Submission Opposing the Application
by Veolia Environmental Services (Australia) Pty Ltd
for Consent by the State of New South Wales
to a Project of State Significance,
Application ID – SSD 13_6277,
By Richard David Graham, a Party with Standing
Prepared: 12 December 2022



Woodlawn – A Blight to Southern Tableland's Landscape Beauty and Viability

CONTENTS

CONTENTS	2
Figure Table	3
Opening Remarks	4
A Party of Standing	4
Introduction	5
Framing the Waste Scenario	6
Commonwealth Policy	6
New South Wales Policy	7
The Irrefutable Reality	8
Waste Scenario in a Nutshell	9
Community	10
Proponent Failed to Contact Me	10
Let's Define Region	11
Who We Are	12
Economic Impact	13
Cumulative Impacts and Impingement	14
Water	15
Dust	15
Heritage	15
Mulloon Rehydration Initiative	17
For the Record Public Health Impacts of Incinerator Technologies	19
Time to Back Up	19
New Age Incineration or An Outdated Industry	20
Incineration Emissions Toxicity	22
Zero Waste Australia on Incineration Air Toxins	22
Nanoparticles	23
Ultrafine particles	23
Incineration By-products a Circular Economy Risk	24
Abstract - Toxic Fallout – Waste Incinerator Bottom Ash in a Circular Economy	24
Encasement – The Elephant in the Room	25
Composting Is the Fit	27
Do It Local	28
Beyond Source Separation	29
Conclusion	30
POLITICAL DONATION DISCLOSURE FORM	32
ADDENDUMS	33

Abbreviations contained herein are per EIS

© 2022 Wiser Equity Pty Ltd

Figure Table

Figure 1	Excerpt from the National Waste Policy Action Plan 2019 Publication	6
Figure 2	The waste hierarchy from the NW Policy (Commonwealth of Australia 2018)	8
Figure 3	Woodlawn and Landtasia are less than 3km apart - boundary to boundary	10
Figure 4	Region Likely to be Affected by the Veolia Incinerator Proposal 1,090,000 Acres	11
Figure 5	Woodlawn - the gift that just keeps giving	14
Figure 6	Our Heritage - Our Future	16
Figure 7	The Mulloon Creek Rehydration Initiative	18
Figure 8	Visualisations of Proposed stack emissions	21
Figure 9	Transforming Australia One B-double at a Time	28
Figure 10) Layne Francis Graham b:2022	31

Opening Remarks

My name is Richard David Graham. My home address is 867 Butmaroo Road, Mulloon, NSW 2622. I began living in Mulloon Parish in 1994.

I am a regional agricultural primary producer, global technology developer and local businessman.

I have prepared this submission that fully opposes the Application ("Application"), to the NSW Department of Planning and Environment ("Department"), by Veolia Environmental Services (Australia) Pty Ltd ("Proponent", "Applicant" or "Veolia") for the approval of a waste incineration complex and hazard waste storage encasement identified in the Application as "Woodlawn Advanced Energy Recovery Centre" ("Proposed Development", "Proposal" or "Incinerator"), as a Project of State Significant Development ("SSD"), application number SSD-21184278.

I became aware of the Proposed development a few weeks ago after seeing opposition flyers in local shops. While having read the EIS and most of its Addenda, limited time hasn't permitted me to absorb and consider its full consequences in their entirety. However, the Proposal is so abhorrent that just the top levels of consequences are sufficient to form a strong opposition position.

A Party of Standing

I have standing in this matter on several grounds.

- 1. I am a resident who anticipates being adversely affected by fallout and contamination from the Proposed Development.
- 2. I am a significant property owner of 11,400 acres of agricultural, scenic, and rural domicile land with building entitlements, including property within 3 km of the Veolia holdings, all within the areas identified in Figure 8.33 of the EIS as Local and Regional social impact areas.
 - The property is bound into a Certified Organic farm called Landtasia. It is certified by ACO Limited, the Australian organic auditor and certifying body. Landtasia has been certified organic since 2006 for livestock, horticulture and viticulture.
- 3. I hold from WaterNSW 22 one-megaliters (22 M Ltrs) Water Access Licenses (WAL) to extract from the Goulburn Fractured Rock Groundwater aquifer water source.
- 4. I have invested more than \$19,000,000 since 1996 (excluding land acquisition costs), in the improvement and evolution of Landtasia, in anticipation of future commercial benefit in the fields of Small Lot Organic Agriculture, Agritourism, Ecotourism and associated Hospitality.
- 5. Landtasia has owned and operated an ACO Certified Organic, EPA licensed, FOGO (Food Organic and Garden Organics) waste recovery composting facility since 2014 at Kings Highway, Mulloon.
- 6. I was a panel member of the successful NSW Heritage and Environment supported, City to Soil / Groundswell, FOGO source separation trial by the LGAs of Goulburn/ Mulwaree, Upper Lachlan, Queanbeyan, and Palerang 2007 2011 (with an extension for Palerang).
- 7. I own 5.5 acres in the village of Bungendore and 3 community and tourist-supporting businesses The Carrington Inn, Café Woodworks, and FLOCK Restaurant & Beer Garden.
- 8. I was an Elected Member of Palerang Council for two terms, from 2008 to 2016. I participated in the development of the Council's cornerstone planning instruments, the Palerang Local Environmental Plan and Development Control Plan.
- 9. I reasonably believe I will suffer significant adverse effects to wellbeing and financial consequences if the Proposed Development is approved.
- I reasonably believe I and others who may stay or work on my properties may suffer unnecessary adverse consequences to health and wellbeing if the Proposed Development is approved.

While I strive in my character and actions to be positive, optimistic, and congenial – due to the criticality of this Proposal – I commence my submission with goodwill but without humour or doubt, so as to leave no uncertainty about the serious harm I think the Incinerator would bring to our region were it to be approved. After that topic is covered I will share, as an alternative path, some of my experience processing FOGO in the region, including direct involvement in a successful LGA waste source separation trial – City to Soil / Groundswell, which recycled domestic FOGO and created EPA Compost Order compliant compost.

Introduction

I write to seek to influence the assessment and outcome of the Proposal to avert the incalculable long-term harm to the residents of the cities of Goulburn and Queanbeyan, and the townships of Bungendore, and Braidwood and the villages of Tarago and Lake Bathurst and the millions of acres of productive pastoral land that will also be affected.

I start this submission by directly speaking to the flawed EIS and its utter mischaracterisation as a modern and safe solution that it claims will 1) enable NSW public policy which intends to reduce GHG emissions, 2) enable what has been called a 'circular economy' for waste, and 3) generally make the world a better place.

The applicant's approach to the EIS, while voluminous, is dismissive of important matters and curates language to imply a positive answer for matters that aren't substantiated in fact. It presents in one breath their global experience as a virtue to be relied upon and then they confess the problems with their reference incinerator in Sheffield, England. They state these problems are due to its not being operated and maintained to the proper level even though their company is the one running it. We are being asked to trust and rest assured that this won't happen again if they run one at Woodlawn.

The Proposal claims to be the answer to delivering on the public policies of the Commonwealth's National Waste Policy Action Plan 2019 (NWP) and the NSW government's NSW Waste and Sustainable Materials Strategy 2041: Stage 1-2021-2027. But this claim can only be made by stretching the interpretation of the policies, as the EIS repeatedly does, so one can only come to that conclusion through corporate self-interest.

The 'solution' fails on all critical policy points and sits at the very bottom of the NWP waste hierarchy pyramid as their proposed process takes benign waste and creates hazardous waste, which must then be entombed and maintained for untold generations. It is a proposal that is looking into the 'rear view mirror' and not toward the future. The State can do much better than this.

The problem with a proposed facility like this is there <u>is no back out for the community</u> when it goes sour. This is already showing itself in the failure of the operator to stop the pungent odour emitted from the so-called 'Bioreactor' they created; a landfill that has decades of filling to go. When you consider EIS's remarks on the matter, they do not address stopping the odour instead, they will just monitor it, assess it, report about it, and 'if affordable and if reasonable' they may fix it.

They then deflect this failure onto the State, saying if people <u>don't trust them</u>, it is <u>the State's fault</u>. That either shows a sheer lack of basic corporate responsibility or perhaps revealing a 'Marie Antoinette' moment of their corporate hubris.

And what if the outcome of this 'monitoring' is not affordable or reasonable, what then for the residents - suffocate with an ever-increasing stench? Sell their property to Veolia at 10 cents on the dollar? From an EPA perspective, are they 'too big to nail'?

What will make Veolia comply and fix failures? If this proposal is approved, they and the situation will probably become Too Big to Enforce as they will be incinerating Sydney's waste 24/7/365 and won't be able to be stopped, lest Sydney's rubbish piles up in the streets. If fined more than a token amount, they can respond by log jamming the flow from Sydney or in the extreme, they can be fined into bankruptcy if the mitigation costs don't add up in its board room.

While this is a rubbish company, it is also one operating around a mine where the previous operator went belly up after 21 years, leaving the contamination, which Veolia is eager to point out in their EIS. There's nothing sacred about a big international company pulling up stakes once the going gets tough and leaving the locals directly - and indirectly through their taxes - left holding the bag. That bag will be economically and geographically huge, environmentally toxic and will cripple the region for future productive use.

Our greater Community says NO to this abominable application and calls upon the Department and the Minister to reject it.

Framing the Waste Scenario

Commonwealth Policy

The **National Waste Policy Action Plan 2019** includes targets and actions to implement the 2018 National Waste Policy. These admirable targets and actions guide Australia's investment and national efforts to 2030 and beyond and include:

- banning the export of waste plastic, paper, glass and tyres, commencing in the second half of 2020
- reducing the total waste generated in Australia by 10% per person by 2030
- achieving an 80% average recovery rate from all waste streams by 2030
- significantly increasing the use of recycled content by governments and industry
- phasing out problematic and unnecessary plastics by 2025
- halving the amount of organic waste sent to landfill by 2030
- making comprehensive, economy-wide and timely data publicly available to support better consumer, investment and policy decisions.

The plan complements and supports the implementation of better waste management and circular economy plans by state and territory governments, local government, business and industry.



Target 6:

Halve the amount of organic waste sent to landfill for disposal by 2030



Organic waste is one of the main waste types sent to landfill. It creates greenhouse gas emissions and costs households thousands of dollars each year.

Organics like food and garden waste are valuable resources that can be harnessed and returned to productive use, turned into compost to improve and fertilise soil, or rescued to provide food for people and animals.

National action is required by all levels of government, businesses and communities to reduce organic waste and improve how we collect and treat organic waste in all waste streams.

Figure 1 Excerpt from the National Waste Policy Action Plan 2019 Publication

On balance, the Applicant's conclusion about the NWP and their interests, truly gilds the lily. The only call out to FOGO in the NWP document is to composting and returning it to soils, not incinerating it.

 $^{^{\}mathbf{1}}$ "Hence, the NW Policy supports the development of the energy recovery industry nationally."

New South Wales Policy

NSW Waste and Sustainable Materials Strategy 2041: Stage 1 – 2021-2027 focuses on the environmental benefits and economic opportunities in how we manage our waste.

In 2019, New South Wales agreed to a set of targets as part of the **National Waste Policy Action Plan**. In this strategy, the State committed to adopting these targets as the NSW targets.

The targets are to:

- reduce total waste generated by 10% per person by 2030
- have an 80% average recovery rate from all waste streams by 2030
- significantly increase the use of recycled content by governments and industry
- phase out problematic and unnecessary plastics by 2025
- halve the amount of organic waste sent to landfill by 2030.



Some of the key reforms include:

- mandating the source separation of food and garden organics for households and selected businesses
- reaffirming State's commitment to the goal of net zero emissions from organic waste by 2030
- introducing tighter environmental controls for energy from waste in NSW

Net Zero Plan Stage 1: 2020–2030, which sets out how we will reduce our emissions by 35% by 2030.

- Mandating separate food and garden organics collection for all NSW households by 2030 and large supermarkets and hospitality businesses by 2025.
- Increasing diversion of organics from landfill and processing technologies like composting and anaerobic digestion are an important first step towards reducing emissions from waste.
- Supporting energy recovery where it makes sense to do so and where it is used to manage residual waste, not as an alternative to recycling, ensuring such projects protect the environment and human health into the future.
- The NSW Government will conduct two initial phases of detailed consultation on the highest priority actions.



Were the Incinerator to be approved, by the time it was built and operational (2027), all NSW large supermarkets, hospitality venues and many LGAs would already be source-separating FOGO for collection (2025), with all LGAs following suit within three more years (2030).

Putting source separated FOGO into incineration, would be contrary to the NW Policy which NSW has also adopted. It would be the destruction of the inherent value of the recyclable assets, conflicting with the duty of care and fiduciary responsibilities State officials and officers have to the constituents of the State

The Irrefutable Reality

The irrefutable evidence that incineration is contrary to public policy and public interests, as it relates to the goal of circular economy and 'retaining the value of materials in the economy for as long as possible', is that incineration intervenes to permanently terminate recyclability. Once put into a furnace, 1) it will be converted into GHG and ash, 2) the whole process will consume more energy than it creates, 3) waste will be removed from recycling forever, and 4) its residual going to landfill – Four strikes against public policy.

By a simple, clear alternative comparison, a discarded pumpkin in the waste stream can be composted and sent to land to grow another pumpkin, to be discarded and composted and sent to land to grow another pumpkin, ad infinitum. This is the definition of sustainability.

FOGO is 65 - 80% water. What net positive caloric contribution is it likely to make being mostly water? To fully liberate² its carbon, external energy must be used – methane and more GHG. Incineration of FOGO for net energy generation is a sleight of hand, an illusion.

The 2018 National Waste Policy recognises that Australia's attitudes to waste have shifted. The value of resources and embodied energy in waste is now recognised and there is an economic opportunity and growing desire to see our resources recaptured and recirculated in our economy.

This Proposal does not do that.

Veolia's Least Preferable Outcomes

The incineration process the Application proposes to apply to the MSW source-separated waste stream lives at the very bottom of the NWP waste hierarchy.

It does not recycle, but rather permanently terminates the potential inherent in the waste. Even if one set aside the total net negative energy result of the process and gave credit for pushing electricity down a line, that potential would then be permanently terminated as soon as the light bulb was turned on. La fin!

What is then left in our wider community is newly created hazardous waste to be covered on site (the mild stuff) and stacked in a forever encapsulation (for the carcinogenic stuff) subject to leaching.

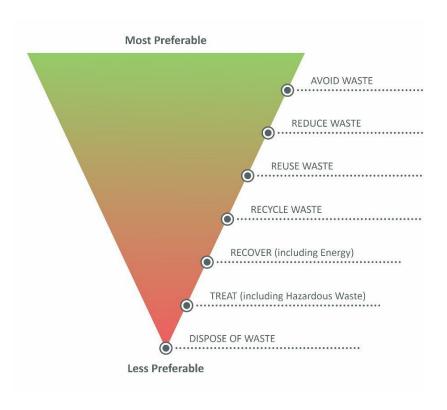


Figure 2 The waste hierarchy from the NW Policy (Commonwealth of Australia 2018)

² The incineration process takes carbon in the waste that is sequestered as a solid and releases it as GHG including CO, hazardous ash, and heat.

Waste Scenario in a Nutshell

NSW has adopted the Commonwealth's National Waste Policy as its own. In doing so, the waste reduction strategy priorities follow the inverted Waste Hierarchy pyramid with the highest most desirable priority being not creating waste in the first place (Avoid Waste) to the lowest, least desirable priority being disposal of waste to landfill (Dispose of Waste). Both governments see waste streams as a resource pool and have high goals for asset recovery, whether as recycled/reuse or as inputs to new products.

Both have a strong focus on halving the amount of organic waste sent to landfill by 2030, with accentuation on composting and anaerobic digestion to achieve this. The Commonwealth policy does not make a connection between incineration and organic waste, while the NSW strategy does make a connection but expresses numerous requisites and reservations about that pathway.

By 2025, NSW will mandate large supermarkets and hospitality businesses to source-separate food and garden organics (FOGO), while encouraging with financial support LGAs to do so too. However, by 2030 all LGA households will be mandated to source-separate food and organic wastes. FOGO can represent around 50% of all MSW. By separating FOGO from other wastes, the State is creating a clean and recyclable raw asset.

Energy from Waste – EfW is a known 'greenwash' marketing concept for incinerator operators; it is not new science nor is it a beneficial environmental process. Burning carbon is, without a doubt, the antithesis of what the world wants for electricity generation. In the most benign indictment, EfW is a concoction of the self-interest of waste operators and unimaginative waste authorities.

It is a process path that is extremely expensive to pursue and introduces hazardous waste into the environment that wasn't present prior to their process being applied.

The EIS claims – but does not substantiate – their process is a 'low carbon' energy saving process. The paper offers some energy accounting gymnastics that include allowances and offsets that obfuscate what the actual caloric expenditure is for all steps in the process, including encapsulation maintenance. The incineration, toxic scrubbing and encapsulation processes are energy and water wasters and emit incremental GHG beyond a traditional landfill solution or which could be virtually eliminated in a FOGO-compost/Landfill strategy.

The EIS implies the Proposal is economically efficient, offsetting the sale of electricity against operational costs, but does not substantiate that in a transparent way. Frankly, this is not credible. The process is much more complex than landfill management and in fact still includes landfill processes within it.

Since Veolia raises economics as a consideration for approving their EIS, let them provide a full economic disclosure of the direct cost to State and local taxpayers (including gate fees, grants, waivers, free State services, interest benefits, and other non-invoiced emoluments), plus the future financial externalities of the process pushed onto the taxpayers – such as maintaining the toxic encapsulation cell.

Let them disclose the contract that motivates them to build a \$600 million incinerator. Would it be that taxpayers are buying it for them over 25 to 30 years on what is called a 'Put or Pay' like contract? Put or Pay is a contract under which a party agrees to supply a raw material for a certain price during a stated period. If that party cannot deliver the material, it agrees to pay for an alternative supply.

Why might this be important to NSW taxpayers and residents to know? Aside from the obvious, it could economically discourage LGAs from recycling and extinguish using FOGO for composting. Why? Because if there was a Put or Pay-like contract, and if the State/Sydney didn't deliver all the waste it contracted to deliver, it would have to pay the incinerator operator to buy the shortfall from elsewhere. ³

I strongly oppose this Application because:

- Incineration economics are diametrically opposed to a circular recycling economy,
- Burning carbon to generate electricity is inconsistent with reducing GHG emissions policies,
- The financial cost to the public is hidden and may include dynamics that would cause governments to either retreat from recycling to assure their waste supply obligations are met, or in the alternative, have to pay the operator to purchase waste elsewhere to replace that which was diverted to recycling (for example, FOGO to composting), thus doubling the cost to taxpayers.

As such these outcomes are against public policy and public will.

³ https://zerowasteeurope.eu/2017/10/deliver-pay-waste-incineration-causes-recycling-slow/

Community

Proponent Failed to Contact Me

I have noted in the Proponents EIS declarations that they had made concerted attempts to contact landholders and residents in the **Local Area** identified in EIS figure 8.33. This despite the fact I meet more than one of their stated criteria for contact and consultation, no consultation ever occurred.

Contrary to those declarations and despite the materiality of my property holdings vis a vis the Proposed Development, both in terms of size and proximity, no person representing the Proponent has ever contacted me for an appointment neither meeting or speaking with me person-to-person or via telephone in that role. There has been no oral exchange or written correspondence from the Proponent to me personally or my representatives.

The only mailbox flyer we received relating to the development proposal at our property address, 1151 Braidwood Road, Mt Fairy, was from **Communities Against the Tarago Incinerator.**

Given other landowners have also reported a similar failure to specifically communicate, this may be indicative of the Proponent's intentions. My identity and holdings are known in the community, and my telephone, email and postal contact information are listed on two websites throughout all relevant times, 4 as well as accessible from QPRC as a resident likely to be affected by a State Significant Development.

While their words are there in the EIS, I interpret their will is not. Their failure to effectively communicate and advise me is not only a personal slight but has also put me at a time disadvantage to fully research and assess the Proposal and to engage fully with my neighbours and the wider community about it.

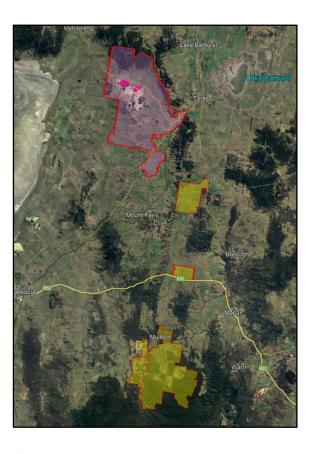


Figure 3 Woodlawn and Landtasia are less than 3km apart - boundary to boundary.

Woodlawn property red | Landtasia property yellow

⁴ www.Landtasia.com, www.thecarringtoninn.com.au,

Let's Define Region

For a development such as the one being proposed, the applicant's definition of Local Region is insufficient. The Proposal isn't for a two-storey house with an oversized shed that might have some amenities effect on the bordering neighbours. This proposal has far-reaching environmental, economic, social and social equity consequences.

The project proposes to violate everyone's airspace and quiet enjoyment of their property. It is silent on its effect of creating economic 'externalities' – costs accrued to the Applicant's benefit but paid by others – but they exist de facto nonetheless. Despite their protestations that nothing harmful will come from their facility, that protest in itself is not sufficient against a body of information to the contrary. So it is within reason that the proposed airspace violation will, over its 25-year operational period, generate and settle airborne pollution onto our properties which can cause us and our primary production activities harm.

With this submission we put all parties on notice that we waive no rights nor accept or grant no waiver of liability or limitations on compensation to the Applicant, including associated and subsequent parties, agents and associated persons with the proposed facility, should it be approved to proceed and later causes harm.

As a starting point to define the region likely over the period of operation to be affected, we should look to the Applicant's **Social Impact Assessment Study Area** (EIS - Figure 8.33). In that land space there is 1,090,000 acres, primarily primary production land, but also including the city of Goulburn and the towns of Bungendore and the villages of Tarago, Lake Bathurst and other settlements. Depending on which way and how strong the wind blows over the course of 25 years, some or all the people and their properties will come in contact with the Proposal's emissions.

Were it to be approved, as well as effects from the operational aspects to the Proposal, people running businesses and working in this area may be affected economically and socially – rental housing, employment, hiring competition, supply opportunities and roads operability – to name a few.

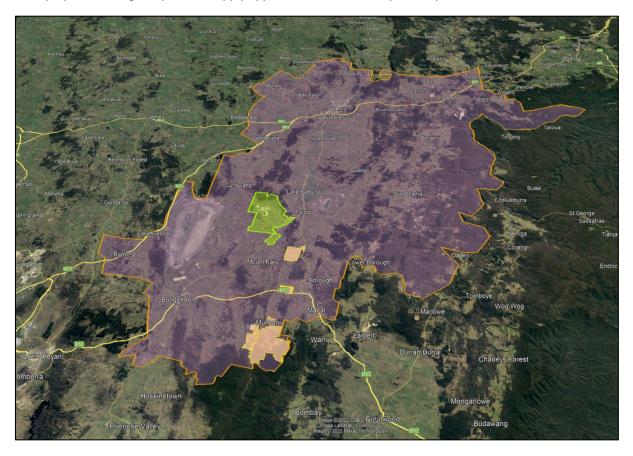


Figure 4 Region Likely to be Affected by the Veolia Incinerator Proposal 1,090,000 Acres

Who We Are

This is the third or fourth time in 5 years that our community has had to stand against inappropriate, life challenging, SSD proposals that seek to transform out beautiful, productive, and historic pastoral region into a growing industrial zone from which to tap into resources or deposit garbage. Each time it causes stress and mental harm to locals and builds an unhealthy cultural wall between country and city.

I'm sure we could be forgiven thinking our Sydney and Parramatta cousins must see us not as people like themselves, but as a zone or region to be allocated, used, and depleted or see us as a place to use and contribute to them (however more palatably referred to as 'the greater good'). This trying to shame us by calling us names like NIMBY while all the time, it is their backyards where such proposals have been rejected.

This type of scapegoating and dehumanising exploitation isn't something new to society. No, it is the very framework of colonialism, which I'm sure most of us thought laid itself down a long time ago. Apparently not. When a power or sovereign takes the position that its authority, thinking, and cultural ways are supreme over those of the local inhabitants, you have colonialism at work. And yes, it's alive and well in the 21st century if we allow it to be.

"Community Consultation", such as the kind practiced in this EIS, is colonialism. Beads and trinkets. The thought that Sydney can issue a charter to a company to enforce exploitation against the will of local inhabitants is colonialism.

This needs to stop! Stop for us in the region, stop to create a better more just society.

The type of solutions that solve one party's problems but create a problem for another party is no solution at all. At the mildest appraisal, we might say 'it kicks the can down the road', but in a frank and fearless assessment we might say "it's a dark alpha side of society where piracy is rewarded". However as I wrote earlier, I'm an optimist, so I'll focus on the mild while acknowledging the potential of the dark.

The greater gift to NSW and the world is the beauty and functionality of the pastoral and cropping lands in the region. These are not speculative contributors to economy and environment, they are proven, and they provide food security. One can burn all of Sydney's rubbish they like but if Sydney can't eat, there will be no requirement to burn anything.

We – ourselves, our families, our neighbours, our forebears, our descendants – are not a zone. We are the caretakers, the holders, the eyes-on-the-ground, and the developers in this region. We are not caricatures. We are capable of assembling and mastering economics, without needing to revert to piracy.

In the Social Impact Assessment Study Area there are one million ninety thousand acres of land. The value of the agricultural land alone, excluding the towns, I estimate to exceed four billion dollars on current land sales values and with a low debt service burden. With existing property improvements and legal entitlements such as subdivision, that valuation would be much higher again.

We give to and take from the land and the environment that which is sustainable. We are the ultimate conservationists because we know what we sustain, sustains us, and we know what we exploit, exploits us. That's been passed down to us from generation to generation, from old-timer to newcomer. We know that. We live that! It is not a website, a webinar, or a David Attenborough film to us; it is our life.

As an example of our going above and beyond the agricultural simpletons some urbanites would like to characterise country folk as, I point to the Mulloon Rehydration Initiative, discussed further in this submission. This is a multi-million-dollar, 57,000 acre environmental research project of national importance and has been recognised by the United Nations Sustainable Development Solutions Network.

We of the region are capable of determining what is good for the region, what is sustainable for the region, and how to solve our problems and assist others to do the same. This ill-conceived incineration initiative is being rejected by this community because it is dangerous, it puts at risk billions of dollars of assets and incalculable future GDP and it doesn't solve problems – it creates them.

Economic Impact

The EIS places emphasis in speculating on the benefits the Proposal would bestow upon the region. It says \$600,000,000 will be spent on building the project, but there is no transparency how that number is comprised or who the actual beneficiaries are.

While curating the implication that it will be a windfall to Goulburn, its highly probable that a very large factor of that will go overseas and interstate. Some part of that figure could be internal allocations such as for intellectual property held in Bermuda or management expertise from a subsidiary on Gurnsey. Who knows? Without transparency, their grandstanding is meaningless.

What isn't meaningless though, is the projection of the adverse effects on vulnerable people who would be competing for housing with a temporary flood of worker's whose rent will be picked up by the company. Also adversely affected would be the harm to businesses in the region, especially smaller and agricultural enterprises.

Since the Covid pandemic, the availability of skilled personnel has been in shortage with many operations struggling to deliver products and services with fewer people. This isn't due to an unwillingness to pay; it is a lack of jobseekers.

Should the proposal be approved, it will surely temporarily bid up wages of skilled local people, extracting some from their present employment. The ability to pay high wages for a short period is within the capacity of the Applicant. However, 12 to 18 months later, it would be even harder finding employees and these conditions would surely put some regional businesses under. Then where are the returning workers to go?

The following is from Communities Against the Tarago Incinerator, with which I concur.

"This project is in direct conflict with alternative development and growth in the local area. Maintenance of successful local agricultural businesses, along with increased growth in rural-residential developments expected over the next 10-20 years will sustainably increase the size and diversity of the local community, supporting local businesses, volunteer organisations such as the NSW RFS, CWA and local schools.

"In contrast this proposal would risk the viability of local agricultural businesses, reduce existing residential developments as families move away due to the health and environmental pollution, and put a halt to any further long-term local business development or growth in rural residential developments as the area.

"It is clear there are limited economic benefits to the community from this project. Despite claims made by Veolia in the EIS, there are only a very small number of ongoing jobs created and required in order to manage and maintain the incinerator once constructed. Most of these workers will not reside in the local impacted community and would commute from either Goulburn, Bungendore or Canberra. The creation of this small number of jobs would in no way make up for the negative economic impact of reduced local population due to impacted families moving away, and halt to future growth which will result in pressure put on the viability of local businesses, schools and community organisations.

"Employment rates in the local region are high – the jobs this project proposes aren't needed in the local economy and there simply aren't the people to fill them. It would likely both steal employees away from existing regional businesses struggling in the current economic environment and utilise significant numbers of fly-in fly-out (FIFO) employees who take and spend their money back home away from the local region. There also simply isn't enough housing in the local area for these proposed workers – there are currently no vacant rental properties in Tarago, so any workers would be forced to surrounding towns again resulting in no economic benefit to the local area which is most impacted.

"There are no requirements for jobs and growth in Goulburn Mulwaree to justify this proposal. The Department of Regional NSW has not listed this LGA as requiring significant investment, nor is it included in any of its Special Activation Precincts or Regional Job precincts. The unemployment rate in this region is lower than both the state and national unemployment rates."

Cumulative Impacts and Impingement

The following is from Communities Against the Tarago Incinerator, with which I concur.

"This project area is surrounded by prime agricultural land and hundreds of rural residential developments, as well as numerous potential future developments as a result of subdivision. The locality is already saturated with state significant projects and Veolia's proposal would place an unacceptable cumulative impact on the local and surrounding communities and environment.

"Veolia notes in the EIS that there are another seven active state significant projects in the local area. This is on top of the existing multiple state significant projects Veolia operates at Woodlawn including a landfill, bioenergy plant, mechanical and biological treatment (MBT) facility, wind farm and solar farm. The local area is also surrounded by many other existing state significant projects in addition to the seven listed by Veolia in the EIS – Capital I, II and Collector Wind Farms, Capital Solar farm and numerous other smaller, but still large scale quarry developments.

"The town has suffered impacts from the Woodlawn site for almost 45 years. The first 20 years from zinc, lead and copper mining undertaken on site, and the last 15 years from Veolia breaching its license conditions through impacting the surrounding region with unbearable odour impacts. The local town is also living with significant lead contamination in and surrounding the rail corridor, including local residences, which has directly impacted the long-term health of the community and young residents, due to long standing impacts from the previous Woodlawn mine."

Furthermore, in my reading of the EIS, the Applicant curates a vague scenario about future mining activities at Woodlawn. In the context writing the EIS goal to get approval for a hazardous waste producing incinerator, they may be playing down the mine's operation on their own potentials so as to discount the cumulative pollution and toxins that site will force upon our community.

However, there doesn't seem to be any uncertainty on the part of the Perth miner, **Develop Global Limited**, who claims to have purchased the mine earlier this year from Heron Resources. Information from Develop Global's presentations would indicate they intend to have a very active and expansive mine site shortly, potentially consuming the village of Tarago and consuming lands for 30 kms south of Woodlawn.

Pic Corne

Main Road

Read

Balance

State Borler

Gourning

Goulbum

Goul

Did someone mention colonialisation? This too must stop!

When researching landholdings via NSW SixMaps application, there is the appearance that Woodlawn associated property acquisitions are incrementally growing. Is the government ignoring the local inhabitants to enrich polluting companies? Hope not. If so, it must stop.



Figure 5 Woodlawn - the gift that just keeps giving

Water

While the EIS informs us that **Veolia** has a 600 ML water access licence (WAL), we need to know more about that, considering **Develop Global Limited** (DGL) is recommencing zinc and copper mining operations at Woodlawn.

Questions, questions:

- 1. Is the 600 ML exclusive to Veolia?
- 2. Are there other WALs which Heron sold to DGL for the mining operation?
 - a. If so, what is the extraction volume?
 - b. If not, will **DGL** be applying to the government to extract more water from our regional aquifers for a water intensive industry?
- 3. How much water would **DGL** seek to extract?
- 4. Would **DGL's** water extraction:
 - a. Adversely affect any of the operational risk considerations for the Proposal?
 - b. Change the geological condition assumptions for the encapsulation cell?
 - c. Affect the way the Project's surface water interacts with groundwater?
 - d. Create a responsibility contention between Veolia and DGL for mitigating adverse effects to people affected by groundwater and bore changes (leaving the resident without a solution)?
- 5. Is the EIS Applicant the owner of the land of the proposed development or a Lessee?

Furthermore, considering Develop Global's media release that it has purchased Heron Resources interests in Woodlawn outright, it would be important to know who owns the land upon which the Incinerator and encapsulation cell would be built. The first page of the EIS Executive Summary states, "Veolia Environmental Services (Australia) Pty Ltd (Veolia) owns and operates the Woodlawn Eco Precinct (the Eco Precinct)", the assumption being it owns the land upon which the eco precinct sits. But it doesn't need to mean that. It could be that the precinct sits upon a leasehold and a leasehold situation would invite more questions particularly with regards to post-operations responsibilities.

Dust

Regarding dust, the presence of an active mining activity at the property is a factor that needs to be considered for antagonising the community. Apparently this Applicant has logically excluded that from their consideration. While perhaps technically correct, Woodlawn is viewed by the community as a whole site whose whole operations are cumulative and need to be considered collectively.

The EIS states outdoor weathering/maturation process will occur, and a crushing process may also occur. Processes expose stockpiles of bottom ash to the atmosphere which, if there is not sufficient dust controls and water, has the potential for airborne contamination across the region, contaminating land, water, and being inhaled in by humans, livestock, and wildlife.

Heritage

Australia has a great affinity for Aboriginal and early European heritage and even natural heritage such as bushlands and waterways. But it has a blind side when it comes to the heritage we live in every day, especially pastoral lands which can be devastated by a Ministerial stroke of a pen.

That happened in the 1970s when the pen granted Denehurst Pty Ltd a lease to open cut mine in the middle of our heritage. What could possibly go wrong? Twenty years later they were bankrupt.

They were gone, but the environmental destruction and tailings was externalised onto the community.



The solution to that problem was another stroke of the pen to license it to become a garbage tip, and so at the turn of the new century that ink was spent, and things got worse – more scars, more pollution.

Now the Applicant is seeking Ministerial approval to keep pushing the envelope. I can hear them say, 'Minister, after all, it's just a garbage dump now, how much worse can it get? Would you prefer us to do this in Campbelltown?"

To this Minister and the Department, I say "Be strong, and be right, knowing that from this terrible stinking scar in our landscape, things could get a lot worse. Don't let it happen! Let us start working on a way to heal. You can stop this colonialism now. The pen just needs to say No".

From the early 1800s until today, this region has been a productive and wholesome area based on an agricultural platform that provides open clean space that is productive for livestock, crops, and human wellbeing, as demonstrated to by the migration of people from the cities.

The exploitation of our living heritage started with Denehurst and continues with Veolia. The beads and trinkets offered by the Veolia Trust do not compensate for the exploitation of our communities, our wellbeing, or our economic viability.



Figure 6 Our Heritage - Our Future

Mulloon Rehydration Initiative

Location: Mulloon and Fairy Meadow Parishes, NSW

In our region is a multi-million-dollar, catchment-scale, environmental research project of national importance which has been in progress for 17 years. It is a multi-discipline hands-on project involving the rehabilitation of the waterways, riparian interfaces, floodplains, flora, fauna, and habitat. As this is a sensitive ecological platform, the introduction of incinerator toxins, particulates, and gases, the drawing down or contamination of the aquifer, and the danger of IBA and ACPr carried on the breezes settling in or around creeks could have tragic consequences for this project, which has decades yet to go.

Called **The Mulloon Rehydration Initiative**, this catchment-scale project aims to rebuild the natural landscape function of the 23,000 Hectare Mulloon catchment and its tributaries boosting its resilience to climatic extremes for more reliable stream flows, improved ecosystem functioning and enhanced agricultural productivity. It includes development and implementation of a comprehensive Integrated Monitoring Plan (see link Peel & Hazell et al 2022).

Starting in 2005, landholders in the Mulloon Creek catchment embarked on an important proof-of-concept project to rehabilitate a remarkable watercourse and to rehydrate its bounding pre-colonial floodplains. The project was initiated by Tony Coote AM and innovative landscape thinker Peter Andrews OAM.

Rehabilitation works initially began along 3kms of Mulloon Creek in 2006 with the objective of slowing the flow, raising the creek's water level, de-energising and spreading flood waters and reinvigorating the floodplains. This included installing a series of erosion control structures (living leaky weirs), fencing to exclude stock and wildlife and planting thousands of trees, shrubs, reeds and rushes. The project was supported and supervised by Southern Rivers Catchment Management Authority and co-funded by the National Landcare Program. It was fully supported by the neighbouring landholders, and indeed, the entire Upper Shoalhaven Landcare network.



In 2014, the initial pilot project dramatically expanded into The Mulloon Rehydration Initiative (MRI). The MRI is a model for landscape-scale repair across Australia which has led to increased productivity, biodiversity and soil fertility and soil organic carbon, improved water quality and quantity and resilience to climatic extremes. The results of the project reflect healthier landscapes and the production of high quality, nutrient dense food. For example, on one of the participating properties – Mulloon Creek Natural Farms pastured egg operation – omega-3 fatty acid content in the eggs has been measured at 4 times the level of eggs produced from a caged hen.

This project now attracts scientists and naturalists from around the world to study and advance the whole of catchment project, which now extends over 50 kms from the Tallaganda National Park in the south to the Reedy Creek gorge in the north, of which 7.5 km is within or bounds Landtasia. It is the most extensive study and historic improvement of a non-commercial waterway in Australia and one of only a handful throughout the entire world. So significant is this project, that it has been recognised by the United Nations Sustainable Development Solutions Network (UNSDSN) as one of five case studies world-wide demonstrating catchment-scale solutions to sustainable development issues (see Mulloon Community Landscape Rehydration Project (MCLRP) | Sustainable Development Goals Australia (sdgs.org.au))

Raising the creek's water level with strategic streambed interventions has raised the water level under the floodplains as well as at the creek. During wetter periods the floodplain recharges (banks water) to a greater extent than before the project and slowly releases this banked water back into the creek during dry times, sustaining the system downstream. During dry periods, the land is more resilient and productive as a result of the land being reintegrated with the waterway as it was before the modern era. The next wet cycle then replenishes 'the floodplain bank' again.

Mulloon Creek has become a healthy, vibrant ecosystem, filtering water through its extensive reed beds, capturing flood sediments, recycling nutrients and providing complex habitat for birds, mammals, reptiles, frogs, fish and invertebrates. Indeed, even koalas have been caught on fire-monitoring cameras in the Tallaganda National Park earlier this year for the first time in decades.

Before their passings, Mr Coote and his wife, Toni, founded the Mulloon Institute, a not-for-profit foundation that is not just carrying forward the continued evolution of the Mulloon Creek restoration, but is taking the lessons, techniques and technologies acquired here to new rehabilitation projects in Australia and abroad.

Finally, recognising the regulatory obstacles standing in the way of landscape regeneration, The Mulloon Institute has been working with the NSW Government to achieve regulatory reform that smooths the path for projects seeking to restore the environment. Just in the last week, landscape rehydration work was defined in the NSW planning law and a pathway that doesn't require Council development approval has been gazetted.

With all due respect, there is nothing in the Applicant's proposal that is more valuable to this community or the nation than this project.

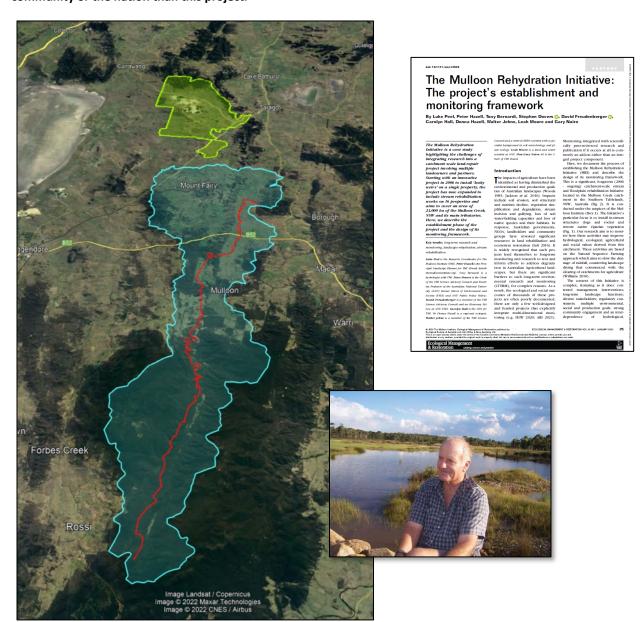


Figure 7 The Mulloon Creek Rehydration Initiative

For the Record | Public Health Impacts of Incinerator Technologies

Time to Back Up

There is something amiss here.

It's not so much with the Applicant, which is a professional in its field. It has provided a professional EIS that is voluminous, carefully word smithed (albeit somewhat vague and evasive of critical matters) but that's just what one would expect from a company playing the world-game at the level they are.

No, what is amiss is whatever has been the government courtship with the Applicant that would force this community to stand so fervently united against such an out of date, discredited and highly dangerous waste incineration processing proposal.

A proposal which is decades old technology – an incinerator with a semi-dry gas reagent system – that would leave a perpetual leaching toxic mountain perched over our landscape and the Sydney Water Catchment. A proposal that is out of touch with the public interest, public policy and the global community. This is scandalous and our multi-million-acre community is here to reject it outright.

The EIS claims on the third page of its introduction, that the project will have the following benefits:

- creating over \$600 million initial investment in regional NSW and a further \$2 billion investment in lifetime maintenance and employment;
- increased capacity to recover energy from non-recyclable waste, while diverting up to 380,000 tpa from landfill;
- generation of up to 240,000 MWh of electricity per annum, of which up to approximately 220,000 MWh will be exported to the grid, enough to power up to 40,000 homes;
- a saving of net greenhouse gas emissions by around 74,000 tonnes
 (t) of carbon dioxide equivalent (CO₂ eq) per annum;
- generation of up to 300 jobs during construction and up to 40 jobs during operation, the majority of which are likely to be in the Goulburn Mulwaree LGA; and
- further investment in community initiatives.

What the project EIS doesn't explain is:

- if the 25 year FT payroll is about \$100M where is the other \$1.9B going? How much of it and the \$600M investment is going overseas including Veolia royalties and fees?
- according to the EIS this is false, as 91,000 tpa of that figure is byproduct to go to landfill or encapsulation after incineration turns benign waste into hazardous waste.
- if the non-waste fuels used to maintain temperatures of 900C 24 hours a day, 343 days per year were just used to just generate electricity, how many MWh would that be?
- how does unlocking sequestered carbon using external energy, plus subsequent handling of hazardous waste reduce GHG emissions?
- while jobs may be 'in' the LGA how many people 'from' the LGA will qualify?; and
- is this intended to compensate for the forever-toxic 1,500,000 m³ encasement cell left perched over the local aquifer and Sydney Water Catchment?

New Age Incineration or An Outdated Industry 5

My research advises waste incinerator operators are rebuilding their old image around the 'generation of electricity' from burning waste. They claim this is a renewable, 'low-carbon' form of energy generation that is climate friendly and can replace landfill methane⁶ emissions. Such claims are critical to their economic models, to receive government subsidies and credits available to "renewable energy" generators.

However, incineration is the opposite of renewable as it burns carbon in organic waste which did not need to be burnt. In doing so the so-called 'renewable energy' generator produces unnecessary GHG and hazardous waste that requires further processing or permanent encasement. This makes the incineration process more climate polluting and energy inefficient than other energy sources such as oil, gas and coal.

I note (but do not accept as reliable) the inconclusive words in the EIS intended to pass for assurances that the Proposal will not create airborne toxic exposures from the incinerator's chimney. Aside from what may come from the chimney or other vent or unintentional openings over time, the Proponent clearly advised that the Incinerator will produce hazardous waste that must be entombed in a 1.5M m3 sarcophagus – presumably forever – although its half-life isn't even raised in the EIS.

Zero Waste Australia states, "The release of toxic air emissions from incinerators can have a significant impact on human health. Because toxic emissions can have a significant lag time or latency period before their human health impacts become obvious scientific studies have only recently emerged that acknowledge the scale of public health impacts from waste incinerators.

"Two public health studies and contamination investigations related to waste incineration are outlined below. The public health impacts associated with incinerator technologies have been documented by internationally recognised scientists in the fields of respiratory and cardiac medicine and epidemiology.

"Claims by waste incinerator proponents that they produce 'acceptable' air emissions are seriously undermined by the facts.

"A 2012 study⁷ investigating health impacts from MSW incineration and hazardous waste treatment plants in Spain concluded, "Our results support the hypothesis of a statistically significant increase in the risk of dying from cancer in towns near incinerators and installations for the recovery or disposal of hazardous waste". Those townships in the proximity of MSW incinerators had the highest excess cancer mortality for populations of all the towns studied.

"France also has a high proportion of waste incinerators compared to most other countries. Researchers conducted a study in the area of Doubs, eastern France, to investigate clustering of two types of cancer, soft tissue sarcoma and non-Hodgkin's lymphoma, near to a MSW incinerator. The study was undertaken following a report of high dioxin emissions from the incinerator. The study found highly significant clusters of both cancers in areas close to the incinerator but not in other surrounding regions."

The EIS states the top of the incinerator 'stack' (formerly known as a 'smokestack') will be 85 mtrs above the floor of the incinerator building. That elevation would be approximately 885 mtrs AHD, and as such would be higher than any natural structure over a 30km radius, excluding a hill immediately north of the stack. The consequence is the emissions from the stack would be carried on the breezes unimpeded.

Should the Proposal be approved by the Minister, all that is under this plume - humans, livestock, wildlife, insect life and biota — will suffer for the next 25 years and that only considers the time for the deposition of the emissions. If, as the community knows and reports around the world validate, that the emissions are harmful, then long after Veolia departs we and our descendants - not Veolia or bureaucrats in Sydney or Canberra - will have to pay the consequences for who knows how long.

⁵ <u>U.S. Municipal Solid Waste Incinerators: An Industry in Decline May 2019</u>

 $^{^{6}}$ Removing FOGO from landfill through composting eliminate a source of methane generation from landfill.

⁷ Cancer mortality in towns in the vicinity of incinerators and installations for the recovery or disposal of hazardous waste. Authors: Javier García-PérezPablo Fernández-Navarro et al

⁸https://www.researchgate.net/publication/304348735_Risk_for_non_Hodgkin's_lymphoma_in_the_vicinity_of_French_municipal _solid_waste_incinerators_Environmental_health_a_global_access_science_source

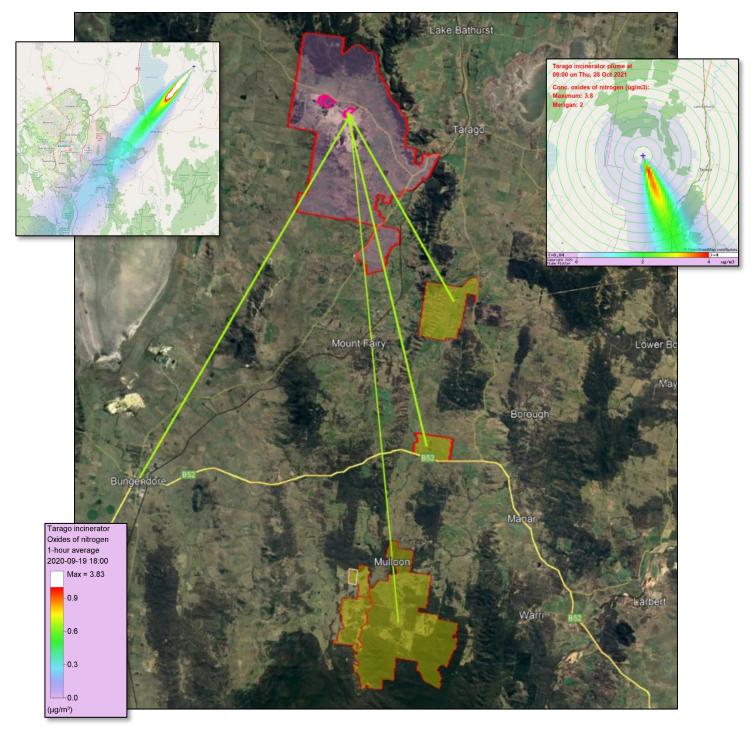


Figure 8 Visualisations of Proposed stack emissions

Here I illustrate the direct unimpeded path the plume emissions would have to my agricultural and hospitality properties. The two inserts show visualisations using the acclaimed US EPA plume modeller produced using real atmospheric and terrain data and assumptive incinerator data. It would be stating the obvious that we live in a breezy region, lest there wouldn't be wind turbines here.

As you can see in the inserts, that breeze would spread emissions well past Queanbeyan and Canberra, with the strongest exposures projected as far as 35km, the greatest brunt being taken within the closest 8km which includes the communities of Tarago and Lake Bathurst.

Therefore for myself, family, personnel, associates, neighbours, our hospitality venues' guests and patrons, our farm's livestock and wildlife, the region's native fauna and biota – I call for the Department and the Minister to reject this Proposal.

Incineration Emissions Toxicity

The EIS strives to deflect and even deny the Proposal will have any toxic or hazardous aerosol escapes, but they do not deny or suggest the Incinerator will not create them. What it implies, and what we are supposed to compliantly swallow, is that their semi-dry gas and particulate capture system will do the job of protecting us totally, 100% of the time for 100% of everything that can adversely affect us, our lands, our livestock and our wildlife. That's a big leap of faith which this million-acre regional community isn't willing to kneel to.

The EIS is careful to skirt close to the unassertive questions of the SEARs. They, as do the SEARs, endow 'best practice' and 'international standards' with some supernatural powers to protect this community, which powers do not exist.

Standards are always an amalgamation of industry practice, paid science, lobbying influence, and political interests. What they are not, is an ironclad guarantee of safety, all the time, for everyone. Top of mind includes BCA's asbestos building materials codifications, doctors' endorsements of cigarette smoking, US EPA's early lax automotive carbon monoxide emissions standards, DDT's government use in war, agriculture, and as a human fumigant, Tokyo Electric's construction and operation of the Fukushima nuclear reactors and TGA's approval of therapeutic injections that caused harm for some. All had government or industry-approved standards, and all were deadly to people and the environment.

For completeness I include in this submission opposing the Application, further information that explores farther than the SEARs, issues that are normally associated with MSW incineration and may well be associated with this Proposal too. The following information is provided by **Zero Waste Australia**⁹ and I include it here as part of my submission. *Emphasis* added.

Zero Waste Australia on Incineration Air Toxins

"Waste incinerators are widely documented as a source of air pollutants including acid gases, nitrogen oxides (NOx), sulphur oxides (SOx), heavy metals, particulates and persistent organic pollutants (POPs) such as dioxins and furans. Incinerator proponents claim to have reduced air emissions to acceptable levels over recent decades by installing very expensive pollution filters and scrubbers which are collectively known as APC (Air Pollution Control).

"When working, the filters capture a lot (but not all) of the pollutants that would otherwise escape to atmosphere. The highly toxic compounds are then transferred to 'fly ash' which is so contaminated that it must be dumped at special hazardous waste landfills.

"Nevertheless, significant air pollution escapes the APC process, which can break down, lose efficiency or be bypassed during plant failures or emergencies.

"Municipal waste is a *highly diverse mix of materials with varying calorific value*. The high variability of municipal waste makes it easier for hazardous materials to slip through the separation processes that may be in place prior to waste entering the incinerator where they are *converted into toxic gases and particles*.

"However, even non-hazardous materials in MSW such as fabrics and furnishings can be converted into hazardous emissions as they may contain or be treated with chemicals for fire retardation (polybrominated diphenyl ethers), stain resistance (perfluorochemicals) or with nanoparticles to reduce UV penetration or to prevent bacteria. Other materials may be non-hazardous in the MSW stream but are converted into hazardous emissions when burned such as poly vinyl chloride (PVC).

"The result is that most modern waste incinerators are still significant sources of hazardous air toxics emissions that are difficult to control. Some of the pollutants such as mercury, dioxins and polycyclic aromatic hydrocarbons (PAHs) can travel great distances and contribute to contamination on a global level as well as contaminating local soil and produce. Less persistent pollutants such as acid gases, nitrogen oxides (NOx), sulphur oxides (SOx) can still be highly toxic and impact on public health at a local and regional level around individual incinerators."

-

⁹ https://zerowasteoz.org.au/incineration/incineration-and-air-toxics/

Nanoparticles

"Australia currently has *no regulatory framework for nanomaterials* and therefore cannot control the types or amounts entering our municipal waste streams. Despite this, there have been significant public health concerns related to the effects of nanomaterials in the human body.

"As these particles bypass the normal defence mechanisms of the body and enter the blood stream and organs directly, the failure of waste incinerators to be able to control nano-pollution may represent a significant threat to human health. There are significant scientific data gaps on the health impacts of nanomaterials while current medical research is uncovering serious adverse health impacts. There are no air quality standards or stack emission limits for nanoparticles in Australia hence the use of the precautionary principle should reasonably be applied in relation to all nanopollution releases."

Ultrafine particles

"There is overwhelming evidence of the harm to human health caused by *ultrafine particulates which* are known to be emitted in high amounts from all forms of incinerator technologies. These small particles can lodge deep in the lungs and cause respiratory and cardiac diseases. There are currently no state or national air quality standards, license conditions or other regulatory measures to protect the Australian community from ultrafine particulates (those less than 0.1 microns in size).

"Waste incinerators release a diverse range of toxic substances to the atmosphere. Some toxic compounds are short-lived and some are persistent and all have varying degrees of toxicity. Once released from an incinerator, toxic material may be carried long distances or deposited in nearby soil and surface water. How these toxic releases affect human health is difficult to assess as people may be exposed to multiple toxic compounds at one time and exposures may very between individuals even in the same location.

"Assessing the health impacts of emissions usually falls into the two categories of predictive assessment (health risk assessment) or epidemiological studies examining current or past population group exposures. Health risk assessment is a form of modelling often criticized for its high levels of uncertainty and inability to consider the impacts of chemical mixtures and cumulative impacts over time. Epidemiological studies are considered more reliable but usually identify population health impacts only after they have occurred. The result is that it can be very difficult to assess the impacts of waste incineration until after they have occurred.

"Incineration proponents rely almost exclusively on health risk assessment when seeking regulatory approvals and this has been criticized by some health professionals.

The British Society for Ecological Medicine in their 4th report (2008) concluded the following in relation to determination of the health impact of MSW incineration:

"'Typically this decision is based on an inexact method called risk assessment. They tend to rely almost exclusively on this type of assessment and often have little understanding of its limitations. Risk assessment is a method developed for engineering but is very poor for assessing the complexities of human health. Typically, it involves estimating the risk to health of just 20 out of the hundreds of different pollutants emitted by incinerators.'

"A number of waste incinerator proponents in Australia have pointed out that Japan, as an advanced industrialised economy, has numerous incinerators operating 'successfully'. Japan has very limited space available for landfill and in the 1970's adopted waste incineration to manage its waste streams. Now Japan has the dubious honour of being the largest waste burner of any country in the world with nearly 70% of the world's waste incinerators burning 70% of Japan's MSW.

"The price of this commitment to incineration has been high in terms of public health risk. *Japan now has dioxin contamination levels ten times higher than any other industrialised country* and is now struggling to reduce dioxin emissions."

Incineration By-products a Circular Economy Risk

I understand from the EIS that Incinerator Bottom Ash (IBA) is the immediate fraction that drops through the incineration grate and Air Pollution Control Residue (APCr) is airborne particulates that are captured near the end of the incineration process using physical filters, 'bags'. APCr may also be called fly ash. Subsequent research has informed me that IBA can be considered a hazardous waste, depending on the source materials and incineration process and APCr is both a hazardous waste and can also be a toxic waste.

Throughout the documentation, the residual components of the incineration process are referred to by the Applicant generally with regards to their creation, storage and potential reuse in the construction and road maintenance industry. The Applicant defers to providing the actual chemical composition of the byproduct until the "commissioning phase of the project". In other words, approve the proposal, let us build, and then we will tell you what will come out of it – trust us.

There seems to be a high expectation in the EIS that the by-product will be allowed to be sent off-site for use as building and road material, thus reducing the volume that would need to go into the forever encapsulation cell. (They don't actually say forever, but they don't provide any timetable for the by-product entombment aside from saying it will need to be maintained past the 25-year date.)

To their wordsmith's credit, there isn't an over exuberant expectation made that the materials would make it to the building market, but the reference is stated often enough in the document that I feel the reader is expected to conclude that it is a probable outcome to make bad waste sort of good. More especially so if the standards agency goes easy on them, taking into account "international standards".

To provide some counterbalance to all that vagueness and innuendo, I offer as part of my submission against this Proposal the following introductory paragraphs, to the report entitled **Toxic Fallout – Waste Incinerator Bottom Ash in a Circular Economy – January 2022**, with link in photo below. After reading the report, I had a more informed outlook on the improbability of placing IBA into a well-regulated EPA environment. Accordingly, what got cemented wasn't the by-product but rather the certainty the forever-encapsulation cell was a necessary requirement.

Abstract - Toxic Fallout – Waste Incinerator Bottom Ash in a Circular Economy

"Bottom ash is fallout from the grate of mass-burn waste incinerators. Large quantities are produced, and this residue has negative value. Visible proportions of sand, glass, and stones make it appear, on the surface, to be low hanging fruit for use in a circular economy; but bottom ash also contains appreciable quantities of toxic 'high level of concern' elements and persistent organic pollutants.

"A secondary 'fallout' occurs when these substances leach from bottom ash into its surroundings across a range of conditions and timescales. The waste incineration industry fails to mention these facts when advertising bottom ash as a 'green' building material. In comparison to direct airborne pollution from waste incinerators, bottom ash has gone somewhat under the radar, making it ripe for greenwash.

"This report uses independent empirical research to evidence that incinerator bottom ash is insidiously hazardous and underregulated. Risk is heightened by the fact that testing methods for its use as a building material are outdated. A list of fifteen concerns for public health and safety is provided in relation to the use of waste incinerator bottom ash in cement-



based products and as road/pathway aggregate. Calls for the support of its use within a circular economy are premature, and, as per the precautionary principle, all ongoing usage should cease. Examination of independently analysed bottom ash provides a diagnostic on the operational steady state of waste incinerators, incidentally, raising concerns about operational compliance with emissions legislation and the capacity of incinerators to produce benign bottom ash when fed with municipal solid waste." (For full report click on link in photo.)

Encasement – The Elephant in the Room

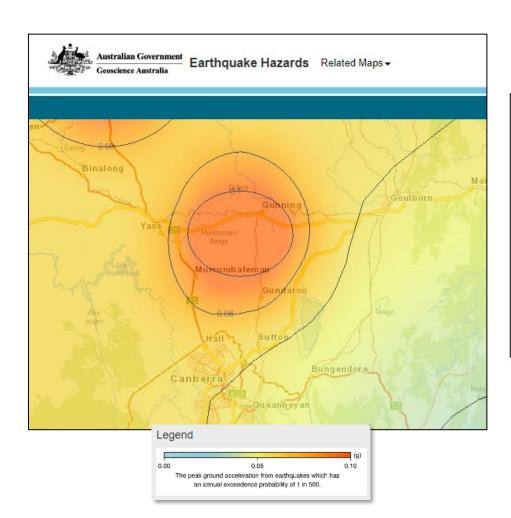
But for this Proposal, there would be no requirement whatsoever to have a hazardous waste storage facility positioned in the centre of our region, perched at the top of the Great Dividing Range. It is only because this Application proposes to turn benign municipal waste into toxic substances through their ill-conceived and self-interested incineration process that this is even on the table. To test their assertion that burning otherwise recyclable MSW was a cheap way to produce electricity, we would have to compare the total cost of energy production their way, versus other ways. That assessment isn't in the EIS, just their implied claim.

I have no doubt in the professionalism of the Applicant and its ability to engineer a system that would handle hazardous waste, including its encapsulation, if it were truly required.

What troubles me with the EIS however, is my inability to see any mention of addressing extraordinary and calamitous events that may befall a vulnerable, strategically positioned leaky hazardous waste storage facility. When I say strategically positioned, I'm referring to it being:

- 1. nearly dead centre of a 3-million-acre prime agricultural region,
- 2. directly over one or more water aguifers positioned in a fractured sedimentary profile,
- 3. directly adjacent or above a mine which is about to recommence operations, and
- 4. is in one of Australia's most seismically active regions.

Regarding the latter point:



The Australian plate is the fastest moving continental land mass on Earth and is colliding into the fastest moving tectonic plate, the Pacific plate which is to Australia's north and east.

3 July 2015

Australian earthquakes explained -Geoscience Australia Earthquakes are just one calamity that my layman's qualifications would question, if not in the actual engineering presentation, then where at least is there a mention of risk and consequences?

In addition to earthquakes that could put the encapsulation cell and its dependencies at risk, how about severe and extraordinary weather? Hurricanes, massive and prolonged inundation, multiple lightning strikes, rising aquifer, ice encapsulation, mine subsidence, acts of war and terrorism.

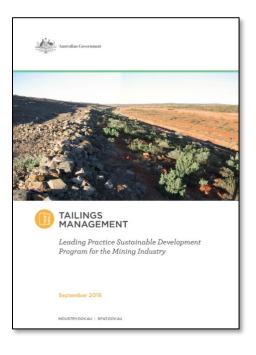
Crickets.

Even if the answer to such a question is we have not planned because we believe it is never going to be required, then that would be an economic judgement call on the part of the Applicant. Fine. But the community should know what the consequence would be if it happened. If not from the Applicant, then from the EPA or NSW Planning and Environment.

- 1. If the 8-metre-high encapsulation cell is opened during a calamity, and its contents are spread in a 5 km radius and its fluids cascading into Crisps Creek and beyond what is the consequence?
- 2. If there is a significant seismic event below the 8-metre-high encapsulation cell and it drops a metre and its liners have irreparably ruptured, with toxics picked up in the groundwater during weekly monitoring what is the consequence?
- 3. And so on....

The way I see it, an 'encasement cell' serves a similar purpose as a tailings dam. Accordingly, it would seem the following standard, or one like it, would apply. If so, then why did the EIS not address it?

I oppose this Application as it fails to address extreme environmental effects such as earthquakes, extraordinary weather events, war, or terrorism.



FAILURE TO ADDRESS EXTREME ENVIONMENTAL EFFECTS: EARTHQUAKE, WAR, TERRORISM

TAILINGS MANAGEMENT Leading Practice Sustainable Development Program for the Mining Industry 2016 INDUSTRY.GOV.AU | DFAT.GOV.AU

5.5 Design aspects Leading practice TSF design requires all aspects of the TSF to be designed to meet or exceed minimum design criteria and standards that reflect an appreciation of the potential dam failure consequence category and the potential health, safety, environmental and community impacts associated with the construction, operation and closure of the TSF. The performance of the TSF must meet the minimum criteria established in the design throughout the life of the facility, extending to after closure. Because the post-closure design life (tens of thousands of years) is so much longer than the operational life (tens of years), the closure design criteria for floods and earthquakes are more stringent than the operating design criteria (ANCOLD 2012a).

Composting Is the Fit

I'd like to change tone now, as I foreshadowed in the opening remarks.

I've been involved with the creation and production of an acclaimed computer software application, and also involved with the creation and production of FOGO compost. To me, they are one in the same. They are inventions that help people solve issues of limited resources of time, money, and opportunity.

Both computer software and FOGO compost are like a mouldable compound; even though you have an idea about what you are going to do with it, once you start moulding it takes you in a direction you never envisioned before, which is good. Like water, both can flow in all directions of application and solution.

My first exposure to compost was in 2003, when Mr Gerry Gillespie from NSW Department of Environment and Conservation, contacted me and asked if I would be willing to participate in a trial on Landtasia to see what difference applying compost might make on grazing soils. I did, and it had a positive outcome.

A few years later, I was invited to join a community panel for a project sponsored by NSW Environmental Trust, to test the logistical, social, technical, and economic issues associated with the concept of LGA 'source-separated' organic rubbish collection. The project name was Groundswell and it was based on tested principles from an earlier pilot project in Karabar called City-to-Soil. Up to that time, separation of recyclables such as bottles and cans was working, however, being 60% of the MSW waste stream, FOGO was seen as the potential 'magic pudding' of waste processing.

I was intrigued and joined the panel along with LGA management from Queanbeyan, Palerang, Goulburn/Mulwaree, and Upper Lachlan. I was the only lay person on the panel. As well as testing the issues mentioned above, each Council was to try a different way to process compost. Goulburn / Mulwaree did so with council land and staff, Upper Lachlan did so with an aboriginal corporation, and Queanbeyan and Palerang wanted to use farmland and personnel for their version. For that I volunteered Landtasia at no charge. Only Palerang residents participated in the collection process.

When the project concluded, I think the general view of the participants was it worked and presented good data points for improvement. Speaking for the Palerang / Landtasia trial, it went very well for the first year. It was not an opt-in trial, so all residents were able to participate. They received a special FOGO waste bin, a kitchen bin and breathable corn starch bags to collect food scraps in.

For Landtasia, the process was rudimentary. Fortnightly, Palerang's FOGO collection trucks arrived at our EPA licenced facility and emptied the contents onto the hardstand. Personnel would look for contamination, removing it to be taken by the truck back to landfill. While the FOGO collection education was maintained by council and the collection drivers gave feedback to the residents, contamination levels were below 0.5 percent. Once the delivery was decontaminated, our composting making process began.

At the start of the second year our composting methods and formulations were good, but council had become distracted with the forced amalgamation process. As a result, residents' education and feedback programs waned and as they did, the contamination levels rose both in volume and risk. At the end of the second year, we left the trial. We continued composting, obtaining FOGO from commercial sources.

Our compost processing formulas have improved over the years and produce an exceptional quality of compost for use in numerous vegetation growing disciplines.

While we departed the source-separation trial, we were very clear that it was the way of the future. Everything worked until the communication and feedback component was waylaid. However, given that media and social media now support the message plus the goals and knowhow of the National Waste Policy and the NSW Waste and Sustainable Materials Strategy, I have no doubt that FOGO composting process, on mass, can meet everyone's NWP expectations.

Quality FOGO composting has been proven in this and other communities.

FOGO has been converted to new soil, in a process that creates no waste, no toxic by-products, no long-term risk liability, very little production energy or airborne pollutants or odours. Its creation enhances the moral connection that makes a successful FOGO source-separated collection work. It can be done close to dense population centres, it contributes to food security and returns lifegiving biology to depleted soils. It has something for everyone.

Do It Local

While I am unwaveringly opposed to the EIS Proposition put forward by Veolia, I am not opposed to Veolia, as least as well as I can know them through the EIS.

The early handling processes they described at point of collection and in the transfer terminal, look good and would also be steps I'd expect to see in a mass scale source-separation process. All the steps to the point of the rail car arriving at the Crisps Creek IMT could remain unchanged.

The change thereafter would be to take the waste to a purpose-built composting facility at Woodlawn rather than an incinerator hall.

To provide some high-level quantum from our own experience at Landtasia, we can process 5,000 tonnes pa of feedstock on ½ acre of land with ½ acre of retention ponds. In an operation designed to handle 380,000 tonnes per year, I'd allocate 80 acres which would include weighbridges, buildings and structures for personnel and equipment, parking and a month's dispatch stockpile. For retention ponds, that will vary depending on depth, but EPA may require a capacity of about 80 ML for a 1 in 100-year event.

Most composters are devotees of an aerobic style of compost. Landtasia did not take that path because it is:

- prone to offensive odours especially at the start of a pile, (which for 380 ktpa would be happening every day),
- 2. requires >50% more labour than our technology, and
- 3. creates a coarse product.

Landtasia's process was originally created by Gerry Gillispie at the time of the Groundswell project and has evolved over the years since then.



It's called Static Pile Inoculated Compost Extension (SPICE). The SPICE compost process starts anaerobic, but in its secondary stage is facultative. This means it uses facultative anaerobes which can switch between anaerobic to aerobic, depending on food and gas conditions within the pile. The net result of this duality is important because it means by using a very broad biological base the outputs of one process become inputs to another. Translation = complete digestion, no smell, high biota values.



Figure 9 Transforming Australia One B-double at a Time

The process produces very little if any off-gases - unlike a standard aerobic pile which releases about a third of its bulk to the atmosphere as pollution. Alwin Sieffert, who was the person responsible for the landscaping on Germany's autobahns, insisted that a well-run compost pile is very much like the gut of an earthworm, which also has both aerobic and facultative phases.

Composting the FOGO component of MSW, separating the metals and recyclables, and putting the rest into landfill is a big leap forward and does not require any blind trust. Its technology is proven and observable today here in NSW, here in this locality. All its result outcomes can be precisely calculated. Its implementation can be done expediently. Its termination can be completed just as fast allowing the land upon which the conversion was performed, to return within a year to as good or better condition than when it started. Everything is transparent.

Aside from the obvious taxpayer savings, cultural benefits and policy wins, Veolia (or others) can do composting using the SPICE process in Sydney provided land is available. This could save the costs associated with the whole transportation process from Sydney to Woodlawn. It would also make redistribution / sale of the finished compost into the major market easy, without the burden and costs (and GHG) to transport it back to a marketplace. Once the consumer balance was determined, the composter would compost at the facility closest to the return (circular economy) market, be that Sydney, Newcastle, Tarago or wherever.



Beyond Source Separation

I believe the governments have the will to implement sourceseparation and I can see there are upsides beyond source-separation.

After a mindset of source-separation settles in, it's logical that the FOGO is composted and used at source. This is a bigger conversation and outside the scope of this submission.

Once source-separation is achieved, which is what the policies of the Commonwealth and State intend to do, then there can be a rewarding progression from source-separating to source-composting. This transition will not need coercion, it will just need enabling – training, tools, and encouragement.

Source-composting will expand governments' waste and carbon goals while lowering their collection, pollution and health costs.

The citizen composter also benefits from lower taxation, but perhaps more valuable would be independence, self-achievement, and social cohesion through the flow-on consequences of community gardens, neighbourhood composters and local growing fairs, awards and markets.



For some people, participating first-person in the conversion of waste to soil with the follow-up of soil-togarden outcomes, will be physically and emotionally uplifting. This is an essential human-to-nature connection. This essential bond will have flow-on effects far beyond rubbish collection and landfill capacities. Without attempting to appear utopian, mental and physical health improves everything!¹⁰

¹⁰ Gardening for health: a regular dose of gardening | Clinical Medicine 2018 Vol 18, No 3: 201–5

Conclusion

While I am not aware of the full basis of assessment that the Department will apply when considering this Application or what the Minister will apply when determining it, I have received advice and am of the view that there are many reasons under planning instruments, public policy, equity and tort that provide material grounds for the State to reject this Application.

These include but are not limited to:

- The Proponent's failure to submit an EIS that fully and transparently discloses all significant issues including but not limited to:
 - full and accurate emission composition and volumes,
 - the length of time the encapsulation of the hazardous ACPr produced at the facility is required and the cost and process to decommission it after that time as expired,
 - the risks of encapsulation and who and at what cost would the encapsulation be maintained after the Proponent or their predecessor are not able to do so,
 - a catastrophic event affecting the encapsulation cell, and
 - the combined drawdown of aquifer water from the Proposed operation and the mining operation of Develop Global Limited at the site.
- The inappropriate nature of the Proposed Development location siting among a de facto RU4 Rural Residential locality;
- Will potentially make high quality regional land less habitable, at a time when regional NSW population is expected to increase by 400,000 to 3.5 million by 2036;
- The Proposal is against the Commonwealth and NSW waste policies by terminating the recyclability of MSW through incineration, creating hazardous waste in the process and the burn residual into landfill,
- The unacceptable risk to community health and safety through:
 - Creation of hazardous waste on-site,
 - The storage in perpetuity of hazardous waste created by the Proponent,
 - Incinerator emissions when on balance cannot exclude the probability of hazardous pollution that would be harmful to humans, livestock, wildlife, vegetation, and biota,
 - The weathering/maturation of incinerator bottom ash with stockpiles open to the atmosphere,
 - Leaching of hazardous fluids produced or used the proposed facility into the groundwater or the surface water environment, including Sydney Water Catchment tributaries.
- Taking a Precautionary approach that underpins the Environment Protection and Assessment Act, to safeguard community health that could be affected by:
 - Incinerator emissions,
 - o Hazardous APCr and IBA dust,
 - Failure of the encapsulation cell structure which has an undisclosed containment life, but as with tailing storages

NSW Net Zero Plan

Adhering to the precautionary principle

Protecting human health and the environment is a fundamental objective. The NSW Government is taking precautionary steps to restrict energy from waste from parts of NSW to protect human health and air quality. This will ensure new industries, such as energy from waste, are not contributing unnecessarily to health impacts from air quality across NSW

Managing human health risk in high density and growing populations NSW is expected to grow on average by over 100,000 people each year until 2041 and is expected to reach 10.6 million people.

By 2036, Greater Sydney's population will grow to approximately 6.6 million. Two-thirds of Greater Sydney's population growth is expected to occur in Greater Western Sydney, where the population is expected to reach 3 million. The regional NSW population is expected to increase by 400,000 to 3.5 million.

Urban growth is increasing the spatial extent of human induced emissions and exposing more people to the impacts of adverse air quality. There is a need to avoid the exposure of high population centres in NSW to new sources of air emissions and take precautionary approaches for all regional communities, especially those that may be more vulnerable to air quality impacts.

Populations can still experience health impacts when emissions are below the national standards, and for some common air pollutants, there is no safe threshold of impact. It is becoming challenging to comply with the national standards in NSW due to the growing population, tighter national air quality standards and the impacts of climate change. From a population health perspective, even where pollution levels are held constant, health impacts from air pollution are likely to increase over time, simply due to an increase in the number of people exposed due to population growth.

could be hundreds of years or longer.

- The Proposed Development not being the highest and best use for the land, taking into
 consideration reasonable projected adverse effects on surrounding lands within reach of the
 project's emissions,
- Will contribute to rental accommodation housing shortages, causing hardship for vulnerable people,
- If the siting of the Proposed Development materially and adversely affects the full equitable enjoyment by residents of their property, contrary to all other local planning instruments except for the ISEPP, then that is not acceptable and should be rejected.
 - o In this instance, the Proponent is seeking from the State in this Application to use the authority of the Infrastructure SEPP to confiscate, extinguish or interfere so as to make defective the valuable rights, benefits and entitlements of one group of parties (not the Applicant), so as to valuably benefit another group of parties (the Proponent and their lessors).
 - While that may be considered speculation on my part, it is the outcome, not the intent, upon which equitable tort determinations are made.

When this Proposal is 'unpacked' it is not an energy generation proposal, nor an improvement for the environment proposal but is an enabler of massive financial transactions for waste incineration which would bind participating LGAs into incineration contracts to 2050. One only needs to pause for a moment, considering the current social and political sensibilities toward energy generation through burning carbon, to see the financial theatre at play.

It is not hard to comprehend that on the one hand, legislation and treaties may certainly terminate incineration in just a few years; 2030 would certainly be logical. But having contracted with the LGAs and having build a reported \$600M structure, the LGA rate payers would be obligated to continue paying for a service which by law or treaty won't be able to be performed and then paying again for whatever then-approved waste handling service is available at the time. In short, they will pay twice if this reasonable scenario plays out in this manner.

Thank you for taking my submission and its rejections of this Application into your assessment.

I am happy to answer any questions you may have regarding my submission or associated matters.

Sincerely Yours,

13

Richard David Graham

Throughout my time researching, digesting, and composing this submission, my motivation as been the hope that when my granddaughter, in 2122, is looking out over the region from a hill on Landtasia, she is seeing beauty and vitality across the landscape, breathing in fresh air from a clear blue sky abounding with avian life, and holding the hands of her great-grandchildren saying, 'now this is yours to care for and improve'.



Figure 10 Layne Francis Graham b:2022

POLITICAL DONATION DISCLOSURE FORM

Amount/ value of donation က Planning application reference (e.g. DA number, planning application title or reference, property address or other description) \exists Veolia Environmental Services (Australia) Pty Ltd for a Project of State Significance 0N / State below any reportable political donations you have made over the 'relevant period' (see glossary on page 2). If the donation was made by an entity (and not by you as an individual) include the Australian Business Number (ABN) If you are the applicant of a relevant planning application state below any reportable political donations that you know, or ought reasonably to know, were made by any persons with a financial interest in the planning application, OR If you are required under section 147(3) of the Environmental Planning and Assessment Act 1979 to disclose any political donations (see Page 1 for details), please fill in this form and sign below Date donation made You are a PERSON MAKING A SUBMISSION IN RELATION TO AN APPLICATION ¥ Name of party or person for whose benefit the donation was made If you are a person making a submission in relation to an application, state below any reportable political donations that you know, or ought reasonably to know, were made by an associate Please list all reportable political donations—additional space is provided overleaf if required NIL - NO DONATIONS Political Donations Disclosure Statement to Minister or the Director-General By signing below, I/we hereby declare that all information contained within this statement is accurate at the time of signing. SSD 21184278 Reportable political donations made by person making this declaration or by other relevant persons Donor's residential address or entity's registered address or other official office of the donor BUTMAROO RD MULLOON, NSW 2622 our interest in the planning application (circle relevant option below) OR. 867 RICHARD DAVID GRAHAM YES / (NO RICHARD DAVID GRAHAM Name of person making this disclosure Name of donor (or ABN if an entity) RICHARD DAVID GRAHAM You are the APPLICANT

ADDENDUMS

ADDENDUM INDEX to Addendum PDF File

Deliver Or Pay Article

Develop Global Mining Perth Announcement

Eco Management Restoration - 2022 - Peel - The Mulloon Rehydration Initiative

Gaia Report Final_05.21

Gardening For Health Clinmed-18-3-201

Groundswell-Final-Agronomy-Report

Incineration And Human Health Greenpeace

Study - Cancer Mortality In Towns In The Vicinity Of Incinerators

The Doctors' Choice Is America's Choice

Toxic Fallout – Waste Incinerator Bottom Ash In A Circular Economy 2022

Waste-Incinerators-Undermine-Clean-Energy-Goals