpa
Density of final waste product	1.4 (1.2-1.7) t/m ³	0.7-1.5 t/m ³ including post-treatment bulking (0.4 t/m ³ pre-treatment)
Specific infrastructure required	Storage pad (to accommodate up to 3 months production capacity) with leachate collection and management	Treatment batching plant (sufficient capacity for 5 days waste production) and mixing unit, with appropriate reagent storage
Transport / handling requirements	Dust suppression and sediment controls associated with general waste management	Dust suppression and sediment controls associated with general waste management
Potential beneficial re-use options	<ul style="list-style-type: none"> — Landfill daily cover material — Road sub-base material — Construction material production (e.g. bricks, pavers, concrete, ceramics, etc.) 	<ul style="list-style-type: none"> — Cement clinker production — Light weight aggregates / concrete — Zeolite production

Figure 1 - Table ES.1 page vii of Appendix E

Interestingly, the report seeks to assert support for the ARC (p.3) because the 2018 National Waste Policy places EfW above disposal in the waste hierarchy. However, the report does acknowledge the following important statement:

“The NSW EPA outlined in its Energy from Waste Policy Statement 2021 that it encourages the recovery of energy from waste if this can deliver positive outcomes for the community and the environment. However, it specifies that energy recovery from waste proposals must represent the most efficient use of the resource and demonstrate they are ensuring air quality and human health are being protected”.

At section 2.4 (p.6) the report discusses the transition towards renewable energy production and asserts that the EfW process has the potential to contribute towards energy renewable targets, therefore, implying it is a renewable energy source. This assertion is incorrect as EfW is not a renewable source of energy like solar or wind.

Section 3.2 discusses input waste feedstock composition based on derived data from EfW plants located in Staffordshire (UK) and Vancouver (Canada) to assess the identified waste feedstock stream that Woodlawn has access to. The ultimate goal is to prove that the feed stock is similar, and if similar then the output would be similar.

This feedstock comparison is summarised in table 3.1 (p.9) and chart 1 (10) shown below:

Plant	Woodlawn ¹			Staffordshire ²	Vancouver ³		
Category	MSW	C&I	Average Input	Average Input	MSW	C&I	Average Input
Organics	39.9%	38.3%	39.6%	25.0%	28.4%	38.0%	35.7%
Paper/Cardboard	15.6%	20.3%	16.5%	24.1%	16.7%	15.2%	14.2%
Plastics	7.7%	5.3%	7.2%	17.9%	24.7%	14.9%	18.5%
Textiles	7.8%	2.1%	6.7%	9.5%	0.0%	0.0%	0.0%
Nappies/Hygiene	15.8%	16.9%	16.0%	5.3%	13.3%	4.4%	7.9%
Non Combustible/Inert	1.2%	3.0%	1.6%	2.7%	6.3%	12.5%	9.8%
Glass	1.5%	3.5%	1.9%	1.8%	2.0%	2.0%	2.2%
Metals	1.7%	1.9%	1.7%	3.4%	4.9%	5.1%	4.5%
Ewaste	0.3%	3.3%	0.9%	1.3%	1.8%	2.4%	1.9%
Other Combustible (not specified)	0.8%	1.8%	1.0%	3.4%	0.0%	0.0%	0.1%
Hazardous Material	0.9%	0.7%	0.9%	0.5%	0.6%	2.1%	1.1%
Other (not specified)	6.7%	3.0%	6.0%	5.2%	1.5%	3.3%	4.1%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%	100.0%

Figure 2- Table 1 page 9 of Appendix E

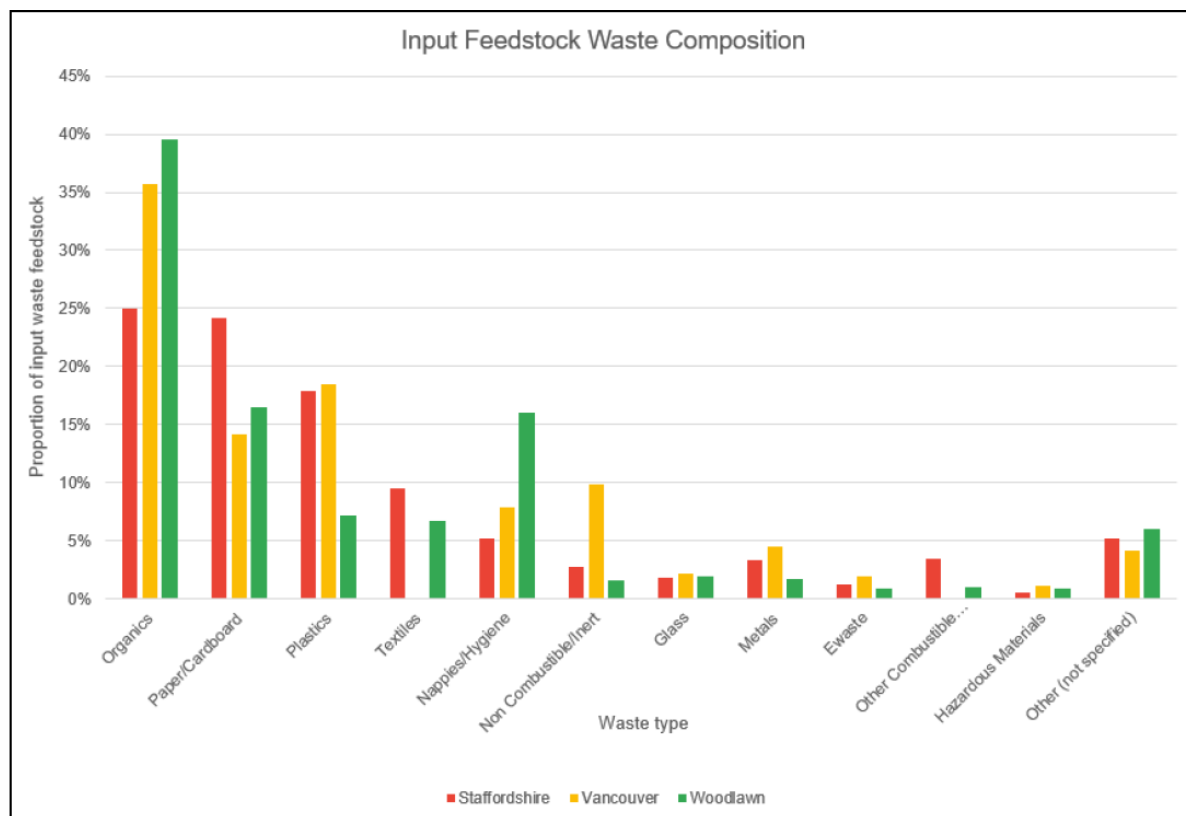


Figure 3 - Chart 1 page 10 of Appendix E

Section 3.2 describes the feedstock as being broadly consistent with organics, paper/cardboard and plastics which make up the bulk of the feedstock. The report determines the bulk to be greater than 66%. Unless 66% is a given value somewhere the bulk of the feedstock would be those items that have the highest value in any group. Using Chart 1, the bulk of the feedstock material (say any group 10%) for Woodlawn is derived from organics, paper/cardboard, plastics, nappies/hygiene. Whereas Vancouver, it would be organics, plastic, and nappies/hygiene.

Furthermore, the use of the term broadly seeks to assert to the reader that the comparisons are similar, however, the language then changes to generally which implies a greater acceptance that the results are aligned. Observation from Table 1 and Chart 1 do not ordinarily allow the reader to arrive at this comparison. For the feedstock to be generally consistent the individual bars on the graph at each item would need to be similar in height. Reading Chart 1 it could be said that glass, metals, E-waste, Hazardous materials, and other are generally the same.

The way the data is reported could be construed as misleading in the way it is discussed on page 9:

- *Organics comprise a higher proportion of the feedstock for Woodlawn than the reference plants, by up to 15% -*
This doesn't appear to be correct because it is just looking at the number on the graph. The reality is Woodlawn will process about 60% more organics than Staffordshire (UK). 15% sounds better than 60%
- *Paper/cardboard content varies by up to 10% between plants, with Woodlawn in the mid-range of the dataset.*
Again, this is just looking at the difference between the high and low numbers, plus Woodlawn is not in the mid-range. The values are Staffordshire 24.5%, Vancouver 14.2%, and Woodlawn 16.5%

It is important to note that the input feedstock will most likely change over time as recycling techniques and attitudes to recycling change, therefore, the evaluation of outputs will need to be undertaken on a regular basis to ensure the right level of waste classification is maintained.

IBA will be classified as General Solid Waste (GSW) and will in the short term (minimum 6 months) be transported to and disposed of in the onsite bioreactor. Long-term the report identifies that alternative uses could be derived from the IBA material such as:

- Landfill daily cover material (this would greatly reduce the need for *Excavated Natural Material* or *Virgin Excavated Natural Material* and reduce truck movements to and from the site)
- Road sub-base material
- Construction material production

Waste from the APCr will initially be classified as hazardous waste (HW), therefore, it will require immobilisation treatment to prevent leachate from occurring. This would then reclassify the waste as Restricted Solid Waste (RSW). The RSW is then disposed of in an encapsulation cell on site at the Woodlawn facility.

The report identifies many different treatment options (table 5.1 p.20) to immobilise the HW, however, the easiest and preferred is the use of Portland Cement (PC). The ratio of PC is dependent on the leachability and ranges from 1:4 to 1:2 (p.25). A typical five-day period will produce approximately 180m³ of APCr waste that will require immobilization. Therefore, the immobilization process will require between 45 & 90m³ of PC every five days. The report does not identify how many additional truck movements this equates to.

The conclusion is awkward as it introduces new arguments/information regarding how waste input feedstock is made to control the quality and therefore, the consistency of feedstock. The conclusion also introduces unqualified assumptions that have also not been discussed that the potential contaminant would be destroyed by the combustion process. If this was the case, why is the APCr classified as HW?

Furthermore, the conclusion states that input was feed suggest a general correlation with adopted waste plants (Staffordshire & Vancouver) and that the variation from the waste input model in Australia is low, to which Council disagrees. Australia has some of the worst recycling policy and practices, and in effect is below international best practice when it comes to resource recovery. Council would also expect there to be a reasonable likelihood that the waste stream will become contaminated, which if not managed correctly will have an impact on waste and emission output.

Notwithstanding the above, Appendix E contains a reference list at section 8 that extends to a page and half. However, the references listed are not all found in the body of the text, with several missing. Consequently, the omissions of adequate referencing calls into question the quality and validity of the documents being relied upon to the extent that they cannot be relied upon.

Finally, and of significant concern, is a statement within the EIS indicating that the use of Portland cement as a binding agent is still to be confirmed subject to the completion of trials. This is a statement of concern for Council and the community, as it demonstrates that not all processes associated with the project have been soundly proven. Ultimately it is not acceptable for a critical element such as this to be left open-ended. The applicant must therefore either demonstrate that the proposed process works, or alternatively find other means (that are demonstrated to be safe and environmentally neutral) of managing the ACPr.

ACTION: *Appendix E relies on statements and assumptions that are unsupported by reference material. To enable a thorough and complete peer review to be undertaken Appendix E is to be properly and correctly referenced in order to establish how the author has arrived at the conclusions asserted. Furthermore, all unsupported arguments and discussion must be removed.*

ACTION: *Appendix E makes assumptions on the likely waste outputs based on the comparison with other EfW plants, however, data used to justify the argument that the “input waste stream will be generally the same” in fact demonstrates that the reference data is dissimilar. Consequently, a different waste input stream would result in a different waste output. Therefore, Appendix E cannot be used to support the likely waste outputs because it is modelling different data. A reevaluation of the waste input model is required.*

ACTION: *Appendix E establishes that the preferred immobilisation technique is mixing the Hazardous Waste with Portland Cement, however, Appendix E has not established the likely number of trucks required to deliver to site the necessary Portland Cement quantities to immobilise the five day best and worst case average. Therefore, without this information the traffic impact assessment is not properly informed.*

ACTION: *While Appendix E discusses APCr, it does not discuss the operation of air pollution control systems or the input quantities of chemicals and liquids required to scrub the exhaust gases before being ejected into the atmosphere. The input chemicals and liquids contribute to the APCr waste outputs. However, Appendix E has not established the likely number of trucks required to deliver to site the necessary chemical sand liquids. Therefore, without this information the traffic impact assessment is not properly informed.*

ACTION: *Appendix E is concentrated solely on ash management with no assessment of the waste gases that are not captured by the APCr, therefore, ejected into the surrounding atmosphere. The EIS needs to include an evaluation of the efficiency of the APCr and the percentage of gases that will not be captured by the APCr.*

ACTION: *The use of Portland cement as a binding agent is still to be confirmed subject to the completion of trials. This demonstrates that not all processes associated with the*

project have been soundly proven. The applicant must therefore either demonstrate that the proposed process works, or alternatively find other means (that are demonstrated to be safe and environmentally neutral) of managing the ACPr.

19. Fire Safety

- **Fire Safety Study**

Appendix FF – Fire Safety Study is written by a suitably qualified fire engineering firm accredited in Dangerous Goods by the Australasian Institute of Dangerous Goods Consultants (AIDGC) and seeks to identify the fire risks associated with the operation of the proposed plant and its ancillary infrastructure.

The fire safety analysis identified numerous scenarios where radiant heat impacts may render active fire safety measures inoperable. Numerous recommendations are made in the report to combat these scenarios. Therefore, it is recommended that the recommendations of the report be incorporated into the approval.

Although the final fire safety design of the hydrant system has not been completed at this stage, I am satisfied with the methodology of the report. All reasonable and foreseeable risks and hazards are identified. The proposal may comply with the Fire and Rescue NSW fire safety guideline “*Fire safety in waste facilities*”. It is recommended to include a condition of consent that clause E1.10 and E2.3 of the National Construction Code is to be complied with to the satisfaction of Fire and Rescue NSW.

ACTION: If consent is granted to the proposed development, a condition is imposed in accordance with the section 7.2.1 of the Fire and Rescue NSW fire safety guideline “Fire safety in waste facilities” that clause E1.10 and E2.3 of the National Construction Code is to be complied with to the satisfaction of Fire and Rescue NSW.

ACTION: If consent is granted to the proposed development, that the consent document includes the recommendations of the Fire Safety Study prepared by Riskcon Engineering Pty Ltd dated 10/06/2022 found in Appendix FF of the EIS.

- **Bushfire**

Appendix X – Bushfire Protection Assessment is written by a suitably qualified consultant (BPAD Level 3 Accredited Practitioner).

Council has no objection to the proposal on the basis of bushfire risk providing the recommendations of the report are included into the approval.

ACTION: If consent is granted to the proposed development, a condition is imposed that a Bushfire Emergency Management and Evacuation Plan is prepared by the operator and is consistent with the NSW RFS publication A Guide to Developing a Bush Fire Emergency management and Evacuation Plan and AS3745:2010 - Planning for emergencies in Facilities.

ACTION: If consent is granted to the proposed development, a condition is imposed that includes the recommendations of the Bushfire Protection Assessment prepared by Travers Bushfire & Ecology dated 14 July 2022 found in Appendix X of the EIS.

20. Statutory Context and Statutory Compliance Table

The statutory context of the proposed development has been assessed by Council officers in addition to the Statutory Compliance Table, included as Appendix J to the EIS. The review has indicated that a number of matters require further consideration, as follows:

Statutory Document	Clause/ Reference	Considerations	EIS Reference	Comment
Environment Protection and Biodiversity Conservation Act 2000 (Cth)		The site does not comprise any listed threatened flora or fauna.	8.10 Biodiversity	Satisfied
Native Title Act 1993 (Cth)		There are no active Native Title claims within the development footprint.	8.11 Aboriginal Heritage	Satisfied
National greenhouse and Energy Reporting Act 2007 (Cth)		Veolia currently triggers the threshold for reporting on energy use and greenhouse gas emissions from the Bioreactor and MBT (mechanical and biological waste treatment facility). The proposal would not change the need to annually report under this Act.	8.3 Greenhouse Gas	Satisfied
Environmental Planning and Assessment Act 1979	Section 1.3	Object of the Act	5.4 Objects of the Act	Addressed, satisfied.
	Section 4.15(1)(a)	<p><i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i></p> <ul style="list-style-type: none"> 2.48 Development likely to affect an electricity transmission or distribution network (Essential Energy referral) 2.121(3) Traffic generating development (TfNSW referral) 2.152(1) waste or resource management facilities permissible in IN3 zone <p><i>State Environmental Planning Policy (Planning Systems) 2021</i></p> <ul style="list-style-type: none"> Schedule 1 (20) proposal is SSD as it is in an energy recovery facility with a CIV greater than \$30 million Schedule 1 (23) proposal is SSD as it is a waste resource management facility handling more than 100,00tpa of waste for the purpose of section 20 of Schedule 1 	<p>Table 5.4 Mandatory considerations for the project</p> <p>5.3 Permissibility</p>	<p>Addressed, satisfied.</p> <p>Addressed, satisfied.</p>

		<p><i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i></p> <ul style="list-style-type: none"> Chapter 8 Sydney Drinking Water Catchment (Water NSW concurrence) Chapter 3 & 4 Koala protection <p><i>State Environmental Planning Policy (Resources and Energy) 2021</i></p> <ul style="list-style-type: none"> Section 2.19 compatibility of proposed development with existing facility <p><i>State Environmental Planning Policy (Resilience and Hazards) 2021</i></p> <ul style="list-style-type: none"> Section 3.7 & 3.12 Hazardous and/or offensive industry Section 4.6 Remediation of land <p><i>Goulburn Mulwaree Local Environmental Plan 2009</i></p> <ul style="list-style-type: none"> The site is zoned IN3 Heavy Industrial and in this zone 'waste or resource management facility' or 'electricity generating works' are permissible with development consent. Zone objectives Clause 7.1A Earthworks Clause 7.2 Terrestrial biodiversity 	<p>8.6 Groundwater</p> <p>8.7 Surface water</p> <p>Appendix Y</p> <p>2 Existing Operations</p> <p>8.16 Hazards</p> <p>8.8 Contamination</p> <p>-</p> <p>-</p> <p>-</p>	<p>Addressed, satisfied.</p> <p>Request proper consideration</p> <p>Addressed, satisfied.</p> <p>Haven't considered zone objectives, Clause 7.1A or Clause 7.2 which are jurisdictional requirements</p>
	Section 4.15(1)(b)	Likely impacts of the development	8.1.3-8.16.3 Potential impacts	Addressed, satisfied
	Section 4.15(1)(c)	Suitability of the site for the development	3.3 Site suitability	Addressed, satisfied
	Section 4.15(1)(d)	Submissions	-	Not required as part of EIS preparation
	Section 4.15(1)(e)	The public interest	ES7	Request proper consideration

Biodiversity Conservation Act 2016		Discussion with Council's Environment and Biodiversity Assessment Officer indicates that whilst the proposal has been supported with a correctly prepared BDAR, the recommendation to pay credits is not the best the developer could do as it is not completely adhering to the 'avoid, mitigate, minimise' hierarchy. Due to the size and significance of the site (entitled an Eco Precinct), the developer could establish a Biodiversity stewardship site and increase supplementary planting, rather than retire credits.	8.10 Biodiversity	Could be better mitigated.
Water Management Act 2000		The site has an existing water access license. The proposal would not seek additional capacity from the existing 600ML capacity permitted.	Appendix U	Addressed, satisfied
Contaminated Land Management Act 1997		The site or land within 1km of the site are not issued with a contamination notice.	Appendix V	Addressed, satisfied
Waste Avoidance and Resource Recovery Act 2001		The proposal satisfies this Act so far in as it reduces waste going to landfill.	3.1.3 NSW Waste legislation and policy	Addressed, satisfied
Protection of the Environment Operations Act 1997	Section 48	Schedule 1 (18) Activity requiring an Environmental Protection License (EPA Integrated DA)	5 Statutory Context	Addressed, satisfied.
Roads Act 1993	Section 138	Approval would be required from Council as the road authority for any upgrade to the site access or works on Collector Road	5 Statutory Context	An approval under s138 of the Roads Act must be obtained from Council to ensure that appropriate traffic controls are in place, the appropriate construction standards are met and road user safety is maintained.

ACTION: *The EIS fails to properly or adequately address Clause 2.19(2) of State Environmental Planning Policy (Resources and Energy) 2021 in relation to the compatibility of the proposal with the existing adjacent Develop mine. Proper consideration is required to be demonstrated.*

ACTION: *Further consideration of the following provisions of the Goulburn Mulwaree Local Environmental Plan 2009 is required to be demonstrated:*

- d. IN3 zone objectives - In particular concern is raised regarding the objectives 'To minimise any adverse effect of heavy industry on other land uses' and 'To provide suitable areas for those industries that need to be separated from other land uses.'*
- e. Clause 7.1A Earthworks – the reference in Appendix J (8 Assessment of impacts) doesn't discuss earthworks.*
- f. clause 7.2 Terrestrial biodiversity – the EIS or BDAR do not properly or sufficiently address clause 7.2(4). The consent authority cannot grant development consent (jurisdictional requirement).*

ACTION: *Meaningful commentary towards Section 4.15(1)(e) of the Environmental Planning & Assessment Act 1979 (public interest) is required.*

21. Life Cycle Analysis

Appendix R is a report that deals with the life cycle environmental impacts of the proposed Energy from Waste (EfW) facility and compares it with and against a conventional coal, biomass-based and natural gas-fired electricity generation alternatives. The assessment is undertaken in accordance with the Australian Renewable Energy Agency (ARENA) guidelines (*Method and guidance for undertaking life cycle assessment of bioenergy products and projects*).

These guidelines are applicable to bio-energy products and projects. The ARENA government website (<https://arena.gov.au/renewable-energy/bioenergy/>) defines bioenergy as a form of renewable energy generated from the conversion of biomass into heat, electricity, biogas and liquid fuels. Furthermore, *biomass* (ARENA website) is considered to be organic matter derived from forestry, agriculture or waste streams available on a renewable basis. It can also include combustible components of municipal solid waste. By the inclusion the combustible component of MSW the ARENA website is asserting that burring combustible waste is a form of bioenergy even though the combustible waste will include non-biomass items. Therefore, by the inclusion of the combustible component of MSW the project is able to be considered as a renewable energy source even though the source of energy does not align with the community's reasonable understanding of the phrase "renewable energy".

Subsequently, as the proposal is defined as bioenergy project, it is therefore able to be considered against the above guidelines.

The Life Cycle Analysis (LCA) identifies that the dominant environmental benefit arises from landfill avoidance of residual MSW and C&I wastes and from the recycling of ferrous and non-ferrous metals

Appendix R identifies that the proposed model for energy recovery from residual MSW and C&I wastes has lower environmental impacts than electricity production from both coal and biomass for all impact categories.

Furthermore, the proposed residual MSW and C&I waste-based electricity production system has lower environmental impacts than a natural gas-based electricity production system in all environmental impact categories except acidification. However, none of this is relevant to the site or the region as there are no coal-fired or gas-fired electricity production facilities currently in the LGA, or the region.

Additionally in relation to Climate Change, Fossil impact indicator, the proposed residual Municipal Solid Waste (MSW) and C&I waste-based electricity production system performs best against natural gas -based electricity generation system followed by coal-based and biomass-based electricity.

Finally, Appendix R essentially provides overall support that the EfW offers considerably better environmental alternative to other electricity generating options.

ACTION: Appendix R relies on recommendations derived from modeling the Life Cycle Analysis against the guidelines for bio-energy projects, however, the proposal does not meet the definition of a bioenergy facility per se as it relies solely on burning MSW. The proposal by definition is an EfW facility and not a bioenergy facility, therefore, it is inappropriate to assess the proposal against the guidelines for bioenergy. Furthermore, there are no comparable operations currently operational in the region. Accordingly, Council requires a new Life Cycle analysis to be prepared based upon the local context and under the definition of an EfW facility, not a bioenergy facility.

22. Biodiversity

The Biodiversity Assessment Report (BDAR) has been prepared as a requirement of SEAR (Secretary's Environmental Assessment Requirements) for the proposed activity.

The findings of the BDAR are broadly supported.

The BDAR has been prepared as required under requirements of the Biodiversity Assessment Method. Biodiversity values of the land and impacts of the proposed activity have been assessed and documented.

Vegetation on the site has been surveyed, mapped and identified appropriately.

The land proposed to be developed comprises has been historically cleared of vegetation, is highly degraded and the area has a long history of disturbance.

However, the report identifies that approximately 1.7 hectares of the area to be cleared contains vegetation, mostly comprising regrowth dominated by native species in previously cleared land. The study has determined that of the 1.7 hectares containing vegetation, 1.55 hectares meets the definition of native vegetation.

As the project will entail clearing of > 1 hectare of native vegetation, entry into the BOS is triggered through the area clearing threshold.

Native vegetation on the land has been assigned to *PCT 1191 Snow Gum – Candle Bark Woodland* on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion. This PCT is a component of the ecological community *Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions*, which is listed as a Critically Endangered Ecological Community under Schedule 2 Part 1 of the *NSW Biodiversity Conservation Act 2016*. This community is also identified as a community at risk of Serious and Irreversible Impacts (SAII).

A Threatened Species Test of Significance has been conducted appropriately and has determined that the proposed activity will not have an adverse significant impact on the Critically Endangered Ecological Community/SAII on the site.

Threatened flora and fauna species listed under the *NSW Biodiversity Conservation Act 2016* and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* with potential to be present on the land have been identified and assessed appropriately.

The project has been designed to avoid impacts on biodiversity as far as possible by locating the proposed activity in previously cleared and disturbed areas.

The BDAR has determined that following all efforts to avoid and minimize impacts of the proposed activity, 31 ecosystem credits are required for PCT 1191 Snow Gum – Candlebark woodland on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion.

The proponent proposes to meet these ecosystem offset credit requirements by purchase of credits from the biodiversity offsets trading market and/or payment into the biodiversity conservation fund.

This is justified in the BDAR on the grounds that the credit requirement is “*relatively small*” and due to “*timeframe constraints*”.

This is extremely disappointing.

Veolia’s total landholdings at the Woodlawn Eco Precinct comprise approximately 6,000 hectares and large parts of this area clearly feature hundreds of hectares of good quality remnant native vegetation. There is enormous scope for establishing a Biodiversity Stewardship Site that would more than meet the credit requirements of this and any future projects.

Similarly, the project includes a proposal to replant native vegetation corridors along the new ARC access road (*Table 7.5 Impact Mitigation Strategy*, page 54) to mitigate impacts of removal of native vegetation on the site. However aerial imagery suggests that the areas immediately adjacent to the proposed access road already contain regenerating native vegetation and do not need replanting.

It would be preferable for the proponents to identify cleared and degraded areas on other parts of the site that could be restored to PCT 1191. There are ample opportunities for them to restore > 1.7 hectares of land to this PCT, which would not only mitigate the proposed loss of native vegetation but would also result in a long term overall gain in biodiversity values in the local area.

The proposed ARC is located within Lot 2 DP 1179305 and it appears that there is an area comprising approximately 20 hectares in the eastern part of the lot (see diagram next page) that would be suitable for rehabilitation and restoration of native vegetation. A project such as this would also assist with screening the proposed ARC from the Collector Road.

The proposal to discharge residual offset requirements appears to be considered by the proponents to be purely a financial transaction or “business cost” and shows no real commitment to conserve and enhance biodiversity values of the site or the local area.

ACTION: *The proponents should identify cleared and degraded areas on other parts of the site that could be restored to PCT 1191. There are ample opportunities for this to occur, which would not only mitigate the proposed loss of native vegetation but would also result in a long term overall gain in biodiversity values in the local area.*

ACTION: *The proposed ARC is located within Lot 2 DP 1179305 and it appears that there is an area comprising approximately 20 hectares in the eastern part of the lot (see diagram next page) that would be suitable for rehabilitation and restoration of native vegetation. A project such as this would also assist with screening the proposed ARC from the Collector Road.*

23. Strategic Planning and Legislative Framework

Page 34 of EIS has quoted Council's Local Strategic Planning Statement (LSPS) with regards to Planning Priority 7: Sustainability. When Council prepared the LSPS, it noted that "*supporting increased take up of renewable energy generation and use*" would be a land use challenge that would need to be overcome in order to "*identify waste and recycling services and infrastructure to meet the needs of the growing community*". Veolia's response on page 35 is that "*the project will enhance the region's ability to implement circular economy waste management principles and benefit from energy produced locally*".

Veolia have incorrectly taken this statement and have used it in an effort to promote the ARC EfW project by effectively merging two distinct points that were never intended to be conjoined. In other words, Council and the community has recognised that it is well located to take advantage of true renewable energy proposals, i.e. wind and solar, in order to increase uptake of renewable energy generation and use. Council does not see a move towards a circular economy for waste and recycling involving the incineration of its local waste stream. Council would prefer to see better Government Policy and regulation relating to the waste industry that would ultimately create a shift towards resource recovery and reuse.

For over 20 years Goulburn Mulwaree Council has continued to manage its own waste without relying upon the Woodlawn Eco-Precinct. Council and the community do not see our role as continuing to support a lack of meaningful and environmentally conscious Government waste initiatives and Sydney Metro Councils with poor environmental practices.

It is Council's understanding that a key component of an EIS is to identify alternatives to the proposal as a means of being able to justify the project. In this instance the EIS appears to completely overlook this requirement and is considered a fundamental flaw in the overall project.

Accordingly, Council does not consider the project to be in the public interest if no alternatives have been identified, let alone considered.

ACTION: *Suitable alternatives to the project must be identified, thoroughly assessed and genuinely considered, and the EIS consequently re-exhibited with the findings prior to any assessment being completed.*

Conclusion

Council's review and assessment of the Environmental Impact Assessment for the proposed Advanced Energy Recovery Centre at 619 Collector Road, Tarago, has demonstrated numerous deficiencies that, in the opinion of Council Officers, does not allow for the complete assessment of the development application. Furthermore, in its current state, the EIS does not sufficiently or appropriately justify a demonstrated need for the project, nor does it demonstrate a minimal impact upon environmental and public health, not only in the immediate vicinity of the proposed development, but also on a much wider regional scale.

In addition to the above, the project has not made any reasonable attempts at identifying or exploring alternative options or locations, including locations much closer to the source of the anticipated waste feedstock streams.

On balance the proposal is not considered to be in the public interest, and Council does not consider that the project should be approved. Council therefore strongly objects to the proposed development in its entirety.

Recommendation

It is recommended that:

1. Council provide a letter to the NSW Department of Planning and Environment that states its formal objection to the proposed Veolia Advanced Energy Recovery Centre to be constructed at 619 Collector Road, Tarago.
2. Council makes a written submission to the NSW Department of Planning and Environment in relation to Development Application SSD-21184278 requesting that the actions as identified by Council in this report be undertaken by the applicant prior to an assessment being finalised.
3. In the event that consent is granted against the wishes of Council and the community, Council make representation to the relevant NSW Government authorities seeking that a maximum of one (1) Energy from Waste facility be allowed in each Waste Priority Infrastructure Area, as identified in the NSW Energy from Waste Infrastructure Plan, at an annual processing limit not exceeding 380,000 tonnes.
4. In the event that the project will proceed against the wishes of Council and the community, the Chief Executive Officer be given delegation to negotiate the provision of additional community benefits to the Goulburn Mulwaree LGA, and in particular, the Tarago and Lake Bathurst district, prior to a consent being issued.