

APPENDIX A: Response to each of the submitters to the EPA Works Approval Application advertising process (21 March to 28 April 2021)

Thank you for responding to Prospect Hill International's Energy from Waste Works Approval Application. Please continue to participate in ongoing communications regarding this project as PHI remains committed to engagement with local community members and organisations into the future.

In summary, PHI's proposed Lara EfW facility will provide a range of significant benefits:

- The project will process waste that would otherwise go to landfill. The diversion of non-hazardous residual waste from landfill to higher order use (recovery of energy) as per the EPA waste hierarchy has great environmental benefits. Utilising this waste to recover its energy, coupled with the recycling of metals from the bottom ash stream and the future potential to direct the ash material for beneficial re-use as aggregate replacement, is a positive environmental outcome – the project has the potential for 100% diversion of residual waste from landfill.
- Avoiding residual waste from being disposed at landfills reduces the quantity of methane gas produced and has been calculated to have a major reduction in greenhouse gas emissions. The project will have a net reduction in greenhouse gas emissions of over 300,000 tonnes of CO<sub>2-e</sub> per annum – that's similar to removing 60,000 cars from our roads.
- Leading European countries with the highest levels of recycling also rely heavily on energy from waste solutions to increase the diversion of non-recyclable municipal waste from landfill. These countries utilise recycling and energy from waste as complementary solutions.
- The project will provide the generation of baseload electricity and increase energy security. The project will also reduce the reliance of the electricity grid on fossil fuel generated electricity.
- PHI's Lara EfW project will contribute to the community by creating hundreds of jobs during the construction of the plant and around 30 ongoing roles during its operation. It is anticipated that people for these jobs will be recruited from the Lara/Geelong area.
- The Lara EfW facility would utilise proven, European best practice technology and be a leader in thermal waste management technology in Australia.

Submission number	Support/object	Submitter	Category	Sub category	Submission text	PHI response	Reference
322087	Conditional support	Township of Lara Care (TLC) Group	Circular economy		"Prospect Hill proposal will need to clearly identify and demonstrate where it fits in the spectrum of possible 'solutions' and whether the technology aligns with 'best practice'"	<p>PHI advocates for a zero waste future. However, Victoria is many years (most likely decades) away from realising zero waste and a fully circular economy. PHI views energy from waste as a transitional technology to help improve the environment while moving towards zero waste.</p> <p>Despite the ambitions of governments and councils for a zero waste society, it is clear that zero waste in Australia will not occur in the near future (10-20 years). This is based on the global experience where numerous jurisdictions have stated ambitions for zero waste over the past 2-3 decades, yet no jurisdiction is close to achieving zero waste. The best performing jurisdictions in the world on waste management, reuse and recycling (Sweden, Denmark, Finland, Netherlands), still produce 43-57% residual waste – Germany is the stand-out producing 'only' 33% residual waste. Based on the European experience over many decades and the comparative superiority in existing reuse/recycling programs, it is unrealistic to believe that Victoria can surpass EU jurisdictions and achieve zero waste within the next 1-2 decades.</p> <p>The current recycling rate in Victoria is approximately 45% and the amount of residual waste (that in Victoria goes to landfill) produced per annum is 1,800,000 tonnes – a figure that MWRRG and the government state is set to rise to ~2,500,000 tonnes per annum in future years. Even with a push for greater reuse and recycling, it will take decades to reduce these amounts to close to zero.</p> <p>In the absence of energy from waste projects, residual waste would continue to be dumped in landfills, compounding a wide range of existing environmental problems such as greenhouse gas emissions, groundwater contamination, soil contamination and amenity issues (dust, odour, traffic, visual). EfW projects present an alternative opportunity where improvements to the environment and climate change can be made, while society transitions to a zero waste future. As an example, PHI's EfW project will reduce GHG emissions from landfills by approximately 300,000 tonnes of CO<sub>2-e</sub> per annum – so for every year that the PHI EfW project is not in operation, these significant GHG emissions will be released to the atmosphere (equivalent to 60,000 cars on our roads).</p> <p>According to the 2018 SWRRIP, it is estimated the Victorian's population growth will contribute to an estimated 63% more waste in the next 20 years. In addition to this, seven regional reports for Victoria (RWRRIP) have concluded that no new landfills are likely to be constructed over the next 10 years to meet waste management needs. PHI's project is very well aligned with government policy. The Victorian Government's circular economy policy, named 'Recycling Victoria: A new economy' (2020), acknowledges the role waste to energy technologies have in an integrated waste and resource recovery system. The policy includes key commitments of encouraging appropriate waste to energy investment and developing a waste to energy framework.</p> <p>On behalf of the Victorian Government, the Metropolitan Waste and Resource Recovery Group (MWRRG) is running a</p>	<p>See Section 1.6 and 1.7 of the Works Approval Application report</p> <p>For more information on the policy, please visit: <a href="https://www.vic.gov.au/transforming-recycling-victoria">https://www.vic.gov.au/transforming-recycling-victoria</a> *Formally known as the State-wide Waste and Resource Recovery Infrastructure Plan.</p> <p>For more information on the MWRRG's SEMAWP project, please visit: <a href="https://www.mwrrg.vic.gov.au/smartersolution/latest-news/shortlisted-companies-announced/">https://www.mwrrg.vic.gov.au/smartersolution/latest-news/shortlisted-companies-announced/</a></p>

					<p>tendering process for a new energy from waste project in south east Melbourne – called the South East Metropolitan Advanced Waste Processing project (SEMAWP). MWRRG is a statutory body responsible for co-ordinating and facilitating the delivery of waste management and resource recovery across metropolitan Melbourne. The SEMAWP project aims " to provide an alternative to landfill for 16 councils in Melbourne's south east."</p> <p>The rationale for the SEMAWP project is similar as for the PHI EfW project (direct quote from MWRRG):  <i>"Landfills in the south east of Melbourne are filling up and no more are planned to be built. Household rubbish in the 16 councils is projected to increase by 40% over the next 25 years. Best outcomes will be achieved by minimising our waste, reusing or recycling, and then what is left over can go to advanced waste processing. Advanced waste processing will help the Victorian government deliver on its circular economy strategy – Recycling Victoria – a 10 year plan that will completely overhaul Victoria's recycling sector and reduce waste going to landfill.</i></p> <p><i>Advanced waste processing solutions will play a significant role in achieving the new target to divert 80 per cent of household rubbish from landfill by 2030. The advanced waste processing procurement will ensure facilities:</i></p> <ul style="list-style-type: none"> <li>• <i>meet best-practice environment protection requirements and energy efficiency standards</i></li> <li>• <i>reduce the amount of waste sent to landfill</i></li> <li>• <i>do not displace or inhibit innovation to reduce or recycle materials</i></li> <li>• <i>reduce greenhouse gas emissions compared to the waste and energy services they displace</i></li> <li>• <i>have sustainable business models creating new jobs and economic development in local communities.</i></li> </ul> <p><i>Advanced waste processing technologies have been used successfully and safely overseas for years as an alternative to landfill."</i></p> <p>Planning for waste to energy facilities will be part of the upcoming review of the Victorian Recycling Infrastructure Plan*. The Victorian Recycling Infrastructure Plan is a 30-year roadmap to improve Victoria's waste and recycling infrastructure.</p> <p>The PHI facility plans to divert 400,000 tonnes of residual household and commercial waste from landfills. The waste feedstock would be sourced from a number of Victorian councils, with a preference for waste from local areas such as the Geelong, Surf Coast and Bellarine areas. The waste feedstock would exclude all material used within existing recycling programs (i.e. yellow kerbside bins) – only residual waste (i.e. red top kerbside bins) will be targeted. PHI intends to source approx. 80% of the feedstock from household waste and approx. 20% from commercial waste that is like household waste – i.e. from shopping centres, schools, office blocks, etc.  With regard to recycling streams (plastics, paper, etc), we are not targeting recycling streams – we are only targeting residual waste that would otherwise go to landfill.</p> <p>Diverting this residual waste to an Energy from Waste facility provides an opportunity to recover value in the form of energy, which is a part of the Recycling Victoria strategy, and is preferred over containment or disposal (landfills). Modelling shows that with sufficient infrastructure, 45-50% of the waste currently going to landfill could be diverted for reuse, using Waste to Energy technology.</p>	
322087	Conditional support	Township of Lara Care (TLC) Group	Air quality - emissions control	Health	<p>"...community health issues associated with emissions from the plant....In particular, the concerns are about the chemical composition of the emissions and whether proposed filtration systems will satisfactorily manage potential health related impacts.</p> <p>We are committed to managing emissions from our energy from waste plant to reduce potential impacts to the community. The air pollution control (APC) system is a sophisticated system that will cover approximately one third of the plant's footprint and accounts for a large proportion of the plant's construction and operational costs.</p> <p>The APC system is designed to utilise the latest best practice technology and will include bag filters, chemical addition (e.g. bicarbonate, activated carbon or lime) and reactors to treat the emissions prior to being exhausted from the chimney (or stack).</p> <p>The important aspect to note is that the APC system will be designed so that the stack emissions comply with the European Union emissions limits (EU IED - Industrial Emissions Directive) and Environment Protection Authority Victoria limits. The APC system will be fitted with a continuous emissions monitoring system (CEMS) which will monitor the performance of the control system and the emissions from the plant. The CEMS will provide constant monitoring of a wide range of emissions to demonstrate compliance with EU IED and EPA limits and will also identify reductions in performance and alert the operators of any issues – before emissions reach limits.</p> <p>Regular calibration checks on equipment and national association of testing authorities (NATA) accredited tests will also occur on the CEMS, and an operation and maintenance program will provide the framework required to undertake regular maintenance on the plant.</p>	See Appendix D Air Quality Impact Assessment See Appendix F Health Impact Assessment

						<p>A Health Impact Assessment (HIA) was completed as part of the Works Approval Application. The HIA concluded that:</p> <ul style="list-style-type: none"> <li>• There are no acute risk issues of concern for health issues related to air quality and inhalation, deposition or multiple pathway exposures</li> <li>• Chronic and incremental carcinogenic risks are negligible and essentially representative of zero risk.</li> </ul> <p>Proper operation and maintenance, and monitoring of the pollution control/flue gas equipment are measures that will be implemented to mitigate any potential negative impacts.</p> <p>Further details on the Health Impact Assessment can be found in Appendix F of the Works Approval Application.</p>	
322087	Conditional support	Township of Lara Care (TLC) Group	Traffic	Impact on roads	"We are also concerned about truck movements..and how they might be managed"	<p>The project is ideally located within the Geelong Ring Road Employment Precinct (GREP), which has been planned by council to allow for large industrial development to facilitate economic growth. The GREP has also been designed to utilise existing excellent road transport routes and to avoid residential roads.</p> <p>The project is located close to major transport routes in the Greater Geelong region, meaning traffic can avoid small local roads during construction and operations.</p> <p>The key transport routes from Melbourne to the site are anticipated to be:</p> <ul style="list-style-type: none"> <li>• Princes Freeway, Geelong CBD exit, Broderick Rd, Production Way</li> <li>• Princes Freeway, Geelong Ring Rd, Bacchus Marsh Rd, Heales Rd, Broderick Rd, Production Way</li> </ul> <p>From the Geelong direction the transport route is anticipated to be:</p> <ul style="list-style-type: none"> <li>• Princes Highway, Bacchus Marsh Rd, Heales Rd, Broderick Rd, Production Way</li> </ul> <p>A Traffic Impact Assessment was conducted and concluded that the project will have minimal midblock impacts and minimal impacts on traffic volume. Prior to construction, PHI will prepare a Traffic Management Plan in coordination with the City of Greater Geelong and Department of Transport. This plan will govern all project traffic during construction.</p>	See Appendix K Traffic Impact Assessment
322087	Conditional support	Township of Lara Care (TLC) Group	Regulatory	Specialist assessments	"...approval of the application must be subject to independent and expert assessment of all potential risks..."	<p>Prospect Hill International has engaged Jacobs, to undertake the environmental and social assessments required by the regulatory approvals process for this Project. These assessments covered noise, air quality, greenhouse gas, heritage and a range of other areas, including a Health Impact Assessment.</p> <p>The Health Impact Assessment found the risk of potential health impacts on the community would be low to negligible. The health impact assessment considered potential impacts due to air emissions, noise and particulate deposition (i.e. where particulates may deposit on to pasture or soils and be ingested by human or animals). Details of the approach used to assess human health and environmental impacts are presented in Works Approval Application.</p>	See Appendix F Health Impact Assessment
324694	Conditional support	Iugis	Circular economy		"...it is not clear how this project fits in with Barwon Water's existing Renewable Organics Network (RON) project...seems to duplicate the RON project. Augmenting existing BW infrastructure is also likely to minimise any social or environmental impacts of a waste-to-energy facility, as these have already largely been factored into an existing facility."	<p>The Renewable Organics Network (RON) is looking to build a facility that can transform organic waste (food organics, garden organics, and biosolids) to renewable energy and soil fertiliser products. The process will use anaerobic digestion, which relies on microorganisms to break down the organic waste without oxygen, into products that can be recycled (compost/soil enhancers).</p> <p>The PHI EfW project will complement the RON facility, as both projects aim to reduce the amount of residual waste being disposed at landfills.</p>	
324694	Conditional support	Iugis	Traffic	Traffic and emissions	"...building a new facility will increase trucks on road transporting organic waste to this facility and increasing GHG emissions."	<p>The project is ideally located within the Geelong Ring Road Employment Precinct (GREP), which has been planned by council to allow for large industrial development to facilitate economic growth. The GREP has also been designed to utilise existing excellent road transport routes and to avoid residential roads.</p> <p>The project is located close to major transport routes in the Greater Geelong region, meaning traffic can avoid small local roads during construction and operations.</p> <p>The key transport routes from Melbourne to the site are anticipated to be:</p> <ul style="list-style-type: none"> <li>• Princes Freeway, Geelong CBD exit, Broderick Rd, Production Way</li> <li>• Princes Freeway, Geelong Ring Rd, Bacchus Marsh Rd, Heales Rd, Broderick Rd, Production Way</li> </ul> <p>From the Geelong direction the transport route is anticipated to be:</p> <ul style="list-style-type: none"> <li>• Princes Highway, Bacchus Marsh Rd, Heales Rd, Broderick Rd, Production Way</li> </ul> <p>A Traffic Impact Assessment was conducted to determine the potential impact of the project's truck movements. The additional truck traffic related to the EfW project equates to 14 truck trips (7 trips in and 7 trips out) during the morning peak – a small increase on current traffic levels. The assessment concluded that the project will have</p>	See Appendix K Traffic Impact Assessment See Appendix C Greenhouse Gas Assessment

					<p>minimal midblock impacts (e.g. lines at traffic lights) and minimal impacts on traffic volume. Prior to construction, PHI will prepare a Traffic Management Plan in coordination with the City of Greater Geelong and Department of Transport. This plan will govern all project traffic during construction.</p> <p>The PHI EfW project will have a net reduction on greenhouse gas emissions. The Greenhouse Gas assessment for this project evaluated emissions associated with both the construction and operational stages of the facility. Logistics were modelled as part of the operational emissions assessment and include:</p> <ul style="list-style-type: none"> <li>• Truck delivery of waste (return trips), modelled both full and empty</li> <li>• Truck removal of: bottom ash (to landfills) and Air Pollution Control residues (to hazardous material landfills)</li> </ul> <p>It is estimated that the transport of both of these components will result in a total of 2,500 tonnes CO<sub>2</sub>e. Although the project will have direct emissions of approximately 192,000 tonnes CO<sub>2</sub>e per year when combined with other operational emissions, the net benefit (emissions that will be avoided) of the project, is approximately 300,000 tonnes CO<sub>2</sub>e per year. By comparison, landfill of the waste would result in emissions of 300,000 tonnes CO<sub>2</sub>e per year.</p>	
325057	Object	No organization noted	Air quality - emissions control	<p>"The production of hazardous ash. Inputs such as PVC leading to increased pollution" ... "emissions can be distributed in the wind? Carbon emissions from burning materials such as plastics... would not occur under a landfill situation"</p>	<p>The Air Quality Assessment demonstrates that there is a low risk of air quality impact from the project's emissions. The assessment shows that the emissions of all substances from the EfW Plant will meet all EU IED (European Union - Industrial Emissions Directive) and EPA emission limits. The assessment also shows that the EfW Plant emissions will meet all ground level concentration design criteria for all substances, as specified in EPA requirements.</p> <p>Emissions of air toxics such as IARC Group 1 carcinogens hexavalent chromium (Cr (VI)), cadmium (Cd) and mercury (Hg) were investigated for this assessment. Model results for all of the carcinogens showed that the ground level concentrations due to the EfW Plant are below the relevant EPA criteria, mostly many times below their criterion.</p> <p>The Greenhouse Gas Assessment demonstrates that the installation of the EfW Plant will have a net reduction in GHG emissions. Although the construction and operation of the facility will produce GHG emissions, those emissions are more than offset by the greater GHG emissions produced by equivalent amounts of waste going to landfills. The project will have a net reduction of GHG emissions of approximately 300,000 tonnes per annum.</p> <p>Solid residues (called bottom ash and air pollution control residues (APCr)) will be generated by the EfW process and will be managed as part of the plant operations. Metals will be separated from the bottom ash and recycled or reused. Initially, the remaining bottom ash will be collected in bins (indoors) and APCr in silos for disposal at suitably licensed landfills.</p> <p>Boiler ash and APCr (flue gas treatment residues carried along with flue gasses/boiler ash) will be treated together. Some of the APCr will be recirculated back, and deposition of the APCr from the bag filters that is not recirculated back will be disposed of to an appropriately licensed prescribed waste landfill. The APCr is expected to be classified as Category B or C Reportable Priority Waste (RPW).</p> <p>The bottom ash is expected to be classified as Reportable Priority Waste (RPW) and it is expected that the bottom ash residues will be able to be accepted at numerous landfills as non-hazardous. The APCr is expected to be classified as Category B or C RPW and is expected to be disposed of at the Taylors Rd landfill in Lyndhurst. APCr is expected to be 2-5% of incoming waste (by mass).</p> <p>PHI plans to reuse bottom ash and APCr over time and achieve 100% diversion of residual waste from landfill. PHI will work with EPA and other stakeholders to ensure that the bottom ash and APCr are fit for reuse purposes and do not pose risks to the environment, as is the case in Europe. The reuse of bottom ash and APCr is common in Europe, based on many decades of EfW operation and extensive research. Ash residues from EfW plants in Europe are commonly treated and reused for various aggregate applications, such as road base or cement bound material.</p>	<p>See Appendix D Air Quality Assessment See Appendix C Greenhouse Gas Assessment See Section 9 of the Works Approval Application report</p>

325057	Object	No organization noted	Circular economy		<p>"Likelihood the proposal will compete with actual recycling and efforts to recycle currently landfilled materials...incompatible with circular economy"</p> <p>"The construction of an industrial incinerator would create a 'waste-industrial complex' that once created would be difficult to reverse. ...the facility would be dependent on continuing gross and excessive generation of waste for its viability "</p>	<p>PHI advocates for a zero waste future. However, Victoria is many years (most likely decades) away from realising zero waste and a fully circular economy. PHI views energy from waste as a transitional technology to help improve the environment while moving towards zero waste.</p> <p>Despite the ambitions of governments and councils for a zero waste society, it is clear that zero waste in Australia will not occur in the near future (10-20 years). This is based on the global experience where numerous jurisdictions have stated ambitions for zero waste over the past 2-3 decades, yet no jurisdiction is close to achieving zero waste. The best performing jurisdictions in the world on waste management, reuse and recycling (Sweden, Denmark, Finland, Netherlands), still produce 43-57% residual waste – Germany is the stand-out producing 'only' 33% residual waste. Based on the European experience over many decades and the comparative superiority in existing reuse/recycling programs, it is unrealistic to believe that Victoria can surpass EU jurisdictions and achieve zero waste within the next 1-2 decades.</p> <p>The current recycling rate in Victoria is approximately 45% and the amount of residual waste (that in Victoria goes to landfill) produced per annum is 1,800,000 tonnes – a figure that MWRRG and the government state is set to rise to ~2,500,000 tonnes per annum in future years. Even with a push for greater reuse and recycling, it will take decades to reduce these amounts to close to zero.</p> <p>In the absence of energy from waste projects, residual waste would continue to be dumped in landfills, compounding a wide range of existing environmental problems such as greenhouse gas emissions, groundwater contamination, soil contamination and amenity issues (dust, odour, traffic, visual). EfW projects present an alternative opportunity where improvements to the environment and climate change can be made, while society transitions to a zero waste future. As an example, PHI's EfW project will reduce GHG emissions from landfills by approximately 300,000 tonnes of CO<sub>2-e</sub> per annum – so for every year that the PHI EfW project is not in operation, these significant GHG emissions will be released to the atmosphere (equivalent to 60,000 cars on our roads).</p> <p>According to the 2018 SWRRIP, it is estimated the Victorian's population growth will contribute to an estimated 63% more waste in the next 20 years. In addition to this, seven regional reports for Victoria (RWRRIP) have concluded that no new landfills are likely to be constructed over the next 10 years to meet waste management needs.</p> <p>PHI's project is very well aligned with government policy. The Victorian Government's circular economy policy, named 'Recycling Victoria: A new economy' (2020), acknowledges the role waste to energy technologies have in an integrated waste and resource recovery system. The policy includes key commitments of encouraging appropriate waste to energy investment and developing a waste to energy framework.</p> <p>On behalf of the Victorian Government, the Metropolitan Waste and Resource Recovery Group (MWRRG) is running a tendering process for a new energy from waste project in south east Melbourne – called the South East Metropolitan Advanced Waste Processing project (SEMAWP). MWRRG is a statutory body responsible for co-ordinating and facilitating the delivery of waste management and resource recovery across metropolitan Melbourne. The SEMAWP project aims " <i>to provide an alternative to landfill for 16 councils in Melbourne's south east.</i>"</p> <p>The rationale for the SEMAWP project is similar as for the PHI EfW project (direct quote from MWRRG):  <i>"Landfills in the south east of Melbourne are filling up and no more are planned to be built. Household rubbish in the 16 councils is projected to increase by 40% over the next 25 years. Best outcomes will be achieved by minimising our waste, reusing or recycling, and then what is left over can go to advanced waste processing. Advanced waste processing will help the Victorian government deliver on its circular economy strategy – Recycling Victoria – a 10 year plan that will completely overhaul Victoria's recycling sector and reduce waste going to landfill.</i></p> <p><i>Advanced waste processing solutions will play a significant role in achieving the new target to divert 80 per cent of household rubbish from landfill by 2030. The advanced waste processing procurement will ensure facilities:</i></p> <ul style="list-style-type: none"> <li>• <i>meet best-practice environment protection requirements and energy efficiency standards</i></li> <li>• <i>reduce the amount of waste sent to landfill</i></li> <li>• <i>do not displace or inhibit innovation to reduce or recycle materials</i></li> <li>• <i>reduce greenhouse gas emissions compared to the waste and energy services they displace</i></li> <li>• <i>have sustainable business models creating new jobs and economic development in local communities.</i></li> </ul> <p><i>Advanced waste processing technologies have been used successfully and safely overseas for years as an alternative to landfill."</i></p>	<p>See Section 1.6 and 1.7 of the Works Approval Application report</p> <p>For more information on the policy, please visit:  <a href="https://www.vic.gov.au/transforming-recycling-victoria">https://www.vic.gov.au/transforming-recycling-victoria</a>  *Formally known as the State-wide Waste and Resource Recovery Infrastructure Plan.</p> <p>For more information on the MWRRG's SEMAWP project, please visit:  <a href="https://www.mwrrg.vic.gov.au/smartersolution/latest-news/shortlisted-companies-announced/">https://www.mwrrg.vic.gov.au/smartersolution/latest-news/shortlisted-companies-announced/</a></p>
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325340	Object	Lara Resident	Regulatory	Monitoring	<p>"Our research suggest that EfW plants pose little risk to the environment and health, whilst they remain compliant. However, there is insufficient history of noncompliance's, and insufficient risk analysis regarding noncompliant situations"</p>	<p>The EfW plant will be fitted with a continuous emissions monitoring system (CEMS) which will monitor the performance of the control system and the emissions from the plant. The CEMS will provide constant monitoring of a wide range of emissions to demonstrate compliance with European Union emissions limits (EU IED - Industrial Emissions Directive) and Environment Protection Authority (EPA) Victoria emissions limits and will also identify reductions in performance and alert the operators of any issues – before emissions reach limits.</p> <p>The plant will operate using control systems that continuously measure and monitor plant parameters, such as temperature, pressure, calorific value as well as emissions concentrations. All of these parameters will be managed to levels (or 'set points') that ensure compliance with the EPA and EU IED limits - in fact the levels will be set below the limit values. If the levels start to rise, the plant can automatically (and manually) adjust the emission controls to revert the levels back to the set points. This can be done by the addition of chemicals (e.g. bicarbonate, activated carbon or lime) to the air pollution controls system.</p> <p>Regular calibration checks on equipment and National Association of Testing Authorities (NATA) accredited tests will also occur on the CEMS, and an operation and maintenance program will provide the framework required to undertake regular maintenance on the plant.</p> <p>The PHI EfW project is being designed using off-the-shelf Moving Grate technology that has a proven track record of reliability and compliance from over 500 such plants around the world and many decades of operations. The design will be considered best practice in accordance with European and Victorian regulations.</p>	See Section 7 of the Works Approval Application report
325340	Object	Lara Resident	Technology	Flue gas treatment	<p>"the entire post-furnace flue gas treatment and filtration systems must be duplicated"</p>	<p>The Prospect Hill International EfW plant will be adopting proven technology and best practice emissions controls. This has resulted in the proposed design of two complete independent lines including boilers, steam turbines and flue gas treatment. The design includes each boiler having dedicated flue gas treatment systems and emissions monitoring systems.</p>	See Section 7 of the Works Approval Application report
325340	Object	Lara Resident	Regulatory		<p>"..proponents should deposit a bond of at least \$100,000,000 with the EPA to cover the costs of a major contamination or health crisis linked to Lara EfW"</p>	<p>Financial assurance is a regulatory tool intended to prevent the Victorian community bearing the financial cost of cleaning up a site. Requirements for financial assurance for the Prospect Hill International EfW plant will be determined as a part of the Works Approval Application and licencing process. EPA publication 1594 sets out EPA's position on how financial assurance is applied for licences and works approvals.</p>	

325340	Object	Lara Resident	Regulatory		"EfW management must conduct a monthly walk around of the EfW facility noting dead animals, vegetation, noise, dust, odour, smoke....Records to be kept"	<p>As part of the ongoing environmental management of the EfW plant during operations, an Environmental Management Plan (EMP) will be implemented. As well as containing measures for managing process emissions, the EMP will also have measures for site inspections of the plant and perimeter. The site inspections will observe potential impacts due to noise, dust, odour and other amenity issues.</p> <p>Nearly all plant and equipment at the site will be housed within enclosed buildings, so the risk of injury to animals is extremely low. The site will be similar in building form to other industrial premises currently operating in the Geelong Ring Road Employment Precinct (GREP) – such as Rocke Transport, SNF chemical manufacturing plant, CivilMart, Clariant Specialty Chemicals manufacturing plant, Geelong Galvanizing and Thorton Steel Fabrication.</p>	
325340	Object	Lara Resident	Regulatory	Reporting during operations	"data relating to the EfW facility's flue gas output must be made available to the public and EPA...."	<p>Prior to operation of the EfW plant, Prospect Hill International will apply to EPA Victoria for a licence to operate. The licence will contain a range of conditions that aim to control the operation of the EfW plant so that there is no adverse effect on the environment. These conditions will address areas such as waste acceptance and treatment, air and water discharges, and noise and odour.</p> <p>To comply with EPA licence conditions, licence holders (i.e. Prospect Hill International) must report on environmental performance for the previous financial year. This is an annual performance statement (APS) which will list performance against each licence condition and requires an explanation of all non-compliance incidents and what actions have been taken to address the issue. In accordance with EPA regulations, APS reporting does not replace the need for immediate reporting of non-compliances to EPA.</p> <p>As well as periodic reporting to EPA, PHI intends to provide data on the plant's operational emissions available to the public.</p>	See Section 7 of the Works Approval Application report
325340	Object	Lara Resident	Health		"The current risk assessment at section 6.3 [should be re-written/assessed]...could only be defended if all operations run within specifications all the time"	<p>The Risk Assessment included in the Works Approval Application presents the key risks – predominantly risks of the project to the surrounding environment and community. The risk assessment presents various risks, potential impact of these risks, proposed mitigation measures and the residual risk when mitigations are included. The results of this risk assessment were used to focus the best practice assessment of mitigation measures. This led to most of the Medium and High operational risks being reduced to Low residual risks.</p> <p>Risk IDs 007 and 010 specifically relate to "operation and non-routine event" from operations and "general air emissions" from non-routine or emergency situations (e.g. mechanical breakdown). Mitigation measures for these situations include the implementation of air pollution controls, hazard controls, control systems and Emergency Management Plan. Additionally, the environmental assessments (Air Quality Impact Assessment, Noise Impact Assessment and Health Impact Assessment) confirm that the risk to the surrounding environment and community is low for air quality, noise and health impact. All emissions (under normal and emergency conditions) will be below relevant EPA or enHealth guideline levels.</p> <p>The risk assessment will also be updated during the detailed design for the project, in order to review current risks and assess any new risks. As part of the risk assessment process, risk mitigations will be reviewed and updated.</p>	See Section 6.3 of the Works Approval Application report
325340	Object	Lara Resident	Air quality - emissions control	Wind data / particle transfer	"Data from the nearby Avalon Airport indicate that morning winds over the Lara EfW facility tend to blow to the west... We can expect the plum from the Lara EfW facility will be carried on the wind"	<p>The Air Quality Assessment demonstrates that there is a low risk of air quality impact from the project's emissions. The assessment shows that the emissions of all substances from the EfW Plant will meet all EU IED (European Union - Industrial Emissions Directive) and EPA emission limits. The assessment also shows that the EfW Plant emissions will meet all ground level concentration design criteria for all substances, as specified in EPA requirements.</p> <p>Emissions of air toxics such as IARC Group 1 carcinogens hexavalent chromium (Cr (VI)), cadmium (Cd) and mercury (Hg) were investigated for this assessment. Model results for all of the carcinogens showed that the ground level concentrations due to the EfW Plant are below the relevant EPA criteria, mostly many times below their criterion.</p>	See Appendix D Air Quality Assessment

325340	Object	Lara Resident	Health	Risk assessment	<p>"The risk assessment [should be re-visited]...highest risks identified ...are risks to the commercial ambitions of the proponents, not the the environment nor the community"</p>	<p>The Risk Assessment included in the Works Approval Application presents the key risks – predominantly risks of the project to the surrounding environment and community. The risk assessment presents various risks, potential impact of these risks, proposed mitigation measures and the residual risk when mitigations are included. The results of this risk assessment were used to focus the best practice assessment of mitigation measures. This led to most of the Medium and High operational risks being reduced to Low residual risks.</p> <p>Risk IDs 007 and 010 specifically relate to "operation and non-routine event" from operations and "general air emissions" from non-routine or emergency situations (e.g. mechanical breakdown). Mitigation measures for these situations include the implementation of air pollution controls, hazard controls, control systems and Emergency Management Plan. Additionally, the environmental assessments (Air Quality Impact Assessment, Noise Impact Assessment and Health Impact Assessment) confirm that the risk to the surrounding environment and community is low for air quality, noise and health impact. All emissions (under normal and emergency conditions) will be below relevant EPA or enHealth guideline levels.</p> <p>The risk assessment will also be updated during the detailed design for the project, in order to review current risks and assess any new risks. As part of the risk assessment process, risk mitigations will be reviewed and updated.</p>	See Section 6.3 of the Works Approval Application report
325340	Object	Lara Resident	Regulatory	Health	<p>"Health Impact Assessment ...could only be defended on the assumption that the Lara EfW facility actually runs within specifications and in accordance with EPA approved procedures, all the time. To make such assumption is dangerous... what are the health impacts if the pollution control/flue gas treatment [fails]?"</p>	<p>A comprehensive Health Impact Assessment (HIA) was conducted and the assessment considered potential impacts from pollutants and impacts related to air emissions, odours, noise, economics, waste and transport. Multiple exposure pathways relevant to both adults and children were assessed and the risks have been calculated on the basis of the maximum predicted deposition rate for all of the sensitive receptors in the surrounding community. As a result, this approach is representative of the maximum impacted rural residential location and provides a conservative estimation of risks relevant to other rural residential and urban residential areas.</p> <p>The HIA used the environmental assessments as the basis for the assessment of health impacts and associated calculations. The HIA also adopted the following guidelines that provide exposure limits to assess the environmental data:</p> <ul style="list-style-type: none"> <li>• enHealth, 2017. Health Impact Assessment Guidelines (enHealth 2017)</li> <li>• enHealth, 2012. Environmental Health Risk Assessment: Guidelines for Assessing Human Health Risks from Environmental Hazards (enHealth 2012a)</li> <li>• NEPM health based guideline (NEPC 2016)</li> <li>• Texas Commission on Environmental Quality (TCEQ, 2014; 2015a; 2015b), <a href="https://www.tceq.texas.gov/toxicology/dsd/final.html">https://www.tceq.texas.gov/toxicology/dsd/final.html</a></li> <li>• California Office of Environmental Health Hazard Assessment (OEHHA, 2019) <a href="https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary">https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary</a></li> <li>• Agency for Toxic Substances and Disease Registry (ATSDR, 2018), as an acute air guideline (relevant to exposures from 1 hour to 14 days) <a href="https://www.atsdr.cdc.gov/mrls/index.html">https://www.atsdr.cdc.gov/mrls/index.html</a></li> <li>• USEPA as Protective Action Criteria (PAC), <a href="https://www.energy.gov/ehss/protective-action-criteria-pac-aegls-erpgs-teels-rev-29-chemicals-concern-may-2016">https://www.energy.gov/ehss/protective-action-criteria-pac-aegls-erpgs-teels-rev-29-chemicals-concern-may-2016</a>.</li> </ul> <p>Another important point to note is that the design of the EfW plant has process controls in-built to manage emergency and breakdown situations. There are sophisticated control feedback loops that constantly monitor emissions and outputs from the EfW plant and adjust the process controls accordingly. For example, if there is a breakage or tear in a bag filter (in the air pollution controls), the control systems will adjust the process flows to maintain the emissions to air below licence limits. If there is a major plant malfunction (e.g. multiple bag filter failures), the system will shutdown the boiler line to prevent emissions being released above licence limits. These design elements have been taken from the experience of many decades of operation of these EfW plants in Europe and around the world.</p>	See Appendix F Health Impact Assessment

325340	Object	Lara Resident	Traffic	Noise	"The EPA should require that proponents prepare a report on the feasibility of using rail transport instead of truck transport for normal operations"	<p>There is no direct rail access to the Geelong Ring Road Employment Precinct (GREP) area nor infrastructure on the Geelong-Melbourne rail line to facilitate use of the rail network. Accordingly, no rail transport is planned and the project is planning to use truck transport as the main form of transport to and from the site.</p> <p>Although there is no direct rail access to the GREP or the site, there is excellent access for large trucks. The EFW plant will be located close to existing major transport routes in the Greater Geelong region, including the Princess Freeway and Geelong Ring Road, avoiding small local roads during operations. Most trucks that transport waste to the plant would use roads in the industrial zone and avoid travel on residential streets.</p> <p>A Traffic Impact Assessment was conducted to determine the potential impact of the project's truck movements. The additional truck traffic related to the EFW project equates to 14 truck trips (7 trips in and 7 trips out) during the morning peak – a small increase on current traffic levels. The assessment concluded that the project will have minimal midblock impacts (e.g. lines at traffic lights) and minimal impacts on traffic volume. Prior to construction, PHI will prepare a Traffic Management Plan in coordination with the City of Greater Geelong and Department of Transport. This plan will govern all project traffic during construction.</p>	See Appendix K Traffic Impact Assessment
325340	Object	Lara Resident	Water	Groundwater	"The EPA must explicitly prohibit the proponents of the Lara EFW project from disposing of untreated groundwater to any natural aquifer"	<p>We anticipate that the plant will use approximately 2.5 megalitres of water a day for operation. Water will be supplied by Barwon Water via the mains pipeline. Discussions will be held with Barwon Water during the detailed design to facilitate a water connection.</p> <p>The main wastewater source from the plant will be the cooling tower blowdown – in essence salty water. This water will be directed to a wastewater holding pond to cool before being discharged to the sewer under a trade waste agreement. Clean stormwater on site will be collected and used for the plant or discharged to the council stormwater system via a stormwater detention pond in the northwest corner of the site.</p>	See Section 10 of the Works Approval Application report
325340	Object	Lara Resident	Air quality - emissions control	Radioactivity	"...a large number of industries and businesses...are handling materials on the EFW prohibited list.....the EPA should require that the proponents provide stronger and more detailed procedures for detecting, preventing, containment and disposal of incoming prohibited [radioactive] materials"	<p>Prospect Hill International's energy from waste facility plans to divert ~400,000 tonnes per annum of Municipal Solid Waste (MSW) from landfills. The waste feedstock will be sourced from residual household and MSW-like commercial waste (from shopping centres, offices, schools, etc) and will only comprise of residual waste that is not able to be reused or recycled.</p> <p>The only potential sources of radioactivity that could emanate from household waste are smoke detectors. Some domestic smoke detectors contain a radioactive source (americium-241), however this radiation source is about 3,000 times less than the radiation dose from natural background radiation (<a href="https://www2.health.vic.gov.au/Api/downloadmedia/%7BF2A96E0-CA0D-46B5-81DD-9D02C895A896%7D#:~:text=The%20risk%20of%20harm%20from,the%20chamber%20of%20the%20detector">https://www2.health.vic.gov.au/Api/downloadmedia/%7BF2A96E0-CA0D-46B5-81DD-9D02C895A896%7D#:~:text=The%20risk%20of%20harm%20from,the%20chamber%20of%20the%20detector</a> ).</p> <p>Prospect Hill International will implement a waste delivery protocol that will involve a range of measures to assess if waste meets the plant's acceptance standards. If there are smoke detectors in the waste stream, they will be removed and sent to smoke detector suppliers for recycling (in accordance with DHHS guidance). If a smoke detector is not observed in the waste stream and ends up being processed in the EFW process, it is expected that the impact will be negligible, due to the very low dose of radiation in a smoke detector.</p>	See Section 8 of the Works Approval Application report
325340	Object	Lara Resident	Regulatory	Reporting	"EPA licenses and other approvals should be stated on the Lara EFW facility's public website [and Certifications]"	All Works Approval documents and associated impact assessments are currently available at Prospect Hill International's website, <a href="https://prospecthill.com.au/documents">https://prospecthill.com.au/documents</a> , as well as on the Engage Victoria website <a href="https://engage.vic.gov.au/epa-works-approvals/prospecthill">https://engage.vic.gov.au/epa-works-approvals/prospecthill</a>	
325340	Object	Lara Resident	Cultural & heritage		"Require that the proponents prepare a new Cultural Heritage report after consulting with the Wathaurung Aboriginal Corporation"	The project area does not intersect with any areas of cultural heritage sensitivity, therefore a mandatory Cultural Heritage Management Plan is not required for the project, in accordance with the Aboriginal Heritage Regulations 2018. Although a CHMP is not required, it is unlawful to harm Aboriginal cultural heritage (s 27 of the Act) or to carry out any act likely to harm Aboriginal cultural heritage (s 28 of the Act). If, during the construction works, Aboriginal cultural heritage is identified, or there is reason to believe that Aboriginal cultural heritage may be present, work must cease immediately in that location, Aboriginal Victoria and the RAP will be notified, and the provisions set out in Appendix A within the Cultural Heritage Due Diligence Assessment (Appendix G of the Works Approval Application) will be implemented.	See Appendix G Cultural Heritage Due Diligence Assessment

325341	Object		Location	Zoning	<p>"The site does not control the required buffers and approval of the applications will devalue surrounding land"</p>	<p>The project is ideally located within the Geelong Ring Road Employment Precinct (GREP), which has been planned by council to allow for large industrial development to facilitate economic growth. The key factors that make the site suitable for this project are:</p> <ul style="list-style-type: none"> <li>• The site is located within the Geelong Ring Road Employment Precinct (GREP). The GREP is Geelong's largest designated industrial development precinct and includes over 500 hectares of land zoned for heavy industrial purposes.</li> <li>• The site is located within an industrial planning zone (Industrial 2 Zone or "IN2Z") which is designated for large industrial purposes like an energy from waste plant. Under the planning scheme, one of the purposes of the IN2Z is "To provide for manufacturing industry, the storage and distribution of goods and associated facilities".</li> <li>• Geelong and the surrounding region have suffered from the closure of large manufacturing plants over recent years. Prospect Hill International sees this project as an opportunity to bring back some of those skilled jobs to the area and hopes to employ people who may have been impacted by skilled job losses in recent years.</li> <li>• The site is located close to potential waste sources, including Geelong, the Surf Coast and Bellarine as well as the growing region of western Melbourne.</li> <li>• The site has good transport links, being close to the Princes Freeway and Geelong Bypass.</li> <li>• Trucks that transport waste to the plant will be able to access the site through roads in the industrial zone and not have to travel on residential streets.</li> </ul> <p>Experience with these types of plants around the world shows that they have very low amenity impacts to surrounding communities. Modern energy from waste plants include sophisticated measures to minimise impacts on surrounding communities, like noise reduction and sound proofing design elements, state-of-the-art air emissions controls and advanced odour controls.</p> <p>There are many locations around the world, including London, Paris, Copenhagen and Zurich, where energy from waste plants are located within tens or hundreds of metres of residents. Our fact sheet shows one example of an energy from waste plant in London that is within metres of many thousands of residents. These examples show that energy from waste plants can co-exist with residential areas with minimal impacts.</p>	
325341	Object		Technology	Facility design	<p>"...no detailed information on the proposed plant, and the application states there will be more detail granted after the approval...removes stakeholders from any meaningful engagement with the process:</p>	<p>Details of the design and refined performance parameters will be detailed in the design phase of the project once the final equipment has been selected. Key plant parameters can be found in section 7.2 of the Works Approval Application in Table 7.1.A, and a more detailed summary of the concept design can be found in Appendix M.</p>	<p>See Section 7 of the Works Approval Application report See Appendix M Concept Design Basis Report</p>
325341	Object		Circular economy		<p>"There are already waste to energy approvals granted...that will exceed the state government cap of 1,000,000 tonnes per annum"</p>	<p>The EfW projects that have already been granted approvals will not fall into the government's cap of 1,000,000 tonnes per annum. Thus, there are effectively no projects that currently contribute to the 1,000,000 tpa cap.</p>	<p><a href="https://www.mav.asn.au/__data/assets/pdf_file/0003/27966/MAV-Submission-Waste-to-Energy-Framework.pdf">https://www.mav.asn.au/__data/assets/pdf_file/0003/27966/MAV-Submission-Waste-to-Energy-Framework.pdf</a></p>
325341	Object		Feedstock	Contaminated feedstock / emissions	<p>"...applicant has undertaken no studies of the composition of the proposed waste stream" "...broad range of contaminants will not be accepted... It is certain that MSW will contain many of the wastes that the applicant says will not be accepted...public have no confidence on the emissions standard proposed will be met"</p>	<p>Prospect Hill International's energy from waste facility plans to divert ~400,000 tonnes per annum of Municipal Solid Waste (MSW) from landfills. The waste feedstock will be sourced from residual household and commercial waste and will only comprise of residual waste that is not destined for recycling.</p> <p>Waste modelling and assessment undertaken for the project has found that the majority of materials within residual waste includes the following – organics (49%), paper &amp; cardboard (13.05%) and plastics (12.93%). Materials including metals, textiles, glass, earth-based, masonry, miscellaneous non-combustibles &amp; combustibles, hazardous fines and e-waste were also identified at much lower contributions.</p> <p>The waste feedstock composition assumptions for the Project will be refined once further datasets are available from the specific councils who are likely to become suppliers for the Project. Further details regarding the waste modelling undertaken and the expected feedstock materials as a percentage per annum is presented in the Works Approval Application Section 8, Table 8.2.</p> <p>There are a number of measures in place to monitor for contaminated waste:</p>	<p>See Section 8 of the Works Approval Application report</p>

						<ul style="list-style-type: none"> <li>• Number plate recognition software to track incoming and outgoing vehicles. The location of waste origin and vehicle will be recorded for auditing purposes and to identify trends (if any) in the disposal of waste</li> <li>• Before entering the tipping hall, waste will be visually inspected by staff for any obvious contamination, problems or hazards. If a problem or hazard is suspected, the vehicle will move to an inspection area. If the waste is unsuitable but not hazardous (e.g. oversized waste like fridges) it will be loaded into a skip, and if hazardous (e.g. batteries) it will be loaded into a hazardous waste storage container. Waste will be inspected again as it is tipped into the bunker and removed to a separate area if necessary</li> <li>• Random waste delivery audits for quality control</li> <li>• Even after this process, we know that small amounts of harmful materials, like batteries, can be found in household waste. The design of the plant takes this into account, and the high temperature of the boiler and the emissions control equipment mean these materials can be processed and harmful substances removed.</li> <li>• One third of the plant is taken up by emissions control equipment like filters and reactors. Sophisticated control systems set the emissions levels below strict European and Victorian emissions limits and can adjust automatically if pollutant levels from the boiler increase toward licence limits.</li> </ul>	
325539	Object	Geelong Sustainability	Circular Economy	Feedstock	"...facility would most likely incinerate reusable waste..."	<p>Prospect Hill International's energy from waste facility plans to divert ~400,000 tonnes per annum of Municipal Solid Waste (MSW) from landfills. The waste feedstock will be sourced from residual household and commercial waste and will only comprise of residual waste that is not destined for recycling.</p> <p>Waste modelling and assessment undertaken for the project has found that the majority of materials within residual waste includes the following – organics (49%), paper &amp; cardboard (13.05%) and plastics (12.93%). Materials including metals, textiles, glass, earth-based, masonry, miscellaneous non-combustibles &amp; combustibles, hazardous fines and e-waste were also identified at much lower contributions.</p> <p>The waste feedstock composition assumptions for the Project will be refined once further datasets are available from the specific councils who are likely to become suppliers for the Project. Further details regarding the waste modelling undertaken and the expected feedstock materials as a percentage per annum is presented in the Works Approval Application Section 8, Table 8.2.</p>	See Section 8 of the Works Approval Application report
325539	Object	Geelong Sustainability	Waste	Source availability	"No guarantee that expected current volume of red bin waste will actually go to the Lara facility" "Volume of red bin waste will reduce in future..."	<p>The expected amount of waste to be treated at the proposed plant is 400,000 tonnes per year. We anticipate that the waste will come from a number of Victorian councils, with a preference for waste from the Geelong, Surf Coast and Bellarine areas as well as western Melbourne. The exact councils will be confirmed following tender processes.</p> <p>PHI advocates for a zero waste future. However, Victoria is many years (most likely decades) away from realising zero waste and a fully circular economy. PHI views energy from waste as a transitional technology to help improve the environment while moving towards zero waste.</p> <p>Despite the ambitions of governments and councils for a zero waste society, it is clear that zero waste in Australia will not occur in the near future (10-20 years). This is based on the global experience where numerous jurisdictions have stated ambitions for zero waste over the past 2-3 decades, yet no jurisdiction is close to achieving zero waste. The best performing jurisdictions in the world on waste management, reuse and recycling (Sweden, Denmark, Finland, Netherlands), still produce 43-57% residual waste – Germany is the stand-out producing 'only' 33% residual waste. Based on the European experience over many decades and the comparative superiority in existing reuse/recycling programs, it is unrealistic to believe that Victoria can surpass EU jurisdictions and achieve zero waste within the next 1-2 decades.</p> <p>The current recycling rate in Victoria is approximately 45% and the amount of residual waste (that in Victoria goes to landfill) produced per annum is 1,800,000 tonnes – a figure that MWRRG and the government state is set to rise to ~2,500,000 tonnes per annum in future years. Even with a push for greater reuse and recycling, it will take decades to reduce these amounts to close to zero.</p> <p>In the absence of energy from waste projects, residual waste would continue to be dumped in landfills, compounding a wide range of existing environmental problems such as greenhouse gas emissions, groundwater contamination, soil contamination and amenity issues (dust, odour, traffic, visual). EfW projects present an alternative opportunity where improvements to the environment and climate change can be made, while society transitions to a zero waste future. As an example, PHI's EfW project will reduce GHG emissions from landfills by approximately 300,000 tonnes of CO<sub>2-e</sub> per annum – so for every year that the PHI EfW project is not in operation, these significant GHG emissions will be released to the atmosphere (equivalent to 60,000 cars on our roads).</p> <p>According to the 2018 SWRRIP, it is estimated the Victorian's population growth will contribute to an estimated 63%</p>	<p>For more information on the policy, please visit: <a href="https://www.vic.gov.au/transforming-recycling-victoria">https://www.vic.gov.au/transforming-recycling-victoria</a> *Formally known as the State-wide Waste and Resource Recovery Infrastructure Plan.</p> <p>For more information on the MWRRG's SEMAWP project, please visit: <a href="https://www.mwrrg.vic.gov.au/smartersolution/latest-news/shortlisted-companies-announced/">https://www.mwrrg.vic.gov.au/smartersolution/latest-news/shortlisted-companies-announced/</a></p>

						more waste in the next 20 years. In addition to this, seven regional reports for Victoria (RWRRIP) have concluded that no new landfills are likely to be constructed over the next 10 years to meet waste management needs.	
325539	Object	Geelong Sustainability	Grid	Energy output	"No guarantee that energy will be able to be fed into the grid"	A connection to the electricity grid will be required for this project we are currently investigating connection options and routes. There are numerous power lines near the site which we are investigating for suitability for connection and we will also be discussing options with Powercor.	
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Regulatory	Best Available Technique	"Will EPA be considerate of continuous improvement principles and also be assessing this application against the performance assumptions of the most recent EfW approvals in Victoria and not just the worst-case limits established under BAT?"	Under the EP Act sources of emissions or discharges to the environment must be managed in accordance with 'best practice'. EPA publication 1517.1 'Demonstrating Best Practice' outlines how EPA assess best practice and provides guidance on how to demonstrate compliance with best practice requirements. With regard to Energy from Waste plants, EPA advises compliance with the European Union's Waste Incineration Directive (2000/76 WID), which was recast into the 2010 EC IED (European Commission, 2010) and The European Commission (2019) Best Available Techniques (BAT) Reference Document for Waste Incineration. The 2010 EC IED/BREF 2019 are seen as the leading standards globally for EfW emissions.	
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Technology	Facility design	"Will EPA require PHI to provide more specific detail relative to its core technology provider, specific process design, input fuel specifications and consequent environmental performance PRIOR to the approval of this application?"	The Prospect Hill International EfW plant will be adopting proven technology and best practice emissions controls. This has resulted in the proposed design of two complete independent lines including boilers, steam turbines and flue gas treatment. The design includes each boiler having dedicated flue gas treatment systems and emissions monitoring systems. The feedstock specifications and likely environmental performance have been included in the Works Approval Application documents. It is also important to note that if the approval is granted for the project, the plant will have to meet the requirements set out by EPA, which will be based on the design put forward in the Works Approval Application.	See Section 7 of the Works Approval Application report
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Consultation	Community engagement	"PHI community engagement program has been extremely limited and inconsistent with that required and delivered by the other EfW proponents as part of their approvals process...The Covid situation seems to have [been] leveraged by PHI to justify a limited and controlled engagement process"	<p>Prospect Hill International is committed to engaging with the community by answering your questions and getting your feedback about the project throughout its development. However, considering that greater Melbourne has been under Lockdown for over 200 days in the past year, it has been extremely difficult to engage face-to-face with the local community as was initially planned. Also, for the remainder of the past year where we have not been under Lockdown, there have been severe restrictions on public gatherings, which has meant that face-to-face consultation has been untenable.</p> <p>As a result, PHI has established a website, phone line and email to field any questions from the community. PHI has also held two online information sessions (28 July 2020, 20 April 2021) and one face-to-face information session (13 July 2021). In addition, there was a public consultation period between 21 March 2021 and 28 April 2021 run by EPA. The EPA also held a 20B conference after the public submission period in order to:</p> <ul style="list-style-type: none"> <li>• Enable EPA to listen to, and better understand the views and concerns of the community and stakeholders</li> <li>• Help explain the Works Approval Application, the assessment process, and its current status</li> <li>• Discuss ideas about possible conditions of the works approval is issued.</li> </ul> <p>This conference was independently chaired and a report prepared to report detailed community concerns and recommendations for EPA to consider as part of its assessment.</p> <p>It should also be noted that all of the above sessions had been postponed due to Lockdowns and COVID restrictions, where the actual date of the sessions referred to above had been pushed back.</p> <p>PHI is looking for additional opportunities to continue engagement with the community, preferably in a face-to-face environment. As greater Melbourne is in another Lockdown, we will need to wait for restrictions to ease. In the meantime, PHI has continued engagement with a number of interested parties (via phone calls and online meetings).</p>	

Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Location	Zoning	<p>"PHI then state 'Given that the Project does not require a substantial threshold distance due to its limited potential for impact on amenity and safety, it is considered that the Project is...located outside of the core of the IN2Z...'. ...."This appears an extraordinary presumptive statement...that the 'potential' for impacts from this proposed facility are clearly considerable"</p>	<p>There are many factors that influence the selection of a suitable site for an energy from waste plant. During the feasibility stage of this project we assessed several potential project sites using the following key criteria:</p> <ul style="list-style-type: none"> <li>• zoning of the land,</li> <li>• road access,</li> <li>• availability of services,</li> <li>• site readiness</li> <li>• potential social and environmental impacts.</li> </ul> <p>The selected project site in Lara scored well on all criteria. The key factors that make the Lara site suitable for this project are:</p> <ul style="list-style-type: none"> <li>• The site is located within the Geelong Ring Road Employment Precinct (GREP). The GREP is Geelong's largest designated industrial development precinct and includes over 500 hectares of land zoned for heavy industrial purposes.</li> <li>• The site is located within an industrial planning zone (Industrial 2 Zone or "IN2Z") which is designated for large industrial purposes like an energy from waste plant. Under the planning scheme, one of the purposes of the IN2Z is "To provide for manufacturing industry, the storage and distribution of goods and associated facilities".</li> <li>• Geelong and the surrounding region have suffered from the closure of large manufacturing plants over recent years. Prospect Hill International sees this project as an opportunity to bring back some of those skilled jobs to the area and hopes to employ people who may have been impacted by skilled job losses in recent years.</li> <li>• The site is located close to potential waste sources, including Geelong, the Surf Coast and Bellarine as well as the growing region of western Melbourne.</li> <li>• The site has good transport links, being close to the Princes Freeway and Geelong Bypass.</li> <li>• Trucks that transport waste to the plant will be able to access the site through roads in the industrial zone and not have to travel on residential streets.</li> </ul> <p>Experience with these types of plants around the world shows that they have very low amenity impacts to surrounding communities. There are many examples of EfW plants being located within tens or hundreds of metres of large residential populations (tens of thousands of people), such as London, Paris, Tokyo, Zurich and Vienna. Modern energy from waste plants include sophisticated measures to minimise impacts on surrounding communities, like noise reduction and sound proofing design elements, state-of-the-art air emissions controls and advanced odour controls.</p>	<p>Please refer to the Prospect Hill International website for examples of EfW plants located very close to large residential areas:  <a href="https://prospecthill.com.au/">https://prospecthill.com.au/</a></p>
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Air quality - modelling	Analog data	<p>"The air modelling assumes output concentrations based on performance information that does not appear in the documentation...recently approved EfW proponents provided supporting emissions data from operational facilities employing their specific technologies over an extended period ..."</p>	<p>In Europe, emissions to air from EfW plants are regulated by the European Union Industrial Emissions Directive (IED 2010/75/EU, and a similar, high level of protection is anticipated for the Australian environment where IED is applied. The BREF (2019) requirements will be included in the next version of the IED, which will most likely be released before the construction and operation of the PHI Plant. Therefore, the EPA will be seeking compliance with BREF 2019, which have more onerous daily average emissions limits for NOx, HCL, SO<sub>2</sub>, dust, and heavy minerals. There are very few operating reference plants globally that are currently required by regulation to achieve the more stringent 2019 BREF emissions limits.</p> <p>Two potential types of flue gas treatment systems for the Project are common in EfW plants throughout Europe, and Appendix N of the Works Approval Application contains details on the emissions of three operating plants for each type of technology (six plants in total). Their capability to achieve BREF 2019 guidelines is also discussed, and both suppliers advise they are able to meet the guideline emission limits. Details to the upgrades required to meet the new regulations can be found in Chapter 7.5 of the Works Approval Application.</p>	<p>See Appendix D Air Quality Assessment  See Appendix N Reference Plant Report  See Section 7 of the Works Approval Application report</p>
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Water	Leachate	<p>"Is PHI planning to inject the leachate into the boilers?"</p>	<p>Yes, water that pools on the floor of the waste bunker will be collected and pumped to be used in the boiler.</p>	<p>See Section 7 of the Works Approval Application report</p>
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Technology		<p>"How can the EPA or community derive confidence in PHI's performance assertions, modelling and efficiency calculations given the level of uncertainty in the facility design and the lack of robust, specific, and validated local supply data this is underpinning the application?"</p>	<p>The Prospect Hill International EfW plant will be adopting proven technology and best practice emissions controls. This has resulted in the proposed design of two complete independent lines including boilers, steam turbines and flue gas treatment. The design includes each boiler having dedicated flue gas treatment systems and emissions monitoring systems.</p> <p>The feedstock specifications and likely environmental performance have been included in the Works Approval Application documents. It is also important to note that if the approval is granted for the project, the plant will have to meet the requirements set out by EPA, which will be based on the design put forward in the Works Approval Application.</p> <p>Details of the design and refined performance parameters will be detailed in the design phase of the project once the final equipment has been selected.</p>	<p>See Section 7 of the Works Approval Application report  See Appendix M Concept Design Basis Report</p>

						Key plant parameters can be found in section 7.2 of the Works Approval Application in Table 7.1.A, and a more detailed summary of the concept design can be found in Appendix M.	
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Waste	Feedstock source	"Is the EPA assessing this proposal as a 400,000 tonne per annum facility or a 600,00 tonne facility? Given PHI has stated its intent to increase in scale, isn't it incumbent on the EPA to consider the capability of the facility...to accommodate this nominated increase"	PHI is proposing the project as a 400,000 tonne per annum (tpa) facility. Provision has been made for an additional future train to the east of the main process plant, which could increase the waste input by a further 200,000 tpa to 600,000 tpa in total. If plans eventuate for an additional train (to a total of 600,000 tpa), an application will be submitted at that time and in accordance with the relevant regulations and standards of that time, however this is beyond the scope of the current proposal.	
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Circular economy	Competing facilities	"PHI proposing to process 400,000 tonnes of waste per annum, 80% ...from municipalities....200,000 tonnes from the western Melbourne councils... "There is already an EfW approved and now under development in Laverton that will also be seeing to service the Western suburbs...facility not scaled to the market...PHI has not designed a facility considerate of the local Victorian waste policy objectives and waste market conditions	The expected amount of waste to be treated at the proposed plant is approximately 400,000 tonnes per year. We anticipate that the waste will come from a number of Victorian councils, with a preference for waste from the Geelong, Surf Coast and Bellarine areas as well as western Melbourne. The exact councils will be confirmed following tender processes.  According to the 2018 SWRRIP, it is estimated the Victorian's population growth will contribute to an estimated 63% more waste in the next 20 years. The current recycling rate in Victoria is approximately 45% and the amount of residual waste (that in Victoria goes to landfill) produced per annum is 1,800,000 tonnes – a figure that MWRRG and the government state is set to rise to ~2,500,000 tonnes per annum in future years. Even with the (200,000 tpa) approved EfW plant in Laverton, there is sufficient residual waste feedstock in greater Melbourne to allow for both projects.	For more information on the MWRRG's SEMAWP project, please visit: <a href="https://www.mwrrg.vic.gov.au/smartersolution/latest-news/shortlisted-companies-announced/">https://www.mwrrg.vic.gov.au/smartersolution/latest-news/shortlisted-companies-announced/</a>
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Waste	Monitoring contents	"PHI proposes to inspect ALL vehicles prior to entry into the tipping hall....it is not realistic that these vehicles can be [inspected] prior to entry so the validity of this as a control...is highly questionable"	There are a number of measures in place to monitor for contaminated waste: <ul style="list-style-type: none"> <li>• Number plate recognition software to track incoming and outgoing vehicles. The location of waste origin and vehicle will be recorded for auditing purposes and to identify trends (if any) in the disposal of waste</li> <li>• Before entering the tipping hall, waste will be visually inspected by staff for any obvious contamination, problems or hazards. If a problem or hazard is suspected, the vehicle will move to an inspection area. If the waste is unsuitable but not hazardous (e.g. oversized waste like fridges) it will be loaded into a skip, and if hazardous (e.g. batteries) it will be loaded into a hazardous waste storage container. Waste will be inspected again as it is tipped into the bunker and removed to a separate area if necessary</li> <li>• Random waste delivery audits for quality control</li> <li>• Even after this process, we know that small amounts of harmful materials, like batteries, can be found in household waste. The design of the plant takes this into account, and the high temperature of the boiler and the emissions control equipment mean these materials can be processed and harmful substances removed.</li> <li>• One third of the plant is taken up by emissions control equipment like filters and reactors. Sophisticated control systems set the emissions levels below strict European and Victorian emissions limits and can adjust automatically if pollutant levels from the boiler increase toward licence limits.</li> </ul>	See Section 9 of the Works Approval Application report
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Waste	Ash production / composition	"...considerable variation across the document as to the quantum of bottom ash expected....which is confusing and potentially misleading... "There does not appear to be any evidence of any lab testing or compositional analysis of bottom ash sourced from a comparable facility"	Solid residues (called bottom ash and air pollution control residues (APCr)) will be generated by the EfW process and will be managed as part of the plant operations. Metals will be separated from the bottom ash and recycled or reused. Initially, the remaining bottom ash will be collected in bins (indoors) and APCr in silos for disposal at suitably licensed landfills.  It is expected that bottom ash generation will be approximately 60,000 tpa and APCr generation will be approximately 20,000 tpa. The composition analysis highlighted in the Works Approval Application is based on data from similar EfW plants from Europe. Further compositional analysis of bottom ash and APCr is being investigated as the project progresses through its design.	See Section 9 of the Works Approval Application report

Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Waste	Ash production / removal	"Can the EPA confirm that this landfill has the capability and licence to treat and stabilise fly ash..."	<p>Boiler ash and APCr (flue gas treatment residues carried along with flue gasses/boiler ash) will be treated together. Some of the APCr will be recirculated back, and deposition of the APCr from the bag filters that is not recirculated back will be disposed of to an appropriately licensed prescribed waste landfill. The APCr is expected to be classified as Category B or C Reportable Priority Waste (RPW).</p> <p>The bottom ash is expected to be classified as Reportable Priority Waste (RPW) and it is expected that the bottom ash residues will be able to be accepted at numerous landfills as non-hazardous. The APCr is expected to be classified as Category B or C RPW and is expected to be disposed of at the Taylors Rd landfill in Lyndhurst. APCr is expected to be 2-5% of incoming waste (by mass – approximately 20,000 tpa).</p> <p>PHI plans to reuse bottom ash and APCr over time and achieve 100% diversion of residual waste from landfill. PHI will work with EPA and other stakeholders to ensure that the bottom ash and APCr are fit for reuse purposes and do not pose risks to the environment, as is the case in Europe. The reuse of bottom ash and APCr is common in Europe, based on many decades of EfW operation and extensive research. Ash residues from EfW plants in Europe are commonly treated and reused for various aggregate applications, such as road base or cement bound material.</p>	See Section 9 of the Works Approval Application report
Email submission	Conditional support	ACT Group (Aust) Pty. Ltd.	Waste	Ash production / removal	"Clearly there is the assumption that bottom ash is reusable but under the PHI proposal, the fly ash will exceed the planned maximum residual disposal to landfill applied to the the gasification plant"	<p>PHI plans to reuse bottom ash and APCr over time and achieve 100% diversion of residual waste from landfill. PHI will work with EPA and other stakeholders to ensure that the bottom ash and APCr are fit for reuse purposes and do not pose risks to the environment, as is the case in Europe. The reuse of bottom ash and APCr is common in Europe, based on many decades of EfW operation and extensive research. Ash residues from EfW plants in Europe are commonly treated and reused for various aggregate applications, such as road base or cement bound material.</p> <p>It should be noted that the PHI EfW plant is a moving grate incineration process and does not include a gasification plant – the Recovered Energy Australia (Laverton) and the Great Southern Waste Technologies (Dandenong) EfW projects have gasification plants.</p>	See Section 9 of the Works Approval Application report
Referral Agency Letter	Conditional support	Barwon Water	Water	Proposed requirements	"Barwon Water strongly encourages that the detailed design investigate opportunities to source alternative 'fit for purpose' water supply to substitute use of potable water where possible"	<p>PHI has reached out to Barwon Water to discuss the project since July 2020. In that time, we have been corresponding with Barwon Water numerous times and we have also held a virtual meeting with numerous Barwon Water personnel.</p> <p>In our interactions to date, the possibility of alternative water sources has been raised and discussed (e.g. recycled water). PHI is very open to the possibility of using alternative water sources besides potable water. We intend to continue engagement with Barwon Water as the project progresses through the design.</p>	
Referral Agency Letter		City of Greater Geelong	Traffic	Proposed requirements	"...facility will require at least 80 car spaces. The staff car park...does not indicate 80 car spaces"	The plant is being designed with 80 car park spaces, as detailed in the Planning Permit Application.	See section 4.5.1 of the Planning Permit Application
Referral Agency Letter		City of Greater Geelong	Noise	Proposed requirements	"Application of acoustic attenuation in the form of noise 'barrier'....barrier to have a mass per unit area in the order of 15 kg/m2 and be contiguous without any gaps... "Application of acoustic insulating constructions for building door and walls.. "The use of attenuators ion extract systems"	The acoustic controls in the Works Approval Application have been specified as the minimum controls necessary to meet the relevant EPA noise limits. During the detailed design, detailed acoustic specifications will be noted in the construction specifications in order to meet the noise limits.	
Referral Agency Letter		City of Greater Geelong	Health	Proposed requirements	"the following recommendations to are to be put into place, "Further development of the proposed feedstock delivery protocols into an operational management plan "Appropriate testing and management of waste materials generated during operations..."	<p>The plant will be operated under an operational management plan during the operations phase. This will include measures to manage feedstock, including:</p> <ul style="list-style-type: none"> <li>• Number plate recognition software to track incoming and outgoing vehicles. The location of waste origin and vehicle will be recorded for auditing purposes and to identify trends (if any) in the disposal of waste</li> <li>• Before entering the tipping hall, waste will be visually inspected by staff for any obvious contamination, problems or hazards. If a problem or hazard is suspected, the vehicle will move to an inspection area. If the waste is unsuitable but not hazardous (e.g. oversized waste like fridges) it will be loaded into a skip, and if hazardous (e.g. batteries) it will be loaded into a hazardous waste storage container. Waste will be inspected again as it is tipped into the bunker and removed to a separate area if necessary</li> <li>• Random waste delivery audits for quality control</li> <li>• Even after this process, we know that small amounts of harmful materials, like batteries, can be found in household waste. The design of the plant takes this into account, and the high temperature of the boiler and the emissions control equipment mean these materials can be processed and harmful substances removed.</li> </ul>	See Section 9 of the Works Approval Application report

						<p>• One third of the plant is taken up by emissions control equipment like filters and reactors. Sophisticated control systems set the emissions levels below strict European and Victorian emissions limits and can adjust automatically if pollutant levels from the boiler increase toward licence limits.</p> <p>The waste materials that will be generated during operations include bottom ash, boiler ash and Air Pollution Control residues (APCr). There will be appropriate testing and categorisation of these wastes, particularly if offsite transport and disposal is required. A testing program will be developed in accordance with EPA requirements, including ALSP – Australian Standard (AS) Leaching Procedure AS4439.2 and AS4439.3. Documentation of testing will be kept, and results will be supplied to the EPA.</p> <p>PHI plans to reuse bottom ash and APCr over time and achieve 100% diversion of residual waste from landfill. PHI will work with EPA and other stakeholders to ensure that the bottom ash and APCr are fit for reuse purposes and do not pose risks to the environment, as is the case in Europe. The reuse of bottom ash and APCr is common in Europe, based on many decades of EfW operation and extensive research. Ash residues from EfW plants in Europe are commonly treated and reused for various aggregate applications, such as road base or cement bound material.</p>	
Referral Agency Letter		City of Greater Geelong	Native vegetation	Proposed requirements	"No report submitted with the application considers potential impacts to biodiversity from these ancillary (but critical to the success of the project) piece of infrastructure"	<p>There will be ancillary infrastructure required for the project as the detailed design is progressed. The main ancillary infrastructure will be the connection of gas, water and electricity services (for plant use) and the connection of exported electricity to the electricity grid. The gas, water and electricity services for plant use are anticipated to be connected at a localised level without environmental or biodiversity impacts – there are existing gas, water and electricity services within metres of the site.</p> <p>To export electricity from the EfW plant to the grid will require an electricity connection utilising powerlines. This is likely to be in the form of 11kV or 22kV power lines, which could be strung from the existing powerlines in the area (e.g. along McManus Rd or Production Way). Discussions will be held with Powercor during the detailed design phase to confirm export requirements and associated infrastructure. If new powerlines are required, the requisite assessments (including biodiversity) will be conducted at that stage and any requisite approvals will be applied for at that time.</p>	
Referral Agency Letter		City of Greater Geelong	Water	Proposed requirements	"...outside of table 6.5 in Part 1 of the application, there is no consideration of how the groundwater table will be protected from contamination resulting from the proposal"	<p>A Land and Groundwater Contamination Assessment was conducted which demonstrated that the groundwater level on site was approximately 9 metres below the surface. The construction contract will specify measures to protect groundwater and to meet all EPA requirements, including:</p> <ul style="list-style-type: none"> <li>• appropriate management of groundwater (if encountered)</li> <li>• no disposal of water to groundwater</li> <li>• the use of impervious surfaces (e.g. concrete slabs) in the design to prevent any pathway from the plant to the soil and groundwater</li> </ul>	See Appendix J Land and Groundwater Contamination Assessment
Referral Agency Letter	Conditional support	MWRRG	Waste	Source availability	"...lack of clarity around the specific nature of the transfer and bulk haul network proposed to support the facility"	<p>At this stage of the project, it is not possible to specify the transfer and bulk haul network to support the EfW plant, other than the truck routes close to the GREP area. Once discussions have commenced with potential waste providers (e.g. councils, waste contracting companies, etc), the possible waste transfer and bulk haul network will be developed. PHI knows that there are numerous existing waste transfer stations around Geelong and western greater Melbourne. It is preferable to utilise existing infrastructure where possible and where suitable.</p>	
Referral Agency Letter		Sustainability Victoria	Waste	Wastes Hierarchy	"...WtE is lower in the wastes hierarchy than recovery, but higher than landfill. As such, the benefits from WtE are best realised when the feedstock is a material stream or waste that cannot viably be recovered for higher order recovery, that is, for reuse or recycling. As such, WtE is preferred over landfilling for residual wastes – however the EPA should be satisfied that materials to be accepted over the life of the facility qualify as residual"	<p>PHI advocates for a zero waste future. However, Victoria is many years (most likely decades) away from realising zero waste and a fully circular economy. PHI views energy from waste as a transitional technology to help improve the environment while moving towards zero waste.</p> <p>At the heart of this project is the diversion of residual waste from landfills and moving the use of residual waste higher up the waste hierarchy to recovery of energy. The waste feedstock would exclude all material used within existing recycling programs (i.e. yellow kerbside bins) – only residual waste (i.e. red top kerbside bins) will be targeted – we are only targeting residual waste that would otherwise go to landfill.</p> <p>EfW projects present an alternative opportunity where improvements to the environment and climate change can be made, while society transitions to a zero waste future. As an example, PHI's EfW project will reduce GHG emissions from landfills by approximately 300,000 tonnes of CO<sub>2-e</sub> per annum – so for every year that the PHI EfW project is not in operation, these significant GHG emissions will be released to the atmosphere (equivalent to 60,000 cars on our roads).</p>	
Referral Agency Letter		Sustainability Victoria	Feedstocks		The application states that (p2 & xix) The waste feedstock would exclude all material used within existing recycling programs. However, a review of the documents indicates otherwise.	<p>Table 8.2 of the Jacobs report (Works Approval Application) shows the waste composition of existing MSW and C&amp;I waste streams – i.e. existing waste streams that are currently being disposed to landfills. Although these recyclable constituents <i>could</i> be recovered and reused/recycled, it is obviously not practical or economically viable to do so at the moment, which is why these wastes are currently being disposed to landfills. Hence these wastes are classed as residual waste and not recyclables.</p>	

				Table 8.2 (p73 Jacobs Report), Total expected feedstock as a percentage from each category per annum, provides a breakdown of the materials. It indicates that out of the C&I materials 36.04% will be organic food waste and 1.15% will be e-waste. The table further indicates that out of the MSW 35.7% will be food waste, 11.2% will be garden waste and 6% will likely be glass.	Residual waste will always contain a percentage of recyclable material until there is a 100% recycling rate – there is no jurisdiction anywhere in the world that is close to achieving this level of recycling. The best performing jurisdictions in the world on waste management, reuse and recycling (Sweden, Denmark, Finland, Netherlands), still produce 43-57% residual waste – Germany is the stand-out producing 'only' 33% residual waste.  At the heart of this project is the diversion of residual waste from landfills and moving the use of residual waste higher up the waste hierarchy to recovery of energy. The waste feedstock would exclude all material used within existing recycling programs (i.e. yellow kerbside bins) – only residual waste (i.e. red top kerbside bins) will be targeted – we are only targeting residual waste that would otherwise go to landfill.	
Referral Agency Letter		Sustainability Victoria	Feedstocks	<p>"Should the facility be <u>reliant</u> on recyclable components for feedstock, it would not be consistent with the SWRRIP, in terms of facilitating higher order recovery, or consistent with Recycling Victoria – a new economy (DELWP, 2020) (RV)..."</p> <p>"Melbourne's population will likely increase over the next 25-30 years and this may assist to compensate for any materials removed from the residual stream. However, the facility should be established to be viable to manage residual waste with lower ratios of recyclable materials. While it may not be viable to recover some of the remaining materials now, over the life of the SWRRIP and subsequent plans, or the WtE facility, this may change."</p>	<p>PHI's EfW project is <i>not at all</i> reliant on recyclable components for feedstock – in fact the opposite is true. Recyclables are not desirable in the waste streams as they have a higher calorific value. Thus only MSW and MSW-like residual waste is being targeted.</p> <p>Residual waste will always contain a percentage of recyclable material until there is a 100% recycling rate – there is no jurisdiction anywhere in the world that is close to achieving this level of recycling. The best performing jurisdictions in the world on waste management, reuse and recycling (Sweden, Denmark, Finland, Netherlands), still produce 43-57% residual waste – Germany is the stand-out producing 'only' 33% residual waste.</p> <p>At the heart of this project is the diversion of residual waste from landfills and moving the use of residual waste higher up the waste hierarchy to recovery of energy. The waste feedstock would exclude all material used within existing recycling programs (i.e. yellow kerbside bins) – only residual waste (i.e. red top kerbside bins) will be targeted – we are only targeting residual waste that would otherwise go to landfill.</p>	
Referral Agency Letter		Sustainability Victoria	Buffer requirements	While the site is within an industrial precinct, it is also within close proximity to land with the Rural Living Zone, which allows sensitive uses (residential). Therefore, there will be a need to ensure that the WtE processes do not impact on surrounding properties. We acknowledge that pollution controls and amenity impacts are the remit of the EPA.	<p>The Works Approval Application and specialist assessments have demonstrated that PHI's proposed EfW facility will not impact surrounding sensitive uses. A comprehensive Health Impact Assessment (HIA) was conducted and the assessment considered potential impacts from pollutants and impacts related to air emissions, odours, noise, economics, waste and transport. Multiple exposure pathways relevant to both adults and children were assessed and the risks have been calculated on the basis of the maximum predicted deposition rate for all of the sensitive receptors in the surrounding community. As a result, this approach is representative of the maximum impacted rural residential location and provides a conservative estimation of risks relevant to other rural residential and urban residential areas.</p> <p>The HIA found the risk of potential health impacts on the community would be low to negligible. The health impact assessment considered potential impacts due to air emissions, noise and particulate deposition (i.e. where particulates may deposit on to pasture or soils and be ingested by human or animals). The HIA concluded that:</p> <ul style="list-style-type: none"> <li>• There are no acute risk issues of concern for health issues related to air quality and inhalation, deposition or multiple pathway exposures</li> <li>• Chronic and incremental carcinogenic risks are negligible and essentially representative of zero risk.</li> </ul> <p>Experience with these types of plants around the world shows that they have very low amenity impacts to surrounding communities. There are many examples of EfW plants being located within tens or hundreds of metres of large residential populations (tens of thousands of people), such as London, Paris, Tokyo, Zurich and Vienna. Modern energy from waste plants include sophisticated measures to minimise impacts on surrounding communities, like noise reduction and sound proofing design elements, state-of-the-art air emissions controls and advanced odour controls.</p>	<p>See Appendix F Health Impact Assessment</p> <p>Please refer to the Prospect Hill International website for examples of EfW plants located very close to large residential areas: <a href="https://prospecthill.com.au/">https://prospecthill.com.au/</a></p>

Referral Agency Letter		WorkSafe	MHF status		On what basis has the proponent assumed that the WtE facility will be an MHF, as stated in the Works Approval (WA) application?	<p>The document referred to by WorkSafe is actually the Planning Permit Application, not the Works Approval Application. In the Planning Permit Application, the references made to the plant potentially being a Major Hazard Facility (MHF) are in the context of approvals that will need to be considered in the next phase of the project, subsequent to the EPA and DELWP approvals phase and during the detailed design.</p> <p>Since the time of writing of the Planning Permit Application, further analysis by PHI indicates that the proposed EFW plant will not meet the thresholds for an MHF. Nonetheless, more detailed analysis will be completed to confirm whether the proposed EFW will meet the thresholds for an MHF.</p>	
Referral Agency Letter		WorkSafe	Dangerous goods		What are the types and quantities of Dangerous Goods (DGs) that the proponent intends to use at the facility and how will they be stored and handled onsite?	<p>The types and quantities of Dangerous Goods (DGs) will be confirmed during the detailed design process. The likely types of chemicals and DGs are outlined in the Works Approval Application in section 7 and are likely to include lime, activated carbon, urea (or ammonia), alum and carbonates. As stated in the Works Approval Application (section 3), PHI will consult with WorkSafe and the CFA on the storage and handling arrangements for the selected DGs. PHI will ensure that the storage and handling of DGs will be in accordance with the relevant legislation and standards, including (but not limited to):</p> <ul style="list-style-type: none"> <li>• Dangerous Goods Act 1985 and associated regulations</li> <li>• AS1940:2017 The storage and handling of flammable and combustible liquids</li> <li>• EPA publication 1698: Liquid storage and handling guidelines</li> </ul>	See Sections 3 and 7 of the Works Approval Application report
Referral Agency Letter		WorkSafe	Fire safety		To what extent has the proponent consulted with FRV/CFA in relation to fire safety at the facility and design of fire protection systems suitable for both the storage of DGs and storage and handling of municipal waste (feedstock)?	<p>PHI's EFW plant will be designed to best practice standards including the design of the fire protection system. The fire protection system will be designed in accordance with the relevant standards and regulations including AS 1603 – Automatic fire detection and alarm systems and AS 2118 – Automatic fire sprinkler systems. The fire protection system will cover the whole site including the storage of dangerous goods and waste feedstock. Key features of the fire protection system will include visible light cameras, infrared cameras, thermocouples in the bunker floor, water cannons and sprinklers. During the detailed design phase, PHI will consult with the CFA on their expectations, in addition to designing a system that meets the relevant Australian Standards.</p>	
Referral Agency Letter		WorkSafe	Risk assessment		Why does the risk assessment not appear to consider the hazard of a major fire at the facility and its impact on neighbouring properties (e.g. the proximal Viva Lara LPG Terminal) and general community? This would have both safety and environmental consequences.	<p>The risk assessment included for the Works Approval Application was an initial risk assessment that considered the most likely risks to the environment as a result of the project – it did not cover all of the potential risks of the project. The risk assessment is a live document and will be updated during the next phase of work for the project, during the detailed design phase – it will be during the detailed design that additional potential risks will be more defined as the detailed design progresses. In addition, there will be numerous environmental and safety assessments that take place during the detailed design phase, including HAZIDs (Hazard Identification process) and HAZOPs (Hazard and Operability Study process).</p>	
Referral Agency Letter		WorkSafe	Viva Energy Refining		To what extent has the proponent/DELWP consulted with Viva Energy Refining in relation to any risks associated with the location of the proposed facility, within the designated Inner Safety Area for the Lara LPG Terminal.	<p>With the COVID-19 pandemic, it has been difficult for Prospect Hill International to conduct extensive engagement with nearby landholders. Considering that greater Melbourne has been under Lockdown for over 200 days in the past year, it has been extremely difficult to engage with the local community as was initially planned. As a result, PHI's engagement with the local community (including nearby industrial premises) has been limited.</p> <p>Despite the challenges of Lockdowns and restrictions, PHI has conducted a number of activities to disseminate information to nearby industrial and residential properties. This has included letterbox drops of information and fact sheets, online community information sessions and the establishment of a website, email and phone line. During the detailed design phase, PHI intends to engage with Viva Energy and other adjoining industrial premises to discuss the project in more depth, once further design elements are more complete.</p>	