

# 1. AIR QUALITY AND ODOUR IMPACTS

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
117772, 117802, 118046, 118116, 118457, 118501, 118560, 119904, 120194, 120236, 126948  Change.org	Prior existence of offensive odours	<ul style="list-style-type: none"> <li>Strong odours from the existing waste facility and industrial area nearby are already tolerated by local residents concerned about the potential for another waste facility to contribute to offensiveness, duration and intensity of strong odours.</li> <li>Offensive odours from both the stockpiling of waste and emissions from exhaust stacks were expressed as a concern.</li> <li>The modelling contained within the Odour Assessment in regards to pollution from EfW facility was criticised as inaccurate as it assumes that waste being processed will be non-toxic. There are doubts about whether the toxicity of waste that is processed is something that can be controlled.</li> <li>200 people from the 'Concerned Residents Group of Western Sydney' signed an online petition objecting to the EfW facility in Eastern Creek (as at 5 November 2015). Of those who listed reasons for signing the petition, offensive odours and air quality was the most commonly cited reason for objecting to the proposal.</li> </ul>	<p>In response to public submissions, an additional report has been prepared by Pacific Environment regarding air quality and odour impacts associated with the EfW facility. The report notes that odour abatement through combustion means that the EfW facility should act to reduce potential odour sources in the local area. Odour emissions from the EfW facility have also been addressed in a stand-alone quantitative assessment. The results of this assessment show that the odour concentrations would be below the impact assessment criteria at all off-site sensitive receptors. This result has taken into consideration the existing air quality in the area.</p> <p>Since the commencement of operations in June 2012, the existing Genesis facility has recorded and logged complaints relating to odour. Since this time, the existing Genesis facility has logged three odour complaints. Subsequent to further investigation and inspection, two complaints were found to not have originated from the existing Genesis facility but from other known odour sources in the area. The third odour complaint in February 2013 resulted in the review of leachate treatment practices at the facility to address this odour complaint.</p> <p>It is also noted that the Odour Assessment exhibited at adopts the most stringent odour performance criterion invoked in NSW, which is relevant to urban populations greater than 2,000 people, as well as schools, hospitals, etc. The results of the dispersion modelling completed by Pacific Environment indicate that under normal operating conditions,</p>	Amended Environmental Impact Statement (EIS)  Odour Assessment (Amended)  Local Air Quality and Greenhouse Gas Assessment (Amended)

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			<p>all air quality metrics (including odour) will be below NSW EPA criteria.</p> <p>There may be odours associated with the operation of the facility, but odour itself is not considered to be toxic or at a level likely to cause nuisance. Flue Gas Treatment will ensure that emissions are “scrubbed” of toxics to comply with the limits of the IED (noted to be more conservative than the NSW PoEO Act Emission limits).</p>	
<p>117772, 118046, 118116, 118501, 118657, 119879, 119900, 119904, 120231, 120194, 119386, 120244, 120247, 120236</p> <p>Change.org</p>	<p>Impacts on existing air quality</p> <p>Cumulative impact on odours and air quality</p> <p>Existing air quality issues have not been considered</p>	<ul style="list-style-type: none"> <li>• Many concerns were expressed that the cumulative impact of industrial development in the surrounding area is likely to worsen odours and further reduce air quality, particularly for residents of Erskine Park, Minchinbury and St Clair.</li> <li>• It was suggested that concurrency and the cumulative impacts of odour and air quality were not considered when odour assessments were undertaken, having limited regard to the effect on neighbouring suburbs and local residents. One submission suggested that the EIS considers air quality impacts in isolation and fails to consider existing air quality impacts in the area.</li> <li>• One submission referred to the EIS which states, ‘Should other sources in the area (existing background and future development) add additional risk of emissions, the overall impact would increase.’ One submission in particular suggested that the cumulative impacts from the existing industrial area in conjunction with pollution expected from aircraft flying in and out of Badgerys Creek Airport has not been considered.</li> </ul>	<p>To assess the cumulative impact of the proposed facility with present conditions against the relevant air quality standards and goals, it is necessary to consider the existing background concentrations of criteria pollutant. Pacific Environment prepared an Air Quality and Greenhouse Gas Assessment and an Odour Assessment.</p> <p>The Air Quality assessment has considered the current (i.e. background) air quality of the receiving environment and modelled the predicted contribution of the EfW plant to determine the cumulative impact.</p> <p>It is acknowledged that future developments in the vicinity of the proposed facility will have the potential to impact local air quality, and therefore influence the cumulative impact of the area on air quality. However, the onus is on the proponent to demonstrate that their proposed development can operate without adversely impacting upon an air quality which may already be constrained by local land uses. Any additional impacts on local air quality as a result of future development is out of the control of the proponent, future potential impact on air quality will be the subject of the same assessment framework.</p>	<p>Amended EIS</p> <p>Local Air Quality and Greenhouse Gas Assessment (Amended)</p> <p>Odour Assessment (Amended)</p> <p>Ozone report (amended)</p>

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		<ul style="list-style-type: none"> <li>One submission asserted that existing nitrogen oxide and ozone levels in Western Sydney 'often exceed recommended levels'.</li> </ul>	<p>In respect to Odour, a detailed odour assessment has been undertaken. The assessment concludes that whilst odour may be marginally above the detection limit within the suburb of Minchinbury it is predicted to be below the regulatory level of 2ou.</p> <p>An ozone assessment has been undertaken in line with the regulatory guidelines. The assessment concludes that ozone impacts, during normal operation of the plant are generally expected to be well within the limit value.</p>	
117775, 117802, 120168, 120153, 120233	Pollution and toxic compounds from emissions	<ul style="list-style-type: none"> <li>Many submissions listed toxic substances from waste facilities which are released into the atmosphere that have been known to have an adverse impact on air quality. Some of these toxic substances listed in public submissions include dioxins, furans, mercury, nitrogen oxides, sulphur oxides, heavy metals and particulates.</li> <li>The content of the by-products from emissions that will be produced as a result of the EfW facility incinerating waste at high temperatures is a concern to residents. The modelling relies on assumptions in relation to the possible content of the rubbish being burned and assumes that no worker will ever deposit anything that is toxic.'</li> </ul>	<p>The chemicals of potential concern (COPC) list has been reviewed and confirmed since exhibition and is considered within the amended EIS, Human Health Risk Assessment Report and Air Quality Assessment, including those cited in the submission.</p> <p>Despite the presence of these chemicals of potential concern, even in a worst case scenario, it was found that the total intake for all receptors is well below the Tolerable Monthly Intake (TMI), and that no adverse non-carcinogenic health effects should result from a lifetime of exposure to any COPC. The carcinogenic effect of COPCs released from the facility is considered negligible for all sensitive receptors. This assessment criteria includes the maximum annualised cancer risk for children at the point of maximum impact. This shows that the carcinogenic effect of COPCs released from the facility is considered negligible in the worst case scenario.</p> <p>The HHRA has demonstrated that appropriate mitigation measures will be adopted with regards to pollution and toxic compounds from emissions. It was found that the proposed EfW facility will not exceed air quality criteria during</p>	<p>Amended EIS</p> <p>Human Health Risk Assessment (Amended)</p> <p>Local Air Quality and Greenhouse Gas Assessment (Amended)</p>



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			<p>construction or operation, and impacts to human health and well below acceptable limits.</p> <p>The EfW facility will generate three types of solid by-products. There are 3 primary by-products being bottom ash, boiler ash and APC residue. Boiler Ash is inert and will be disposed of to landfill. Boiler Ash and APC Residue will continue various concentrations of contaminants and will be managed and disposed of in accordance with the appropriate EPA guidelines.</p>	
<p>120231, 120227 Change.org</p>	<p>Technology choices have contributed to pollution and smog</p> <p>Photochemical smog already exists in Western Sydney</p>	<ul style="list-style-type: none"> <li>Major international cities including China were cited as examples of cities which deal with large-scale impacts of pollution and smog due to industrial developments and outdated, inefficient technology.</li> <li>Technology used for incinerators are now outdated and referred to as 'yesterday's technology.' Several submissions suggested there are alternative methods to process waste such as the Fischer-Tropsch process which eliminates landfill altogether by converting waste into fuel.</li> <li>Particularly in the summer months, issues of photochemical smog already exist in Western Sydney. 'It is well documented that Western Sydney already suffers from one of the worst air pollution problems in Australia.</li> </ul>	<p>The Ozone Impact Assessment includes a quantitative photochemical smog assessment in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2005) and the Director General's Environmental Assessment Requirements. Ozone is the principle component of photochemical smog, which is typically formed several hours after the precursors are emitted. Ground-level ozone continues to be a problem in Sydney during summer months. However, it is likely that the Department of Planning and Environment (DP&amp;E) will condition a limit on ozone levels during peak months. The operator of the EfW facility will be required to comply with these established limits.</p> <p>The EfW Policy Statement indicates that any facility proposing to recover energy from waste will need to meet current international best practice. This Policy Statement also requires that emissions from EfW facilities must satisfy, as a minimum, emission limits prescribed by the Clean Air Regulations. The proposed technology for the facility is based on existing facilities in Europe and will incorporate best available technology (BAT) for flue gas treatment. A</p>	



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			<p>summary of the technologies used to control emissions from waste incineration at existing EfW facilities is provided within the Local Air Quality and Greenhouse Gas Assessment .</p> <p>This report demonstrates that existing technology can satisfy the emission limit requirements of the EU IED, and is therefore appropriate for the EfW facility.</p> <p>In terms of ozone impacts, during normal operation of the plant, the emission levels are generally expected to be well within the limit value. The facility will employ best available technology in the form of selective non-catalytic reduction for reducing emissions of NOx, the dominant ozone precursor released from the facility.</p> <p>The additional report prepared by Pacific Environment in response to public submissions undertook additional analysis which compared the annual nitrogen dioxide (NOx) from the proposed EfW facility with other significant NOx sources. A comparison of the top 10 man-made NOx emission sources located within the Sydney basin, 8 of these are transport related. The 2 remaining significant sectors are generation of electrical power from gas, and petroleum products and fuel production. The proposed EfW facility ranks seventeenth compared to other grouped emissions sources in the Sydney air shed. Relative to man-made sources within the GMR, where most electrical power generation sources are located, the EfW facility would be placed significantly lower in ranking. The photochemical smog emission levels during normal operations of the EfW facility are anticipated to be well within the limit value.</p>	

## 2. HEALTH AND SAFETY

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
117775, 118116, 119386, 120247	Cumulative impact on human health	<ul style="list-style-type: none"> <li>Submissions expressed concerns about the cumulative impact of industrial development in the surrounding area on human health, particularly in regards to the combined effect of pollution from multiple industrial facilities.</li> <li>The cumulative impact of existing industrial development, impacts from the proposed EfW facility and impacts from the future Badgerys Creek Airport on human health was also highlighted as a concern for residents.</li> </ul>	<p>The SEARs for environmental assessment requires the Environmental Impact Statement to address a number of key issues of perceived high environmental, social, and economic value, sensitivity or impact. One of the key issues identified includes human health. In accordance with the SEARs, a Human Health Risk Assessment covering the inhalation of criteria pollutants and exposure to specific air toxics from all pathways was. The Human Health Risk Assessment uses national and international guideline values when quantifying the long term impact of the proposed EfW facility on human health.</p>	<p>Amended EIS Human Health Risk Assessment (Amended) Air Quality Assessment (Amended) Human Health Risk Assessment Report,</p>
117775, 117802, 118560, 118657, 119879, 119900, 120231, 120168, 119386, 120153, 120227, 120233, 120236, 126948  Change.org	Evidence shows that emissions associated with waste facilities are harmful to human health	<ul style="list-style-type: none"> <li>Emissions and the associated release of airborne substances into the atmosphere are proven to be harmful to human health. When referring to concerns about impacts on human health, the majority of submissions referred to the connection between emissions and impacts of health.</li> <li>Emissions pose health risks to humans due to inhalation of particles in the air resulting in lung conditions or respiratory issues.</li> <li>Those that are at the highest level of risk are children, the elderly and those with existing health issues. Several submissions expressed concern for sick children, or children with existing respiratory issues such as asthma.</li> <li>Several submissions noted that exposure to pollutants has impacts on human health. Some of the pollutants listed include nitrogen dioxide, particulate matter, carbon monoxide, mercury, cadmium, arsenic, lead, dioxin and furans, benzene and polycyclic aromatic hydrocarbons (PAHs). Symptoms listed as a result of exposure to these</li> </ul>	<p>Refer to 'pollution and toxic compounds from emissions' under Air quality and odour impacts for a list of the chemicals of potential concern (COPC) that have been assessed as part of the amended HHRA and amended EIS. Despite the presence of chemicals of potential concern (COPC), even in a worst case scenario, it was found that the total intake for all receptors is well below the Tolerable Monthly Intake (TMI), and that no adverse non-carcinogenic health effects should result from a lifetime of exposure to any COPC. The carcinogenic effect of COPCs released from the facility is considered negligible for all sensitive receptors. This assessment criteria includes the maximum annualised cancer risk for children at the point of maximum impact. Since children are considered the most sensitive receptors due to the likelihood of being exposed to COPC via cumulative pathways, impacts on children have been specifically addressed. This shows that the carcinogenic effect of COPCs released from the facility is considered</p>	



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		<p>pollutants may include, but are not limited to respiratory problems, aggravated asthma, bronchitis, heart attacks, cardiovascular effects, increased blood pressure, increased risks of cancer, neurological effects especially in children and melanomas.</p>	<p>negligible, even in the worst case scenario. Given that the total intake for all receptors is well below the Tolerable Monthly Intake, the cumulative impact of the proposed EfW facility with regards to human health, together with the background conditions, is considered acceptable, and will not lead to adverse health impacts.</p> <p>The HHRA has demonstrated that appropriate mitigation measures will be adopted with regards to pollution and toxic compounds from emissions. It was found that the proposed EfW facility will not exceed air quality criteria during construction or operation, and impacts to human health and well below acceptable limits.</p> <p>An amended HHRA has been prepared. The HHRA covers the inhalation of criteria pollutants and exposure from all pathways (including inhalation, ingestion and dermal) to specific air toxics. The amended HHRA prepared by AECOM in response to public submissions has also considered ingestion of soil and playing in dirt as a possible exposure pathway, particularly for children. The tests carried out are extremely conservative and conducted under worst case scenario conditions where outputs from the EfW facility would in reality only occur for approximately 1 hour every year. The HHRA modelling uses this 1 hour per year risk level for 24 hours per day, 365 days a year. Therefore, the comprehensive results presented in the additional HHRA assessment report demonstrate that the EfW facility will not have any adverse impacts on human health, and that the risk for carcinogenic and non-carcinogenic impacts are within, or well within acceptable limits.</p> <p>It is not within the scope of this report to assess the health impacts as a result of the future Badgerys Creek Airport.</p>	

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			<p>However, the onus is on the proponent to demonstrate that their proposed development can operate without adversely impacting upon on human health.</p>	
117802, 119900	Correlation with cancer	<ul style="list-style-type: none"> <li>• There is evidence of a correlation between waste incinerators and cancer over a medium to long term period of time, including links between benzene and cancers such as leukaemia which have potentially fatal outcomes.</li> <li>• Instances of cancer are already prevalent and a facility which could potentially contribute to an increase in instances of cancer is a radical approach. One submission suggested that a more cautious approach should be adopted with regard to the construction of this facility.</li> <li>• Two submissions listed an example from Spain which referred to a ‘statistically significant increase in the risk of dying from cancer in towns near incinerators and installations used for the recovery or disposal of hazardous waste.’</li> </ul>	<p>Despite the presence of chemicals of potential concern (CoPC), even in a worst case scenario, it was found that the total intake for all receptors is well below the Tolerable Monthly Intake (TMI), and that no adverse non-carcinogenic health effects should result from a lifetime of exposure to any CoPC. The carcinogenic effect of CoPC s released from the facility is considered low and acceptable for all sensitive receptors. This assessment criteria includes the maximum annualised cancer risk for children at the point of maximum impact.</p> <p>The HHRA has assessed impacts on human health over a period of a lifetime of exposure to CoPC from the proposed EfW facility. This comprehensive assessment is considered the worst case scenario.</p>	<p>Amended EIS Human Health Risk Assessment (Amended) Air Quality Assessment (Amended)</p>
117802, 120168	Time-lag and delayed onset of symptoms	<ul style="list-style-type: none"> <li>• Despite incremental improvements to technology, there is time-lag before human health impacts are known. ‘Toxic emissions have a significant time lag before human health impacts become obvious. There is an issue of latency of onset of symptoms after exposure which can take decades.’</li> </ul>	<p>Since children are considered the most sensitive receptors due to the likelihood of being exposed to CoPC via cumulative pathways, impacts on children have been specifically addressed. With regards to carcinogenic effects, the NSW Government document ‘Land Use Safety Planning’ states that the risk rating is on a per year basis and that the most sensitive land-use types (including schools, and hospitals, etc) should not be exposed to an individual risk level greater than half in one million per year. This demonstrates that the carcinogenic effect of CoPCs released from the facility is considered negligible, even in the worst case scenario, for children and the elderly in particular. ‘</p>	

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			<p>The limit levels set within the National Environmental Protection Measure for Ambient Air Quality have been set at a level which is considered to present minimum or zero risk to human health. If the concentrations in the atmosphere are less than the criteria, then the pollutant is unlikely to have an adverse impact on human health. This is the case for most pollutants released by the proposed EfW facility, specifically oxides of nitrogen, oxides of sulphur, carbon monoxide, hydrogen fluoride, and particulates.</p>	
117802	<p>Risk assessment and problems with predicting health risks</p>	<ul style="list-style-type: none"> <li>• There is an uncertainty in the ability to understand the impacts of long-term exposure to toxic substances and cumulative impacts to human health over time.</li> <li>• Risk assessment is a poor method of assessing the complexities of human health impacts. ‘Typically this decision is based on an inexact method called risk assessment.. ‘and often have little understanding of its limitations. Typically it involves estimating the risk to health of just 20 out of the hundreds of different pollutants emitted by incinerators.’</li> </ul>	<p>Risk Assessment forms the basis of the regulatory assessment framework of NSW. While concerns regarding the veracity of the process are noted the practice of risk based assessment, particularly in respect to HHRA and EfW is widely practiced.</p> <p>The HHRA covers the inhalation of criteria pollutants and exposure from all pathways (including inhalation, ingestion and dermal) to specific air toxics. The tests carried out are extremely conservative and conducted under worst case scenario conditions where outputs from the EfW facility would in reality only occur for approximately 1 hour every year. The HHRA modelling uses this 1 hour per year risk level for 24 hours per day, 365 days a year. Therefore, the comprehensive results presented in the additional HHRA assessment report demonstrate that the EfW facility will not have any adverse impacts on human health, and that the risk for carcinogenic and non-carcinogenic impacts are within, or well within acceptable limits.</p>	<p>Amended EIS Human Health Risk Assessment , Human Health Risk Assessment (Amended Air Quality Assessment (Amended)</p>
<p>118116, 120190, 119386, 120244  Change.org</p>	<p>Children’s health</p>	<ul style="list-style-type: none"> <li>• The EIS fails to consider the impacts of dioxins and carcinogenic hydrocarbons on children’s growth.</li> </ul>	<p>Despite the presence of chemicals of potential concern (CoPC), even in a worst case scenario, it was found that the total intake for all receptors is well below the Tolerable</p>	<p>Amended EIS</p>

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		<ul style="list-style-type: none"> <li>• Children with reduced lung function or asthma will be further affected by any additional impacts on air quality. 'My daughter is asthmatic. This development has the potential to cause long term harm to her asthma.'</li> <li>• Several submissions noted that existence of several primary and secondary schools in the area, where children could be affected by inhalation of airborne particles. 'Proximity of schools to municipal waste incineration plans may be associated with an increased prevalence of wheeze, headache, stomach ache and fatigue.'</li> </ul>	<p>Monthly Intake (TMI), and that no adverse non-carcinogenic health effects should result from a lifetime of exposure to any CoPC. The carcinogenic effect of CoPCs released from the facility is considered low and acceptable for all sensitive receptors. This assessment criteria includes the maximum annualised cancer risk for children at the point of maximum impact.</p> <p>Since children are considered the most sensitive receptors due to the likelihood of being exposed to CoPC via cumulative pathways, impacts on children have been specifically addressed. With regards to carcinogenic effects, the NSW Government document 'Land Use Safety Planning' states that the risk rating is on a per year basis and that the most sensitive land-use types (including schools, and hospitals, etc) should not be exposed to an individual risk level greater than half in one million per year. This demonstrates that the carcinogenic effect of COPCs released from the facility is considered low and acceptable, even in the worst case scenario, for children and the elderly in particular.</p>	<p>Human Health Risk Assessment Report</p> <p>Human Health Risk Assessment (Amended)</p> <p>Air Quality Assessment (Amended)</p>
117802, 118116, 118560, 120231, 120168, 120153, 120233, 120236	Pollution control and monitoring concerns	<ul style="list-style-type: none"> <li>• It has been questioned whether the monitoring of pollution control is effective since sources of strong odours in nearby residential areas are largely unknown.</li> <li>• The institutional capacity to monitor pollution does not necessarily result in sufficient pollution control measures. Monitoring is considered by some to be an inadequate solution in protecting the health and safety in nearby residents.</li> </ul>	<p>The HHRA has demonstrated that the potential for impact associated with the operation of the EfW plant is low and acceptable. The plant has been designed, incorporating best available technology with respect to flue gas treatment to ensure that management of pollution and toxic compounds from emissions is within guideline limits. Assessment concludes that the proposed EfW facility will not exceed air quality criteria during construction or operation, and impacts to human health are low and acceptable.</p>	<p>Amended EIS</p> <p>Air Quality Assessment (Amended)</p> <p>Project Definition Brief</p>

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		<ul style="list-style-type: none"> <li>• There is a high level of risk associated with attempts to control emissions, and their effectiveness may only be able to be determined after operations have commenced.</li> <li>• Concerns were expressed about over exposure or non-compliance with emissions limits. For example, where industry exceeds the original levels set in the permit, industrial regulators may simply increase the emission limits of environmental licences.</li> <li>• Environmental reports are generally provided annually to regulators resulting in long periods of time when pollution can be occurring undetected by authorities.</li> <li>• There have also been periods of time where monitoring of emissions and pollution were suspended altogether. For example, two submissions referred to instances in 1989, late 1994 and early 1995, where the EPA ceased monitoring emissions from the Port Kembla waste facility to 'reduce costs'.</li> </ul>	<p>The proposed EfW facility represents best practice technology to minimise the discharge of emissions. Best practice accountable, real time emissions monitoring is proposed to be installed to constantly demonstrate that there are no harmful emissions to the environment, air, soil or water. This emissions monitoring is consistent with the NSW EPA Energy from Waste Policy Statement, and is known as a Continuous Emissions Monitoring System (CEMS). Emission concentrations will be verified by an independent testing company at frequencies agreed upon by the relevant regulator.</p> <p>The EfW Policy Statement indicates that any facility proposing to recover energy from waste will need to meet current international best practice. This policy statement also requires that emissions from EfW facilities must satisfy, as a minimum, emission limits prescribed by the Clean Air Regulations.</p> <p>A more detailed description of the CEMS is included within the Project Definition Brief prepared by Ramboll.</p>	
117802, 120168, 120153	There is no safe level of exposure to dioxins	<ul style="list-style-type: none"> <li>• Several submissions noted that there are no safe levels of human exposure to airborne dioxin emissions, even those that meet regulatory guidelines.</li> <li>• Two submissions cited examples of studies from Japan which refer to a connection between direct inhalation of dioxins and a high rate of cancer in residents living within 2km of a waste incinerator.</li> </ul>	<p>The chemicals of potential concern (CoPC) which have been considered within the amended EIS, Human Health Risk Assessment Report exhibited at and Air Quality Assessment.</p> <p>Despite the presence of CoPC, even in a worst case scenario, it was found that the total intake for all receptors is well below the Tolerable Monthly Intake (TMI) for dioxins, furans and dioxin like PCBs, and that no adverse non-carcinogenic health effects should result from a lifetime of exposure to any CoPC. The carcinogenic effect of CoPCs released from the facility is considered low and acceptable</p>	Amended EIS Human Health Risk Assessment (Amended) Air Quality Assessment (Amended)



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			<p>for all sensitive receptors. This assessment criteria includes the maximum annualised cancer risk for children at the point of maximum impact. Since children are considered the most sensitive receptors due to the likelihood of being exposed to CoPC via cumulative pathways, impacts on children have been specifically addressed. This shows that the carcinogenic effect of CoPCs released from the facility is considered low and acceptable, even in the worst case scenario.</p>	



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	<p>Suggested an alternative location</p>	<p>have something like this in such close proximity to densely populated family suburbs.'</p> <p>One submission expressed concern that residents are victims of circumstance and are disadvantaged due to living 'in the West'.</p> <p>There is no need or precedence in Australia for an industrial waste facility to be located in such close proximity to an urban population.</p>	<p>outcomes for those communities. Similar standards apply to this facility.</p> <p>The State Government has identified the subject site as appropriate for large-scale industrial uses. The proposed EfW facility is within the Eastern Creek Industrial Area and is consistent with the existing large-scale industrial character of the surrounding local context, is permissible within the industrial IN1 General Industrial zone and complies with the development standards and objectives of state and local policies. This subject site has been selected as a suitable location for a number of reasons including to its proximate location in relation to the residual waste fuel sources available in the region and from the neighbouring Genesis Xero Waste Facility site, as well as the availability of existing supporting infrastructure such as the regional motorway network.</p> <p>Looking at both the volume of waste currently landfilled in NSW and forecasts regarding volume of landfilled waste in the near future, there is a clear demand and need for energy recovery facilities in NSW to utilise waste that is currently going to landfill and diverting this waste from landfill. Based on the findings of the exhibited Phase 2 Detailed Site Investigation, the site is deemed suitable for commercial/industrial land use.</p>	

## 4. VISUAL IMPACTS AND AMENITY

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117775, 118501, 120231	The facility will be visible from residential properties	<ul style="list-style-type: none"> <li>One submission from a Minchinbury resident noted that existing warehouses and industrial facilities in the area have 'no additional screening'. These can be seen from residential areas which is a concern for residents.</li> <li>100m high emission stacks were referred to as 'unsightly' and 'eyesores'.</li> </ul>	<p>The closest residential areas are Minchinbury and Colyton to the north and Erskine Park to the west. The proposed EfW facility will be naturally screened via the existing M4 Western Motorway to the north, undeveloped open space along Ropes Creek to the east, comprising remnant and regrowth riparian vegetation up to 15m in height, existing large form industrial development to the east and significant areas of undeveloped industrial land to the south. The local context also has a relatively flat topography. In other words, the presence of existing vegetation and built form effectively screen views from adjoining residential areas to the north in Minchinbury and to the west in Erskine Park. The exhibited Visual Impact Assessment addresses the potential for visual impacts, concluding that the resulting visual impact will be negligible for most locations and generally low to moderate where views are possible from sensitive viewpoints.</p> <p>Visual impact to residential properties has been reduced through cladding of the buildings with non-reflective materials and use of subdued colours that mimic those found in the surrounding area and landscape setting.</p>	Amended EIS Visual Impact Assessment (Exhibited)
118501, 120231	The size, height and scale are inappropriate for the proposed location	<ul style="list-style-type: none"> <li>There is no other development in the adjoining residential or industrial areas that is allowed to be built to 35 storeys (100m) in height. Therefore, there is no precedent for this development in the surrounding area.</li> <li>One submission noted that the size of the facility is a concern. 'It is much too big for Sydney. Smaller stacks aren't as space intensive.'</li> </ul>	<p>While it is not possible to fully screen the proposed 50m high buildings and 100m vent stacks, canopy tree planting is proposed for the north eastern boundary of the facility in order to soften the bulk of the buildings and assist in integrating them within the landscape.</p> <p>The exhibited Visual Impact Assessment at has been prepared to define areas of highest visual impact and to assist in the mitigation of impacts of the proposed works from</p>	Amended EIS Visual Impact Assessment (Exhibited) Project Definition Brief (Amended)

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			<p>sensitive viewpoints. The proposed location utilises the topography of the site to reduce the visual impact of the proposed facility by locating the stacks at the lowest point of the site. The relatively flat topography of the broader setting also reduces opportunities for overlooking from surrounding viewpoints.</p> <p>For most locations, the lower parts of the facility will be totally obscured from view. Where views are possible, these will generally be of the upper parts of the buildings and the slender twin vent stacks protruding above the tree canopy or building line. The resulting visual impact will be negligible for most locations and generally low to moderate where views are possible from sensitive viewpoints. Most views to the industrial landscape from Colyton, Minchinbury and Erskine Park are naturally screened by existing vegetation and residential built form.</p> <p>The visual impact of the stacks against the sky has been further reduced through the selection of a light grey finish which aids visual integration in a range of atmospheric conditions. The stacks will be approximately the same visual height as the nearby electrical towers on the hill.</p>	
<p>117802, 118046, 118457, 119904, 120194, 120190, 120244, 120247, 120236, 126948</p> <p>Change.org</p>	<p>Impacts on the amenity of surrounding neighbourhoods</p>	<ul style="list-style-type: none"> <li>• The facility will be disruptive to the amenity and ‘peace’ of residential areas living ‘right next to this facility’.</li> <li>• Several submissions noted that residents are often forced to close windows and doors due to strong odours or dust emanating from the nearby waste facility and industrial area.</li> <li>• Dust, ‘layers of dirt’ and odour from industrial development means that some residents feel that they are unable to hang washing outside, which has cost implications of having to</li> </ul>	<p>Refer to ‘inadequate noise mitigation measures’ under Noise for a response to the potential for noise to impact on surrounding residential areas. Noise mitigation measures have also been addressed in the Amended EIS and Noise Impact Assessment.</p> <p>Under the NSW Environmental Protection Authority’s Energy from Waste Policy Statement, any facility proposing to recover energy from waste will need to meet current international best practice. The policy also requires that</p>	<p>Amended EIS</p> <p>Visual Impact Assessment (Exhibited)</p> <p>Local Air Quality and Greenhouse Gas Assessment (Amended)</p>

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
		<p>use a dryer as an alternative. 'I haven't been able to hang washing outside because of the smell.'</p> <ul style="list-style-type: none"> <li>• Strong odours prevent residents from enjoying outdoor entertainment and prevent children from playing outside. One Change.org submission stated, 'I should be allowed to open the windows, have a BBQ outside with friends, let the children play in the yard and enjoy my home without having an atrocious smell lingering in the air.' Another Change.org submission stated, 'I am embarrassed to have family and friends over for a BBQ' because no one wants to sit outside.</li> </ul>	<p>emissions from EfW facilities must satisfy, as a minimum, current emission limits prescribed by the POEO (Clean Air) Regulations. Details on how the proposed facility complies are provided in the amended Local Air Quality and Greenhouse Gas Assessment or the amended EIS.</p> <p>With regards to fugitive dust emissions and their mitigation, residual waste fuel would be transported on site via sealed roads. The use of sealed roads is considered an effective mitigation strategy in the reduction of fugitive dust emissions, specifically those related to wheel generated dust emissions. The tipping hall building will also operate under negative pressure whereby air within the building will be used as excess air for boilers, limiting the release of fugitive dust emissions generated within the shed to the ambient environment. On the basis of the above, the EfW facility is considered to have minimal potential for the generation of fugitive dust emissions provided good dust management practices are adhered to.</p> <p>A Dust and Air Quality Management Sub-Plan is also included within the exhibited Construction Environmental Management Plan. Some of the proposed dust mitigation measures include the installation of stabilised driveways; physical barriers to prevailing winds; sweeping of external roads; covering haul roads with gravel; enforcing speed limits on all vehicles; assessing dust generating activities during excessively windy periods; confirmation of dust levels in the event that a complaint is received; water carts and sprinklers if required; plant and equipment maintenance; and covering loads on trucks transporting materials, for example. To ensure that dust control measures are in place and implemented, Brookfield Multiplex will inspect these weekly.</p>	<p>Noise Impact Assessment (Amended)</p> <p>Amended Air Quality and EIS</p>



SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>Further details regarding dust mitigation measures are included in the exhibited Construction Environmental Management Plan.</p> <p>Non-putrescible fuel (waste) will arrive to the proposed facility in covered trucks or via an enclosed conveyor from the Genesis MPC facility. All waste storage and unloading is to take place within the tipping hall building (as opposed to open air spaces), which is kept at negative pressure with air extracted from the building to be used as excess air in the boiler (i.e. air with potential odours will ultimately be thermally oxidised). The air will then be drawn into the primary combustion zone and will ultimately undergo combustion and be released via the stack. As a result, the odorous compounds within the primary air will breakdown to simpler compounds that will pass through various scrubbers and process to further remove contaminants and odours from the air stream.</p>	

## 5. CONSULTATION PROCESSES

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
118501	The exhibition period was not long enough	<ul style="list-style-type: none"> <li>The EIS was not on display for a reasonable period of time to allow the average person to read and understand its content and provide an accurate comment. The complete document is over three thousand pages.</li> </ul>	<p>The DGRs issued for the proposed development required consultation with the relevant local, State or Commonwealth Government authorities, service providers, community groups or affected landowners during the preparation of the original (exhibited) EIS. In accordance with the DGRs, the exhibited and the amended EIS describes the consultation process and the issues raised and identified where the design of the development has been amended in response to these issues.</p> <p>Since November 2013, a comprehensive and coordinated program of communication and engagement has been rolled out to support the application process. This involved providing a range of consultation opportunities to enable feedback and input into the different stakeholders, community groups and individuals.</p> <p>The original EIS was on public exhibition from 27 May 2015 to 27 July 2015, for 63 days in total, in accordance with the Director General Requirements. This public exhibition period twice as long as the minimum requirement due to the scale and technical nature of the SSD application. This time frame was determined by the Department of Planning and Environment (DP&amp;E) and considered appropriate. This information still forms part of the amended EIS and accompanying appendices are still able to be viewed online at the Department of Planning and Environment's Major Projects website.</p>	Amended EIS  Community Communication and Consultation Report (Exhibited)
119879, 120194, 120233, 120247, 120236	Community consultation processes were inadequate	<ul style="list-style-type: none"> <li>Some responses highlighted that community consultation processes were insufficient, as there are still many potentially affected residents nearby that are unaware of the proposed EfW facility. 'Not enough has</li> </ul>	An Ongoing Community Consultation and Communications Strategy has been prepared by the proponent which provides a framework to guide information provision and communications, engage with key stakeholders, residents and neighbours through ongoing phases of the development; support a clear and	Amended EIS  Community Communication and Consultation Report (Exhibited)

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
		<p>been done to bring this matter to the attention of the public who will be directly affected by this facility.'</p> <ul style="list-style-type: none"> <li>Some residents suggested community meetings at local neighbourhood centres and shopping centres as an alternative to DVDs sent via post. The community meetings that were set up didn't attract people. One submission noted that the proponent simply 'did the bare minimum' with regard to community consultations. 'The majority of residents are completely unaware.'</li> </ul>	<p>consistent approach which meets required standards of quality and offers avenues for feedback and dialogue; manage potential risks proactively and positively; outline complaints management procedures and protocols; comply with project requirements; and provide appropriate authorities and auditors with verification that required community and stakeholder consultation and communications will be addressed. This strategy responds to NSW EPA requirements for ongoing, genuine dialogue and consultation with key stakeholders in accordance with the 'good neighbour' principle outlined in the NSW EPA Energy from Waste Policy Statement.</p> <p>Since November 2013, a comprehensive and coordinated program of communication and engagement has been rolled out to support the application process. This involved providing a range of consultation opportunities to enable feedback and input into the different stakeholders, community groups and individuals.</p> <p>The consultation methods adopted have been designed to inform and build awareness of the proposed facility, as well as identify key issues and opportunities, and establish a framework for ongoing dialogue. Examples of consultation methods that have been adopted to date, include key stakeholder correspondence via post and/or email, letter box drops to a total of 4,000 residences, personal briefings to key stakeholders, a door knock to a number of businesses in Eastern Creek, and a community information day and site tour. The exhibited Community Communication and Consultation Report documents the consultation process to date.</p> <p>For those residents that were unable to attend the information day, a dedicated project website (<a href="http://www.tngnsw.com.au">www.tngnsw.com.au</a>) has been created to offer general information on the proposal, together with a project flyer and video. Frequently asked</p>	<p>Ongoing Community Consultation and Communications Strategy</p>

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>questions have been uploaded to provide responses to general questions.</p> <p>A dedicated, toll-free 1800 community information line (1800 252 040) and email address (<a href="mailto:info@tngnsw.com.au">info@tngnsw.com.au</a>) have also been established from the inception of the consultation to provide an immediately an available and central point of contact for stakeholder and community enquiries. These contact points can provide assistance with interpretation of technical reports.</p>	
119900, 120194, 120233, 120236	Lack of understanding by the general public	<ul style="list-style-type: none"> <li>Some reports are very lengthy and contain a lot of technical jargon which makes it difficult for local residents and 'normal people to understand' the implications or consequences of the proposed EfW facility. 'Unless you have a legal degree it is near impossible to understand the detailed information on the project.'</li> <li>Several submissions suggested that detailed information be provided in plain English to allow the general public to understand and make informed decisions.</li> </ul>	<p>Unfortunately, the technical nature of the reports is unable to be avoided. These reports have been prepared in accordance with the DGRs and were undertaken to inform the design of the proposed facility and the associated works in the context of future land uses, urban structure and built form, and to assess potential social and environmental impacts.</p> <p>However, the amended Environmental Impact Statement can be read as a standalone document by the general public which includes a detailed assessment of the potential environmental and social impacts of the EfW facility, and identifies the management, mitigation and offset measures that will be implemented as part of the proposed development.</p> <p>A summary of comments and issues from pre-lodgement phase of community consultation is included in the amended Environmental Impact Statement (EIS). This table may provide a less lengthy and technical summary of the key issues for residents in the surrounding area, and the proponents response to each. The topics identified in this table include general; operational questions; visual; traffic; air, dust, emissions; odour; and noise.</p> <p>A dedicated project website (<a href="http://www.tngnsw.com.au">www.tngnsw.com.au</a>) has been created to offer general information on the proposal, together with</p>	<p>Amended EIS</p> <p><a href="http://www.tngnsw.com.au">www.tngnsw.com.au</a></p> <p>Community Communication and Consultation Report (Exhibited)</p>

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>a project flyer and video. Frequently asked questions have been uploaded to provide responses to general questions.</p> <p>A dedicated, toll-free 1800 community information line (1800 252 040) and email address (<a href="mailto:info@tngnsw.com.au">info@tngnsw.com.au</a>) have also been established from the inception of the consultation to provide an immediately an available and central point of contact for stakeholder and community enquiries. These contact points can provide assistance with interpretation of technical reports.</p>	
120168, 120153, 120227	Transparency and risk of non-compliance	<ul style="list-style-type: none"> <li>The proponent of the EfW facility has been criticised for having a poor record of environmental breaches in the past, and being investigated for serious pollution offences. The integrity of the proponent and its owner are questionable, particularly with regard to self-regulated monitoring.</li> <li>One submission also noted that the EPA has a poor history of 'not following regulations'.</li> </ul>	<p>The manufacturer of this particular type of plant has never had a forced shut down caused by a breach of its operating standards. Several dozen of these generation plants are in operation across Europe and the United Kingdom, and have been for a number of years. A number of these plants also operate close to residential communities, where close and constant monitoring is required in order to demonstrate safe outcomes for those communities. Similar standards apply to this facility.</p> <p>The operator of the EfW facility has not yet been determined. A tender process will occur for both the construction and operation of the facility.</p> <p>The EfW Policy Statement indicates that any facility proposing to recover energy from waste will need to meet current international best practice. This Policy Statement also requires that emissions from EfW facilities must satisfy, as a minimum, emission limits prescribed by the Clean Air Regulations.</p>	Amended EIS
117802, 120244 Change.org	Community concerns have not been heard	<ul style="list-style-type: none"> <li>One submission noted that numerous complaints have been made to the EPA and local waste facility operators with regard to the strong odours from existing waste facilities. The source of odours has not been identified, and 'the problem has continued'.</li> </ul>	<p>Whilst it is acknowledged that there are community concerns regarding impacts from local waste facility operators, the scope of the proponent's response can only address those submissions received regarding the proposed EfW facility.</p>	Amended EIS Ongoing Community Consultation and Communications Strategy

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
		<ul style="list-style-type: none"> <li>Residents feel that their concerns have not been heard and that the EPA has 'proven itself to be an ineffectual enforcement agency'. Industrial facilities continue to be constructed without proper consideration of the impacts on local residents. There is a feeling of distrust among residents since the impacts from existing industrial facilities have not been adequately addressed.</li> </ul>	<p>Following a review of the original EIS by the Department of Planning and Environment in June 2014, the EIS was amended to provide more details and be read as a standalone document. The detail of the application has increased considerably as a result of feedback provided from relevant government agencies and independent consultants. The original EIS has been scrutinised in detail and community concerns are being addressed as part of the proposed development.</p> <p>A summary of the anticipated risks for each of the environmental issues is provided with a summary of proposed control measures. The inclusion of an Environmental Risk Analysis was based on consideration of the DGRs for the project, the planning and environmental context of the site, outcomes of the community and stakeholder engagement process, and technical studies completed as part of the amended application and amended EIS.</p> <p>An ongoing Community Consultation and Communications Strategy has been prepared by the proponent which provides a framework to guide information provision and communications, engage with key stakeholders, residents and neighbours through ongoing phases of the development; support a clear and consistent approach which meets required standards of quality and offers avenues for feedback and dialogue; manage potential risks proactively and positively; outline complaints management procedures and protocols; comply with project requirements; and provide appropriate authorities and auditors with verification that required community and stakeholder consultation and communications will be addressed. This strategy responds to NSW EPA requirements for ongoing, genuine dialogue and consultation with key stakeholders in accordance with the 'good neighbour' principle outlined in the NSW EPA Energy from Waste Policy Statement.</p>	

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
118501, 120168, 120153	The terminology is misleading	<ul style="list-style-type: none"> <li>The industrial waste facility is deceptive and misleading in being referred to as an EfW facility. This is being 'dressed up as green power production'.</li> <li>Two submissions asserted that the technology used at waste facilities has not changed. 'What has changed is the branding of these technologies' because proponents are aware that the public has a negative perception of this technology.</li> </ul>	<p>A detailed and comprehensive explanation of the proposed energy from waste process is contained within the Environmental Impact Statement. This detailed explanation does not intend to deceive or mislead.</p> <p>The proposed facility has been designed using established Best Available Technology (BAT). Energy from Waste (EfW) is the generic term given to a process by which the energy stored in waste (chemical energy) is extracted in the form of electricity, heat and/or fuel for use in a decentralised energy generation plant. This technology currently operates reliably in the United Kingdom and Europe and has a successful track record in treating the same Residual Waste Fuel streams that will be generated by the proposed facility.</p> <p>An ongoing Community Consultation and Communications Strategy has been prepared by the proponent which provides a framework to guide information provision and communications, engage with key stakeholders, residents and neighbours through ongoing phases of the development; support a clear and consistent approach which meets required standards of quality and offers avenues for feedback and dialogue; manage potential risks proactively and positively; outline complaints management procedures and protocols; comply with project requirements; and provide appropriate authorities and auditors with verification that required community and stakeholder consultation and communications will be addressed. This strategy responds to NSW EPA requirements for ongoing, genuine dialogue and consultation with key stakeholders in accordance with the 'good neighbour' principle outlined in the NSW EPA Energy from Waste Policy Statement.</p> <p>A dedicated project website (<a href="http://www.tngnsw.com.au">www.tngnsw.com.au</a>) has been created to offer general information on the proposal, together with</p>	<p>Amended EIS</p> <p>Ongoing Community Consultation and Communications Strategy, <a href="http://www.tngnsw.com.au">www.tngnsw.com.au</a></p>



SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			a project flyer and video. Frequently asked questions have been uploaded to provide responses to general questions.	

## 6. GENERAL ENVIRONMENTAL IMPACTS

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
118560, 119879	<p data-bbox="293 384 510 448">Impacts on flora and fauna</p> <p data-bbox="293 986 510 1161">The approach to ecologically sustainable development (ESD) is irrational</p>	<ul data-bbox="524 384 1234 991" style="list-style-type: none"> <li>• In addition to health impacts to humans, there are potential health risks to animals.</li> <li>• There is a lack of concern for the protection of diminishing flora and fauna, as well as fauna inhabited trees.</li> <li>• Proposed replantings are insufficient to replace tree loss. Replantings are disproportionate to the amount of trees that will be removed during the construction process.</li> <li>• The attitude is that trees are considered as decoration that can be removed and replaced. ‘How does a juvenile tree equate to the 100 years or more of ecological function of a mature tree?’</li> <li>• The subject site is part of an earlier Precinct Plan for the SEPP 55 Employment Lands, where zoning for the Precinct Plan allowed for losses of flora and fauna habitat in some areas and preservation in others. The EfW facility allows flora and fauna losses, when there were offsets proposed for earlier losses.</li> </ul>	<p data-bbox="1234 384 1926 783">The Environmental Planning and Assessment Regulation 2000 requires that an EIS include the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development. As listed in the Regulations, the principles of ESD are addressed within the Environmental Impact Statement, which include the precautionary principle; inter-generational equity; conservation of biological diversity and ecological integrity; and improved valuation, pricing and incentive mechanisms.</p> <p data-bbox="1234 810 1926 1474">With regard to the conservation of biological diversity and ecological integrity, the Environmental Impact Statement notes that the site is currently largely cleared of vegetation. However, the proposed development has been designed to protect habitats and biological diversity where possible. For example, approximately 0.54 hectares of Cumberland Plain Woodland will be regenerated or replanted for the 0.27 hectares that will be removed, and approximately 4.98 hectares of River Flat Eucalypt Forest will be regenerated or replanted for the 2.89 hectares that will be removed. While it is acknowledged that the proposal will disturb native fauna as some existing habitat will be removed, highly mobile fauna will easily disperse to other areas of suitable habitat, such as the retained 9 hectares of Cumberland Plain Woodland. The loss of eight hollow-bearing trees will be offset through the installation of fauna roosting/nesting boxes within the retained River Flat Eucalypt Forest along the Ropes Creek Tributary. For each of the hollow-bearing trees removed, two fauna nesting or roosting</p>	<p data-bbox="1926 384 2163 954">Amended EIS Flora and Fauna Report (Exhibited) Construction Environmental Management Plan (Exhibited) Secretary’s Environmental Assessment Requirements (Exhibited) Flora and Fauna Response</p>



SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>boxes will be installed. While the total number of fauna boxes recommended to be installed is 20, an additional 20% has been included. Mitigation measures are further detailed within the exhibited Flora and Fauna Report.</p> <p>An additional Flora and Fauna Response to submissions has been prepared and provides further details on avoidance and mitigation measures with regards to flora and fauna impacts.</p> <p>Measures to avoid impacts on biodiversity have been developed which include locating the proposed facility and associated infrastructure as far away as possible from endangered ecological communities or threatened species habitats, siting the proposed facility within cleared grazing lands, and allowing a suitable setback from the Ropes Creek tributary. Mitigation Measures to reduce or minimise impacts on biodiversity are included within the exhibited Construction Environmental Management Plan.</p> <p>The amended EIS has been prepared to address the issues outlined in Schedule 2, Part 3, Clause 6 and 7 of the Environmental Planning and Assessment Regulations 2000 and the Secretary’s Environmental Assessment Requirements (SEARs) issued for the proposed development. Health risks to animals were not listed as a requirement in the DGRs. However, health impacts are addressed in Health and safety above.</p>	
118657, 120190, 120244, 120231  Change.org	General concerns about environmental impacts	<ul style="list-style-type: none"> <li>Several submissions expressed concerns about general environmental impacts as a result of the EfW facility. Although limited detail was provided, environmental impacts were listed as a concern.</li> </ul>	In accordance with the DGRs, the original EIS was required to include an assessment of the potential impacts to threatened species, populations and communities, and their habitat(s), and if required describe how the principles of “avoid, mitigate, offset” have been used to minimise the impacts of the proposal on biodiversity. The exhibited Flora and Fauna Report. Further	Amended EIS  Flora and Fauna Report (Exhibited)

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>details are contained within the amended Environmental Impact Statement. Environmental impacts assessed as part of the DGRs include waste management; soil and water; hazards and risks; and flora and fauna.</p>	
<p>117802, 119879, 120168, 120153, 120244 Change.org</p>	<p>Soil and land impacts</p>	<ul style="list-style-type: none"> <li>• One submission attached an article titled ‘Burning waste for energy, it doesn’t stack up: Exposing the push towards unsustainable waste to energy technology in Australia’ (Bell, L &amp; Bremmer, J 2012). This article stated the majority of waste processed at EfW facilities consist of plastics and other materials that form highly toxic compounds. These compounds are either released into the atmosphere as emissions or into the soil through ash dumping, contaminating the environment (p. 2).</li> <li>• One submission listed impacts to the water table as a concern.</li> <li>• There is a lack of qualified and objective research into what the impact on Western Sydney will be ‘from what has been previously pastoral or agricultural land being turned into an industrial area.’</li> <li>• Two submissions referred to a study investigating an area in Japan which found ‘high levels of dioxin contamination in soil’ near a waste incinerator.</li> <li>• One resident which signed the Change.org online petition suggested that waste can be converted into fuel by the Fischer-Tropsch process, which involves catalytic cracking and fractional distillation. This process eliminates landfill altogether whilst manufacturing fuel.</li> </ul>	<p>The amended Environmental Impact Statement contains an environmental assessment of waste management for the proposed development, in accordance with the DGRs.</p> <p>The amended EIS is required to demonstrate that any waste material produced from the EfW facility for land application is fit-for-purpose and poses minimal risk of harm to the environment; describe how waste would be treated, stored, used, disposed and handled on site, and transported to and from the site, and the potential impacts associated with these issues, including current and future offsite waste disposal methods. While there will be some plastics in the residual waste, these will be eliminated and transformed into energy at the combustion stage. Plastics will not be released through the vent stacks. Further discussion regarding the disposal of ash residue is addressed below.</p> <p>The exhibited Soil and Water Report notes that the proposed development involves the construction of large areas of impervious surfaces, and provision of a formal stormwater drainage system for the site. Therefore, potential for the proposed development and land use to cause or exacerbate salinity impacts is very limited. The site is also in a low risk area with respect to groundwater impacts, and there are no constraints on development or mitigation requirements other than standard pollution prevention measures.</p> <p>The exhibited Phase 2 Detailed Site Investigation notes that the site has been in use as grazing land with a quarry and asphalt</p>	<p>Amended EIS Soil and Water Report (Exhibited) Phase 2 Detailed Site Investigation (Exhibited)</p>

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>manufacturing plant adjacent to the site for greater than 40 years. Therefore, the proposed site is considered unsuitable as an area of productive agricultural or pastoral land. The location of the proposed EfW facility is within the Eastern Creek Industrial Area and is consistent with the existing large-scale industrial character of the surrounding local context, is permissible within the IN1 General Industrial zone and complies with the development standards and objectives of state and local policies. The State Government has also identified the subject site as appropriate for large-scale industrial uses.</p>	
117802	Disposing of incinerator residues and waste	<ul style="list-style-type: none"> <li>The 'Burning waste for energy' article referred to disposing of incinerator residues, such as ash and char, as being problematic due to the large volumes and toxicity of the material (p. 3).</li> </ul>	<p>The Amended Environmental Impact Statement contains details of the wastes arising from the EfW process and provides an indication of how these materials will be managed to ensure environmental health is maintained through the proper disposal that will be informed through testing of waste material prior to disposal.</p> <p>The exhibited Waste Management Report addresses the Director General's environmental assessment requirements with regard to waste manage. Operational controls and procedures are also described in the amended EIS which demonstrate that the potential impacts of residual wastes from the EfW process will be adequately managed.</p> <p>The proposed facility will generate three types of solid by-products which includes bottom ash; flue gas treatment residents (also known as air pollution control (APC) residue which is a 'Restricted Solid Waste'); and boiler ash. Bottom ash will be contained within an enclosed ash storage bunker before being transported off-site. Air pollution control (APC) residue ash will be collected into sealed storage silos and transported via sealed tankers off-site for further treatment or disposal at</p>	Amended EIS Air Quality and Greenhouse Gas Assessment (amended)

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>landfill. In the event the APC residue exceeds the criteria for Restricted Solid Waste, the residue will be taken off site to a Hazardous Waste Treatment facility, in line with relevant hazardous waste legislation. Boiler ash will be conservatively dispose of with the APC residues, unless it can be proven to be reusable following rigorous testing procedures in compliance with EPA regulations.</p> <p>Facilities authorised to receive and treat ash residue and are available in NSW, and the material will only be taken to such a facility. As such, the potential issues associated with transportation, treatment and management of and management of the residual ash at the receiving facility, are addressed and regulated. The Waste Management Report lists three different residue ash disposal options. Although the applicant accepts that transportation to a licensed waste treatment facility to treat the residue is the most likely disposal option.</p> <p>The EfW Policy Statement indicates that any facility proposing to recover energy from waste will need to meet current international best practice. This Policy Statement also requires that emissions from EfW facilities must satisfy, as a minimum, emission limits prescribed by the Clean Air Regulations. The proposed technology for the facility is based on existing facilities in Europe and will incorporate best available technology (BAT) for flue gas treatment. A summary of the technologies used to control emissions from waste incineration at existing EfW facilities is provided within the exhibited Local Air Quality and Greenhouse Gas Assessment.</p>	
117802	Contribution to climate change	<ul style="list-style-type: none"> <li>The 'Burning waste for energy' article attached states that waste to energy incinerators are not 'climate friendly' and that waste burning is not renewable energy. Waste is a significant</li> </ul>	The estimated greenhouse gas emissions from the waste incineration process are contained within the amended EIS and	Amended EIS Local Air Quality and Greenhouse Gas

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
		<p>contributor to greenhouse gas emissions releases and climate change, mainly due to methane gas emissions from landfill which total around 15 million tonnes of carbon pollution in Australia each year (p. 35).</p>	<p>the amended Local Air Quality and Greenhouse Gas Assessment.</p> <p>With regard to direct greenhouse gas emissions occurring from sources owned or controlled by the proponent ('Scope 1' emissions), The Local Air Quality and Greenhouse Gas Assessment notes that the emission intensity for electricity generated from waste incineration is lower than that derived from the NSW electricity grid. Therefore, a net reduction in greenhouse gas emission is achieved when electricity from the proposed facility is exported to the NSW grid. The operation of the facility would have a net positive greenhouse gas emissions. Similarly, by removing biomass waste from landfill, significant emissions of methane from the decomposition of that waste are also eliminated.</p> <p>The amended Air Quality report acknowledges that some landfills combust the methane via a flare or gas engine. However, this is not currently the case at the Genesis facility and would not form part of the future operations for the site (and has therefore not been considered). This report concludes that there is a net greenhouse gas emission reduction on an annual basis compared with the status quo.</p>	<p>Assessment (amended)</p>

## 7. ECONOMIC AND SOCIAL IMPACTS

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
117775, 117802, 118116, 118457, 118560, 120190  Change.org	Impact on property values and place of residence	<ul style="list-style-type: none"> <li>Residents expect the EfW facility to have a 'devastating' impact on their property values, with property values likely to decrease in adjoining residential areas. Residents are concerned about what kind of impacts this will have.</li> <li>Some residents have considered selling their house and moving due to odour and air quality impacts from the cumulative impacts of nearby industrial developments.</li> <li>A reduction in property values will cause an enormous financial loss for home owners in the area.</li> </ul>	<p>The land surrounding the broader site, i.e. the area of land containing both the Genesis Xero Waste Facility and the proposed development site for the EfW facility, have been identified for higher end industrial and employment uses to occur over the next decade by the State Environmental Planning Policy (Western Sydney Employment Area) 2009 (SEPP WSEA). As such, the State Government has identified the site as appropriate for large-scale industrial uses. The proposed EfW facility is consistent with the existing large-scale industrial character of the surrounding local context, which currently comprises large-scale logistics and industrial warehouse uses.</p> <p>The closest residential areas are Minchinbury and Colyton to the north and north west, and Erskine Park to the west. The proposed EfW facility will be naturally screened via the existing M4 Western Motorway to the north, undeveloped open space along Ropes Creek to the east, comprising remnant and regrowth riparian vegetation up to 15m in height, existing large form industrial development to the east and significant areas of undeveloped industrial land to the south. The local context also has a relatively flat topography. In other words, the presence of existing vegetation and built form effectively screen views from adjoining residential areas to the north in Minchinbury and to the west in Erskine Park. The exhibited Visual Impact Assessment addresses the potential for visual impacts, concluding that the resulting visual impact will be negligible for most locations and generally low to moderate where views are possible from sensitive viewpoints.</p> <p>Any impact on residential property values as a result of the existing industrial uses is likely to have already taken effect. The impact on</p>	Amended EIS  Visual Impact Assessment (Exhibited)

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>residential property values as a result of existing odour and air quality impacts is not within the scope of this report. However, once construction of the EfW facility is complete and the facility is wholly operational, the direct impact of the EfW facility on property values in isolation is expected to be imperceptible. The cumulative impact of the EfW facility on residential property values, in conjunction with existing large-scale industrial development in the area, is similarly expected to be negligible.</p> <p>Advice sought from Urbis stipulated that financial losses for home owners in nearby residential areas are not expected to occur as a consequence of the proposed EfW facility. Notwithstanding this, property values are not a matter for consideration under section 79C of the Act.</p>	
117802, 119879, 119386	Criticism of job creation and generation of employment as a justification	<ul style="list-style-type: none"> <li>• There are alternative methods of diverting waste from landfill which employ more people and have less adverse public and environmental impacts.</li> <li>• Job provision and employment generation is an inadequate justification to support the construction of the EfW facility. There are other ways to generate higher employment which are less risky.</li> <li>• The EIS noted that the facility has the potential to generate 55 full-time employment positions. However, the EfW facility has the potential to adversely affect significantly more people than 55 in the surrounding residential areas.</li> </ul>	<p>The subject site is located within the Western Sydney Employment Area (WSEA) at Eastern Creek. The proposed facility aims to create an employment generating land use, consistent with the objectives and intentions of the Eastern Creek Precinct within the broader Western Sydney Employment Lands.</p> <p>While it is acknowledged that employment generation density for the facility is below preferred targets, the facility will generate significant employment benefits compared with the current use of the site. The facility will create 55 new jobs during the facility's operation, substantial indirect employment, and over 500 direct jobs throughout the construction phase. This is consistent with the objectives and intentions of the Eastern Creek Precinct within the broader Western Sydney Employment Lands.</p> <p>The Amended Environmental Impact Statement outlines a number of justifications for and benefits of the proposed development. While it is acknowledged that job provision and employment generation on its own may not be sufficient justification to support the proposed</p>	Amended EIS

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>facility, employment generation is not the only justification or net benefit that will result. The proposed facility represents a positive development outcome for the site and surrounding area and is an appropriate and suitable land use for the site which will result in a number of net benefits.</p> <p>The Amended Environmental Impact Statement has also identified a number of potential impacts that may occur as a result of the facility. In consultation with government agencies, a comprehensive review and consideration of the issues raised during the preparation of the amended EIS has identified mitigation measures required. In accordance with the Environmental Planning and Assessment Regulation 2000, the collective measures required to mitigate the impacts associated with the proposed works are detailed within the amended EIS and appended consultant reports.</p>	
120244	EfW facilities are inefficient	<ul style="list-style-type: none"> <li>The amount of waste that passes through the EfW facility, and the high cost of building and running a facility like this, is disproportionate to the amount of electricity that is actually generated. The efficiency of EfW facilities has been questioned.</li> <li>The 'Burning waste for energy' article attached to one submission states that "current waste burning technology is an expensive, carbon intensive, unreliable, polluting and unsustainable" (p. 3).</li> <li>Incinerators have also been demonstrated to be extremely expensive to build and operate, often leaving communities with a legacy of debt and pollution while locking out alternate, superior methods (p. 3).</li> </ul>	<p>The proposed facility as a multi-fuel station (energy from waste facility) with a capacity to generate up to 158 Mega Watts of electrical energy (MWe). Of this, 137.3 MWe (about 90% of the gross electricity production) will be available for export from the facility to the National Grid. The remainder is required for internal plant power usage. The proposed facility will have a net electrical efficiency of circa 30% (with a thermal input of 469.6 MW and a net thermal export to the grid of 140 MWe). High efficiency is also assured by recovering the energy released by the combustion process.</p>	Amended EIS
117802, 120231, 120227	The EfW facility is unsustainable over a long period of time	<ul style="list-style-type: none"> <li>Two submissions stated that the high volume of waste required to sustain the facility over its 20 year life span is extremely resource intensive, and suggested other</li> </ul>	<p>While renewable energy projects and carbon markets are positive steps towards creating a cleaner energy market, the economic reality of the matter is that landfill void space and landfill levies make EfW viable in Sydney and other areas of Australia. In terms of cost comparison and efficiency of energy production between energy from waste facilities and other renewable energy systems,</p>	

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
		<p>small to medium sized facilities that have better resource recovery outcomes.</p>	<p>energy from waste is the more cost effective source based on 1 MWh of energy produced. Further details of the facility's efficiency are contained within the amended EIS.</p> <p>The EfW facility will contribute by diverting waste from landfill and preserving the remaining valuable landfill capacity in Sydney.</p> <p>The facility is to be delivered in 2 phases, with the first requiring only 552,500 tpa of waste. As the facility is linked to an established waste management operation with an existing residual waste (i.e. left over) stream much of the waste required for phase 1 is already available.</p> <p>The EfW facility has been developed in accordance with the best available technologies (BAT) that complies with international best practice. It is consistent with most recent standards of the Industrial Emissions Directive (IED) 2010/75/EU. The BAT for Waste to Energy is described in, the Best Available Techniques Reference (BREF), 'Reference Document on the Best Available Techniques for Waste Incineration'. The plant is entirely consistent with the BAT (refer to BAT Assessment document).</p>	
<p>117775, 117802, 118457, 118501</p>	<p>Is there a need for an EfW facility?</p>	<ul style="list-style-type: none"> <li>It is noted that future high energy consumption developments could be built adjacent to the EfW facility in the future, such as a cold storage facility. One submission noted that 'this is a case of the EfW facility generating a need rather than showing that there is any actual and immediate need for the facility.'</li> <li>It is questioned whether there is any actual need for an EfW facility, or whether the purpose of its construction is to enable future high energy consumption developments to be built adjacent to the EfW facility.</li> </ul>	<p>The Amended EIS has included an analysis of feasible alternatives in relation to the development of the site and design. The diversion of waste from landfill, reducing the potential for methane emissions, while also providing a form of low carbon, renewable energy, is now recognised by Government as making an important contribution to targets for dealing with waste.</p> <p>The 'Do Nothing' scenario is therefore considered to be inappropriate given the established need for new energy generation, including a need for low carbon generation. The alternative to the proposed SSDA proceeding would be continued operation of traditional landfill waste management operations which have been</p>	<p>Amended EIS</p>

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>found to be inefficient as a long term sustainable solution to Sydney's expanding population and waste generation.</p> <p>This subject site has been selected as a suitable location for a number of reasons including to its proximate location in relation to the residual waste fuel sources available in the region and from the neighbouring Genesis Xero Waste Facility site, as well as the availability of existing supporting infrastructure.</p> <p>Looking at both the volume of waste currently landfilled in NSW and forecasts regarding volume of landfilled waste in the near future, there is a clear demand and need for energy recovery facilities in NSW to utilise waste that is currently going to landfill.</p>	
120244, 126948	Community welfare and human rights are important	<ul style="list-style-type: none"> <li>• One submission acknowledged the need for and importance of EfW facilities. Although it was noted that the welfare of the community is far more important in comparison to the importance of an EfW facility.</li> <li>• Living in a reasonably clean environment is a human right.</li> </ul>	<p>It is acknowledged that the welfare of the community is an important matter to consider. However, as mentioned previously, the State Government has identified the subject site as appropriate for large-scale industrial uses. The proposed EfW facility is consistent with the existing large-scale industrial character of the surrounding local context, is permissible within the IN1 General Industrial zone and complies with the development standards and objectives of state and local policies.</p> <p>In order to address any impacts on the community, the amended EIS has identified a number of potential impacts that may occur as a result of the facility and has sought to clearly align any identified impacts with necessary mitigation measures. In consultation with government agencies, a comprehensive review and consideration of the issues raised during the preparation of the original EIS has identified mitigation measures required. In accordance with the Environmental Planning and Assessment Regulation 2000, the collective measures required to mitigate the impacts associated with the proposed works are detailed within the amended EIS and appended consultant reports.</p>	Amended EIS Ongoing Community Consultation and Communications Strategy



SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>An Ongoing Community Consultation and Communications Strategy has been prepared by the proponent which provides a framework to guide information provision and communications, engage with key stakeholders, residents and neighbours through ongoing phases of the development; support a clear and consistent approach which meets required standards of quality and offers avenues for feedback and dialogue; manage potential risks proactively and positively; outline complaints management procedures and protocols; comply with project requirements; and provide appropriate authorities and auditors with verification that required community and stakeholder consultation and communications will be addressed. This strategy responds to NSW EPA requirements for ongoing, genuine dialogue and consultation with key stakeholders in accordance with the 'good neighbour' principle outlined in the NSW EPA Energy from Waste Policy Statement.</p>	

## 8. TRAFFIC IMPACTS

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
117802, 119904, 120194, 119386, 120244, 120247  Change.org	Increased traffic volume  Cumulative impact of increased traffic volume	<ul style="list-style-type: none"> <li>• There is likely to be a marked increase in the volume of traffic on and off site, particularly due to the increase in trucks transporting waste to and from the facility and the non-stop hours of operation. The effects of this are likely to affect nearby residents.</li> <li>• Residents also expressed concerns for the increase in trucks congesting other main roads regularly used by residents, including Wallgrove Road, the Light Horse interchange and the M7 and M4 motorways. This has resulted in traffic snarls which are affecting local residents.</li> <li>• The expected increase in traffic volume as a result of EfW facility, in conjunction with impacts of traffic to and from Badgerys Creek Airport upon its completion, has not been considered in the EIS.</li> </ul>	<p>It is acknowledged that there will be an increase in the volume of traffic as a result of the EfW facility. A Traffic Impact Assessment has investigated existing traffic conditions, expected traffic generation and combined traffic generation in Eastern Creek. The report also assessed the performance of major intersections used by inbound and outbound vehicles in order to understand the traffic impacts of the development. The report found that the traffic impacts of the development can be readily accommodated by the surrounding road network.</p> <p>Since the exhibition period, an amended traffic report has been prepared which responds to public and agency submissions. This response has also considered vehicle movements associated with the traffic volumes associated with the off-site disposal of ash residue produced at the facility, which were not previously addressed in the exhibited Traffic Report. The additional Traffic Response found that the additional traffic associated with ash residue will have minimal impact on the surrounding road network. The response concludes that the road network will operate satisfactorily post development, even with these increased truck movements.</p> <p>A general maximum of up to 56 trucks per day is anticipated during construction and an average of approximately 37 trucks per day across the total construction period of 3 years. The total number of truck movements per day is also expected to significantly decrease once the construction of the proposed facility is completed and the facility is operational.</p> <p>With regard to the expected increase in traffic volume as a result of Badgerys Creek Airport, the airport's proponent will similarly need to commission their own Traffic Impact Assessment Report. This will investigate existing traffic conditions (which will likely include the traffic</p>	Amended EIS and Traffic report.

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			<p>generated as a result of the EfW facility), expected traffic generation and combined traffic generation. At the time of lodgement, it is noted that the EIS for Western Sydney Airport was not publicly available. Therefore, the potential traffic impacts of Badgerys Creek Airport are not able to be taken into consideration.</p>	
<p>120194, 126948 Change.org</p>	<p>The road network is heavily congested</p>	<ul style="list-style-type: none"> <li>• The surrounding road networks are already heavily congested due to an increase in the number of business premises and industrial facilities that occupy the former Wonderland site in Eastern Creek, as well as Minchinbury and Erskine Park industrial areas.</li> <li>• An increase in 142.26 trucks per day, which equates to an additional 5.93 trucks per hour, is concerning for residents who dispute the idea that existing roads and infrastructure are capable of accommodating this increase.</li> <li>• It is questioned whether the existing road network has the ability to cope with such an increase in traffic volume. Roads are already heavily congested, and residents consider the existing infrastructure unable to handle any increase in traffic volume.</li> </ul>	<p>The traffic report has been amended following exhibition of the original EIS. The traffic report concludes the following:</p> <ul style="list-style-type: none"> <li>• The project, when operational, based on a worst case scenario will generate a total 504 truck movements and 110 car movements per day equating to 65 vehicles movements per hours (two ways).</li> <li>• There will be no impact of the level of service at key intersections as a result of the project. Accordingly it is considered that there is adequate capacity within the existing road network to adsorb the additional traffic.</li> </ul>	<p>Refer to the amended EIS and Amended Traffic Impact Assessment.</p>

## 9. NOISE IMPACTS

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
117775, 120244	Inadequate noise mitigation measures	<ul style="list-style-type: none"> <li>The noise mitigation measures proposed are inadequate, particularly in relation to existing and future industrial development in the surrounding area.</li> <li>The EIS states that noise mitigation measures will be implemented where reasonable and feasible. What criteria and whose interpretation is used to determine what is reasonable and feasible? This is criticised as being quite subjective, where interpretation of what is 'reasonable and feasible' may vary between different people.</li> </ul>	<p>It is acknowledged that there will be some construction and operational noise as a result of the EfW facility. An updated Noise Impact Assessment was commissioned by the proponent to assess the all potential sources of noise such as construction, operational, on and off site traffic noise, as well as qualitative noise and cumulative noise impacts. Details of noise mitigation, management and monitoring measures are also contained within this report.</p>	Amended EIS Noise Impact Assessment (updated)
120194, 120190, 120244, 120247	Noise and vibrations from construction and operation	<ul style="list-style-type: none"> <li>Residents have had to tolerate sirens and explosions from nearby quarry for a long period of time. There are concerns that construction noise and vibrations will affect local residents as a result of the facility.</li> <li>Turbine vibrations and blasts from quarry operations and the construction of nearby industrial facilities have damaged structures of residential houses and caused cracks to appear.</li> </ul>	<p>The updated Noise Impact Assessment that impacts from vibration can be considered both in terms of effects on building occupants (human comfort) and the effects on the building structure (building damage). Of these considerations, the human comfort limits are the most stringent. Therefore, for occupied buildings, if compliance with human comfort limits is achieved, it will follow that compliance will be achieved with the building damage objectives.</p> <p>The construction vibration assessment contained within the exhibited Noise Impact Assessment has indicated that the most significant vibration generating activities will comply with the most stringent criteria at the closest receiver locations in Minchinbury and Erskine Park. Vibration levels from construction will be well below building damage criteria. However, a Construction Noise Management Plan is to be developed and implemented once further details and schedules are confirmed. This plan will include measures to identify appropriate monitoring locations, schedules, frequencies and methodologies, and is to be completed prior to commencement of construction.</p>	Amended EIS Noise Impact Assessment (updated)

SUBMISSION ID	MAIN ISSUES	PUBLIC SUBMISSION COMMENTS	PROPONENT RESPONSE	REFERENCE
			No explosions or blasts are associated with the construction of the proposed EfW facility.	
117802, 120194, 120247, 126948	<p>Traffic noise</p> <p>Cumulative impact of traffic noise</p>	<ul style="list-style-type: none"> <li>The proposed hours of operation (24 hour operation) will likely result in a marked increase traffic, and subsequently noise, due to the volume of waste being transported to and from the facility and the non-stop hours of operation. Noise from trucks reverse beepers and sirens were cited as some of the main sources of traffic noise.</li> <li>Long-term residents expressed concerns about noise pollution from nearby motorways with proposed EfW facility likely to compound this.</li> <li>Noise pollution from the M4 motorway, M7 motorway, Wallgrove Road and the future airport at Badgerys Creek have not been considered in the impact assessment reports.</li> </ul>	<p>The NSW Road Noise Policy (EPA 2011) provides guidance, criteria and procedures for assessing noise impacts from existing, new and redeveloped roads and traffic generating developments. The assessment of road traffic noise impacts has been assessed under the RNP.</p> <p>The updated Noise Impact Assessment notes that existing project related roads already carry large volumes of traffic, including a large percentage of heavy vehicles on Wallgrove Road, M4 and M7 generated by existing industrial and commercial land uses. The road traffic noise assessment found that the traffic volumes are expected to increase on these roads by less than 2% of annual average daily traffic as a result of the proposed EfW facility. Therefore, no significant increase (2 dB or more) is expected on these roads. This complies with the NSW Road Noise Policy criteria.</p>	Amended EIS Noise Impact Assessment (updated)
120190, 126948	General concerns about noise	<ul style="list-style-type: none"> <li>General concerns that noise pollution will increase as a result of the EfW facility. Although limited detail was provided, noise impacts were listed as a concern.</li> </ul>	Refer to the amended Environmental Impact Statement (EIS) and Noise Impact Assessment for a summary of noise mitigation, management and monitoring measures.	Noise Impact Assessment (updated)



NUMBER	SUBMISSION ID	MAIN ISSUES								
		AIR QUALITY AND ODOUR IMPACTS	HEALTH AND SAFETY	LOCATION OF FACILITY	VISUAL IMPACTS AND AMENITY	CONSULTATION PROCESS	GENERAL ENVIRONMENTAL IMPACTS	ECONOMIC AND SOCIAL IMPACTS	TRAFFIC	NOISE
1	117772	x		x						
2	117775	x	x	x	x			x		x
3	117802	x	x	x	x	x	x	x	x	x
4	118046	x		x	x					
5	118116	x	x	x		x		x		
6	118457	x	x	x	x			x		
7	118501	x		x	x	x		x		
8	118560	x	x	x			x	x		
9	118657	x	x	x			x			
10	119879	x	x	x		x	x	x		
11	119900	x	x	x		x				
12	119904	x		x	x				x	
13	120231	x	x	x	x			x		
14	120194	x		x	x	x			x	x
15	120190		x	x	x		x	x		x
16	120168	x	x	x		x	x			
17	119386	x	x	x					x	
18	120153	x	x	x		x	x			
19	118278			x						
20	120227	x	x	x	x	x		x		



NUMBER	SUBMISSION ID	MAIN ISSUES								
		AIR QUALITY AND ODOUR IMPACTS	HEALTH AND SAFETY	LOCATION OF FACILITY	VISUAL IMPACTS AND AMENITY	CONSULTATION PROCESS	GENERAL ENVIRONMENTAL IMPACTS	ECONOMIC AND SOCIAL IMPACTS	TRAFFIC	NOISE
21	120244	x	x	x		x	x	x	x	x
22	120233	x	x	x		x				
23	120247	x	x	x	x	x			x	x
24	120236	x	x	x	x	x				
25	Change.org	x	x	x	x	x	x	x	x	
26	126948	x	x	x	x			x	x	x
<b>TOTAL</b>		<b>24</b>	<b>20</b>	<b>26</b>	<b>14</b>	<b>14</b>	<b>9</b>	<b>13</b>	<b>8</b>	<b>7</b>