Chapter 7

Environmental assessment scope

7 Environmental assessment scope

7.1 Overview

The Scoping Report issued to the Department to support a request for SEARs included an environmental risk assessment of the likely environmental impacts of the proposal and the proposed approach to assessment in the EIS based on the available information about the site and the proposal at that time. This chapter updates the environmental risk assessment to confirm the scope of the assessment for the EIS, outlining 'key' and 'other' issues based on more detailed site analysis, environmental assessment and design information.

7.2 Existing environment

Section 1.2 of Chapter 1 Introduction provides the site description. In the same chapter, Figure 1.2 shows the surrounding area and local context of the site. The nearest residential area is located around 1km to the south of the site in Horsley Park with the Minchinbury residential area located around 3km to the north-west. Horsley Park Public School is located over 2km south of the site and a childcare centre is located within the Eastern Creek industrial area about 1km to the west of the site.

The site is bounded by the Westlink M7 Motorway to the west with the Eastern Creek industrial area located farther west. The now-closed Eastern Creek landfill site, which still has an operational organics recycling facility component, is located to the north and north-east, with the operational Global Renewables waste management facility located immediately to the east. To the south, the site is bounded by the Warragamba Pipeline Corridor with the Austral Bricks facility located farther south.

Table 7.1 below summarises the nearest receivers within a 3km radius to the proposal that may be affected by the development. These are shown on **Figure 7.1**

Table 7.1: Environmental receivers

Receivers

Residential areas

The nearest residential area is the Horsley Park rural residential area, located about 1km to the south of the site. The Erskine Park residential area is located about 3.5km to the west with Minchinbury located about 3km to the north.

Education facilities

Horsley Park Public School and Marion Catholic Primary School are located more than 2km south of the site. A childcare centre is within the Eastern Creek industrial area about 1km to the west of the site. A driving school associated with the Sydney Dragway is 1km to the northeast of the site.

Community facilities or services

The nearest community halls and churches are located more than 1km to the south of the proposal site within the Horsley Park rural residential area.

Industrial and commercial activities

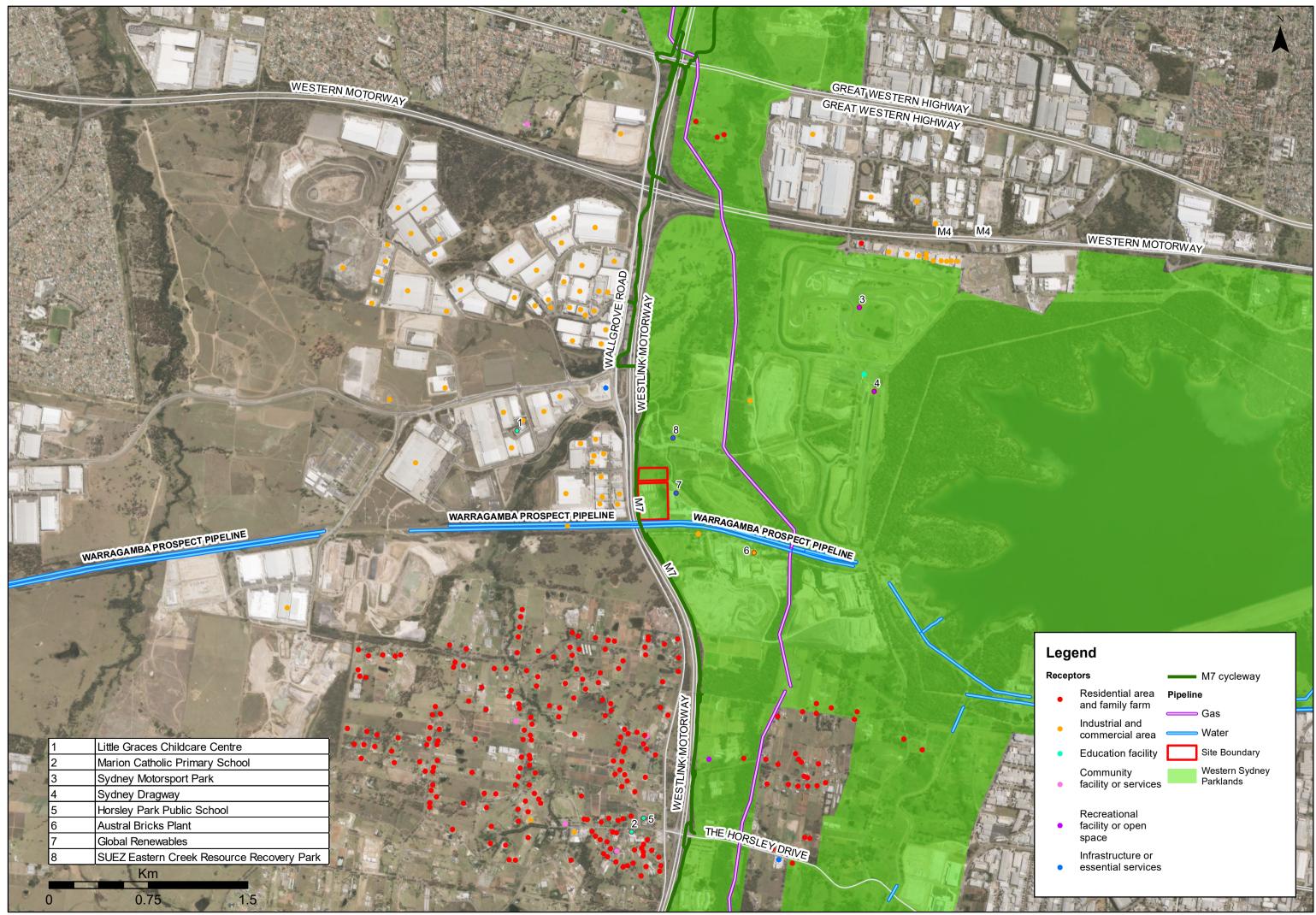
A variety of industrial and commercial businesses operate from the Eastern Creek Industrial area to the west of the M7 Motorway with other industrial operations located to the south of the site (Austral Bricks). Other industrial activities considered essential services are described below.

Infrastructure and essential services

The site is bounded by the M7 Motorway and Wallgrove Road to the west and an unnamed road (referred to as Austral Bricks Road) to the south. The Warragamba Pipeline Corridor adjoins the proposal site's southern boundary. The now-closed Eastern Creek landfill site (which still has an operational organics recycling facility component) is located to the north and north-east, with the operational Global Renewables waste management facility located immediately to the east.

Recreational facilities and open space

The site is located within the Western Sydney Parklands (WSP). The M7 cycleway is located adjacent to the proposal site's western boundary. This cycleway forms part of the Parklands Track – which connects other trails and tracks of the WSP. The Sydney Motorsport Park and Sydney Dragway are located about 1.5km to the northeast of the proposal site.



Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community © Department of Customer Service 2020 DFSI 2020 Figure 7.1: Sensitive receivers

7.3 Scoping process

The Scoping Report included an environmental risk assessment of the likely environmental impacts of the proposal and the proposed approach to assessment in the EIS based on the available information regarding the site and the proposal at that time. This involved the following steps:

- Describe the existing environment relevant to each issue. For example, for traffic and transport, describe the local transport network and its current performance.
- Identify the aspects of the proposal that may interact with the existing environment to find out potential impacts. For example, generation of additional traffic during operation of the proposal.
- Carry out a preliminary assessment of the impact to consider whether the
 impact is likely to happen and whether the consequences of the impact would
 be material. The concepts of likelihood and consequence are commonly used
 in risk assessments and were used in a simple form for the purpose of the
 environmental risk assessment.
- Assess the likelihood of impact (negative or positive) that would result, considering mitigation measures. This recognises that for many issues, mitigation is an integral part of the proposal description. For example, the air pollution controls which clean the air before its discharge are a key part of the proposal.
- Consider community perceptions of potential impacts based on the findings of the community engagement carried out before lodgement of the Scoping Report and community responses to similar projects.
 - Use the above information to categorise the issue as either 'key' or 'other'. Key issues are those where there is a likelihood of a material impact or where there is a high level of community concern about the issue. 'Key' issues must be assessed in detail in the EIS to better understand the impact or to develop proposal-specific mitigation measures. 'Other' issues are those where a material impact is not likely. A less detailed assessment may be needed, either because the impact is well understood or there are standard mitigation measures available to manage the impact.
- Note that most issues can be broken down into components. For example, construction dust and operational air emissions are part of Air Quality and Odour for the purposes of the environmental risk assessment. Where one component of the issue is categorised as a key issue and another component is categorised as 'other' issue, the overall issue air quality and odour is considered to be a 'key' issue.

- Identify issues that were considered during the Scoping Report but are not subject to any further assessment in the EIS as they are unlikely to have an impact on the receiving environment.
- Note that the concept of material impact or effect is similar to the concept of significance which is used throughout impact assessment practice. However, significance has a specific meaning within the *Environmental Planning and Assessment Act 1979*, therefore material is used to avoid any confusion. Material effect means that the impact will have an effect that is likely to require mitigation and/or technical assessment¹.

The use of the above assessment method follows the approach described in the Department of Planning Draft EIA Guidelines for State Significant Projects (Guidelines 3 and 4), exhibited in June 2017. The Draft Guidelines describes a process to decide which elements of the receiving environment (matters) are potentially impacted by a proposed development and the level of assessment needed to predict and understand the impact and mitigation measures.

The Draft Guidelines also consider cumulative impacts, where the elements of the receiving environment are affected from the combination of a proposal's impacts and the impacts of other committed and approved projects.

The Scoping Report was issued to the Department on 13 November 2019 after which it was submitted to Government agencies and key stakeholders. The report was discussed at the planning focus meeting (PFM) which helped define the final SEARs.

Table 7.2 summarises the key and other issues identified in the scoping report with an updated assessment of environmental risks based on current design and environmental impact assessment information in the EIS.

The updated environmental risk assessment has not changed the categorisation of assessment issues as key or other issues. However, it has clarified areas of uncertainty identified in the Scoping Report environmental risk assessment, so that the likelihood of impact and consequence can be further defined.

¹ DPIE, 2017

Table 7.2: Environmental assessment scope

Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material

Waste management

Key issue

Waste Supply – Resource Recovery Criteria

Scoping Report:

- Likelihood: it is **unlikely** that waste received at the EfW facility will be non-compliant with the resource recovery criteria of the EfW Policy as waste supply arrangements would make sure waste is residual from resource recovery operations.
- Consequence: receival of non-compliant waste would be **material** as it would result in the use of a resource which has a higher order value in the waste hierarchy and non-compliance with the EfW Policy.

EIS: No change.

Waste Supply – Hazardous Waste

Scoping Report:

- Likelihood: it is **unlikely** that hazardous waste will enter the combustion process as the waste receival, and handling process requires in-bound vehicles to show documents on the source and type of waste. Loads can be inspected in the receival hall and arrangements made for unapproved waste to be transported off site.
- Consequence: combustion of hazardous waste in the EfW process would be **material** as it would generate additional contaminants in the flue gas. Ensuring hazardous waste does not enter the combustion process is an important issue for the community.

EIS: No change. The flue gas treatment system has been designed to incorporate a wet scrubber and other measures to achieve current international best practice techniques (BAT). The flue gas treatment process is designed to manage instances where small quantities of non-compliant waste enter the process. It is unlikely that hazardous waste will enter the combustion process, however, if they did, the consequence would not be material.

Residual waste management

Scoping Report:

- Likelihood: it is **unlikely** that residual waste from the EfW process (bottom ash, boiler ash and air pollution control residues) will be disposed at facilities that are not approved and licensed to receive this type of waste.
- Consequence: inappropriate management and disposal of residual waste would be **material** because of the potential impacts on land and water. Residual waste management is an important issue for the community.

Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material

EIS: No change. Incinerator Bottom Ash (IBA) is produced as a waste by-product from the EfW combustion process. The WSERRC will include a ferrous metal separator onsite to recover large ferrous metals from the IBA for recycling and sale to market. The remaining IBA may be transported to a dedicated IBA storage, treatment, metal recovery and maturation facility where non-ferrous metals (or secondary metals) recovery may be carried out.

The IBA facility, if progressed, will be subject to a separate development application process, however, the site location for storage and/or treatment has not been finalised at this stage.

Other ash by-products including Flue Gas Treatment residue (FGTr) and boiler fly ash will be managed offsite using existing infrastructure (described in **Chapter 3 Proposal description** and will not need any additional related development).

Air quality and odour

Key issue

Air quality

Scoping Report:

- Likelihood: it is **unlikely** that emissions from the stack will exceed air quality standards because of the air pollution controls incorporated into the EfW process and facility design. These controls are based on similar plants operating in the EU which demonstrate that actual emissions are consistently within best international practice standards.
- Consequence: exceedance of air quality standards as a result of emissions from the stack would be **material** because of the potential impacts on air quality and human health. Air quality is an important issue for the community.

EIS: No change. An air quality assessment has been carried out and demonstrates that all emissions will meet required air quality standards as defined in the European Union BAT Conclusions 2019 and NSW Protection of the Environment Operations (POEO) Act 1997.

Odour

Scoping Report:

- Likelihood: emissions of odour from the receival hall are **unlikely** as the building operates under negative pressure with fast acting roller shutter doors containing odour within the building. Air is drawn though the combustion chamber destroying odour in the air.
- Consequence: odour emissions would be **not material** because of the distance to residential areas. Odour is an important issue for the community.

EIS: No change. Design development since the Scoping Report has also identified additional mitigation measures to manage odour including the use of a carbon filter in the waste receival hall to manage odour when the boiler is not operating.

Issue and categorisation	Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material
Other issue	Air quality – construction
	Scoping Report:
	• Likelihood: generation of dust offsite during construction is unlikely with the application of standard construction environmental management measures.
	• Consequence: offsite dust generation would be not material given the separation distance to residential areas and the industrial character of surrounding land use.
	EIS: No change. To minimise dust generation and the potential for offsite impacts during the construction activities, appropriate mitigation measures would be applied.
Human health	
Key issue	Human health – air quality
	Scoping Report:
	• Likelihood: exposure of people to unacceptable levels of air emissions from the stack is unlikely because of the air pollution controls incorporated into the EfW process.
	• Consequence: exposure of people to unacceptable levels of air emissions from the stack would be material because of the impact on human health. Air quality related human health risk is an important issue for the community.
	EIS: No change. The design of the flue gas treatment system has been developed since the Scoping Report and includes:
	SNCR technology for the reduction of Oxides of Nitrogen (NOx) within the flue gases
	Bag house filter
	Wet scrubber acts as a final stage to further absorb acid gases, reduce ammonia and reduce volumes of particles and heavy metals.
	A wet scrubber has been chosen due to the significantly improved emissions performance when compared to a fully dry or semi-dry system. The proposed flue gas treatment system represents best practice and best available technology. WSERRC is the only proposed energy from waste facility in NSW, for which an EIS has been lodged, that commits to this combination of dry/wet flue gas treatment technology.

Issue and categorisation	Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material		
	Human health – soil contamination		
	Scoping Report:		
	• Likelihood: exposure of workers to contaminants in soil disturbed and mobilised during construction is unlikely because of the construction environmental management and material management procedures that will be used during construction.		
	• Consequence: exposure of workers to contaminants in soil is material because of the potential impacts on the health of workers.		
	EIS: No change. Further site investigations have confirmed the presence of contamination in discrete areas of the site. A Remediation Action Plan (RAP) has been prepared which describes the approach to managing contamination onsite to reduce the risk of health and environmental impacts.		
	Human health – potable water quality		
	Scoping Report:		
	• Likelihood: exposure of people to unacceptable levels of pollutants being deposited on potable water sources (such as Prospect Reservoir) from air emissions from the stack is unlikely because of the air pollution controls incorporated into the EfW process.		
	• Consequence: exposure of people to unacceptable levels of pollutants in potable water sources would be material because of the impact on human health. Water quality related human health risk is an important issue for the community.		
	EIS: No change. The air quality assessment has modelled the deposition of particulates on to Prospect Reservoir and concluded that the levels are very small and beyond the level of detection. The health risk assessment has concluded that there will be no unacceptable risks for rainwater tanks or Prospect Reservoir.		
Other issue	Human health – disposal of contaminated soil		
	Scoping Report:		
	• Likelihood: exposure of the community from mobilisation of soil contaminants to offsite locations is unlikely because of the management procedures that will be used during construction.		
	• Consequence: community exposure to mobilised contaminants is material because of the potential health impacts to the community.		
	EIS: No change. All contaminated material will follow a Remediation Action Plan (RAP) ensuring there is no community exposure of contaminated soil.		

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Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material

Noise and vibration

Key issue

Noise – EfW operations

Scoping Report:

- Likelihood: increased noise in the area around the proposal is **likely** as a result of operation of the EfW facility.
- Consequence: increased noise is **material** because of the potential impact on recreational users in the Parklands. However, the facility is located around 1km from the nearest residential area.

EIS: No change. The noise assessment confirms that the proposal can be designed so that all noise criteria can be meet, therefore avoiding any unacceptable noise impacts during operation of the proposal.

Noise – construction

Scoping Report:

- Likelihood: noise from construction activities is **likely**.
- Consequence: noise impacts are **material** because of the potential impact on recreational users in the Parklands and occupants of neighbouring industrial facilities during the construction period.

EIS: No change: A Construction Noise and Vibration Management Plan (CNVMP) will be prepared and carried out to manage and mitigate any noise and vibration impacts during construction.

Other issue

Noise – transport

Scoping Report:

- Likelihood: increased noise along transport routes as result of truck movements generated by the proposal is likely.
- Consequence: while truck routes are not yet known, increased noise from truck movements is **not material** as the overall contribution to traffic on the road network is minor and will be primarily located in industrial areas.

EIS: No change. The noise assessment concludes that the noise from additional vehicles on the road network as a result of the proposal would be negligible.

Issue and

Likelihood of impact following mitigation: likely or unlikely categorisation Consequences of impact: material or not material

Water – surface, groundwater and hydrology

Key issue

Surface water - runoff

Scoping Report:

- Likelihood: increased surface water run-off as a result of a permanent increase in the impervious area of the site is **likely**, however, surface water management infrastructure will be incorporated into the site layout and design to minimise the risk.
- Consequence: increased surface water run-off is material because of the potential impacts on Council surface water infrastructure, the Warragamba Pipeline Corridor and neighbouring properties.

EIS: No change. Stormwater from hardstand areas and roofs will drain to two basins to control the flow of surface water through the site and manage its discharge offsite.

Groundwater - flow

Scoping Report:

- Likelihood: depth to groundwater is unknown, however, the proposal involves below ground structures waste receival bunker and bottom ash storage bunker (subject to design development). Impact on groundwater is assumed to be likely.
- Consequence: potential groundwater retardation and change in flow due to the construction of below ground structures is **material** because of impacts on groundwater movement and character.

EIS: No change. The bunker will be excavated to a depth of about 15m. The waste bunker excavations will only encounter shallow groundwater and the impacts will be localised and negligible.

Groundwater – contaminants

Scoping Report:

- Likelihood: construction of below ground structures will likely impact groundwater and may mobilise or expose contaminants in the groundwater.
- Consequence: potential mobilisation of contaminants in groundwater is **material** because of the risk of worker and community exposure to contaminants.

EIS: No change. The low permeability of the underlying geology limits the potential for mobilisation of pollution, as a precaution, periodic monitoring of groundwater quality will occur throughout the dewatering period.

Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material

Other issue

Water quality – construction

Scoping Report:

- Likelihood: erosion and sedimentation dispersion during construction is unlikely when standard construction environmental management measures are used.
- Consequence: erosion and sedimentation dispersion during construction causing impacts on water quality is **not material** because of the distance to watercourses and the ability to manage erosion and sedimentation onsite with standard construction environmental management measures.

EIS: No change.

Traffic and transport

Key issue

Traffic – network performance (operation)

Scoping Report:

- Likelihood: the proposal is likely to generate an increase in car and truck movements on the road during operations.
- Consequence: the impact of the increase in traffic on network performance is **not material** because traffic generated would be minor in the context of overall traffic volumes.

EIS: No change. The proposal will increase traffic generation, however the impacts on the nearest intersections (Wallgrove Road / Austral Bricks Road and Austral Bricks Road / the site access) will not change the existing level of service at these intersections.

Traffic – access

Scoping Report:

- Likelihood: the proposal is **likely** to generate an increase in car and truck movements and a change in vehicle types using the access to the site.
- Consequence: the increase in car and truck movements and change in vehicle types is **material** as it will affect the ability of the existing access to accommodate site traffic, potentially requiring upgrade to the access.

EIS: No change. The existing access will be upgraded to accommodate heavy goods vehicles required for the proposal. The upgrade will involve minor widening of the existing access road to minimise any new impacts on the Warragamba Pipeline. The access upgrade will be assessed and determined through a separate planning approval process and does not form part of the scope of the WSERRC proposal for the purposes of this EIS. Refer to **Chapter 22 Related Development** for further information.

Issue and categorisation	Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material
	Traffic – access upgrade/interface with Warragamba Pipeline Scoping Report:
	• Likelihood: any necessary upgrade to the access road will require construction works over the Warragamba Pipeline Corridor, owned by Water NSW. The minor nature of the works is unlikely to cause any damage to this infrastructure and associated ecology when standard construction environmental management measures are used.
	• Consequence: the potential impact of necessary upgrades on the Corridor is material as the Corridor contains critical water supply infrastructure. EIS: No change. The access upgrade will be assessed and determined through a separate planning approval process and does not form part of the scope of the WSERRC proposal for the purposes of this EIS. Refer to Chapter 22 Related development for further information on site access and Chapter 6 Engagement for consultation with WaterNSW. A Warragamba Pipeline Risk Assessment was prepared for this EIS and is included as Appendix A of Technical report P Utilities and Services Assessment Report .
Other issue	Traffic – network performance (construction)
	Scoping Report:
	 Likelihood: construction of the proposal is likely to generate a temporary increase in truck and vehicle movements on the local road network. Consequence: the impact of construction traffic on the local road network is not material as the additional vehicle movements would be negligible compared to existing volumes.
	EIS: No change.
Hazard and ris	k
Key issue	Hazard and risk – incidents related to dangerous goods
	Scoping Report:
	• Likelihood: the storage of dangerous goods onsite is unlikely to result in incidents which may pose a risk to employees and offsite properties as materials will be handled and stored in line with the relevant requirements of the Dangerous Goods Code.
	• Consequence: incidents resulting from the inappropriate handling and storage of dangerous goods are material because of the potential exposure of employees and offsite properties to hazards.
	EIS: No change.

Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material

Other issue

Hazard and risk - construction incidents related to dangerous goods

Scoping Report:

- Likelihood: worker incidents, spills and leaks and exposure to contaminated soil during construction are **unlikely** as the construction contractor will apply site safety and material handling procedures.
- Consequence: impacts from worker incidents, spills and leaks and exposure to contaminated soil during construction are **material** because of the potential exposure of workers and offsite properties to hazards.

EIS: No change.

Flora and fauna

Key issue

Flora and fauna - terrestrial

Scoping Report:

- Likelihood: the clearing of vegetation during construction is **likely**, however, vegetation communities with habitat value are located on the eastern portion of the site and will be avoided to the extent possible through the design and layout of the site.
- Consequence: the impact of vegetation clearing is **material** because of the presence of vegetation communities with habitat value on part of the site.

EIS: No change. Clearing of 0.45ha of Cumberland Woodland is required. A Vegetation Management Plan (Appendix G of **Technical report Q Biodiversity Development Assessment Report**) has been prepared and will be carried out to rehabilitate the site following construction.

Flora and fauna – aquatic

Scoping Report:

- Likelihood: increased surface water run-off to the pond in the eastern part of the site will **likely** affect any aquatic ecology due to dirty surface water run-off into the pond however, this risk will be managed through construction environmental management measures and permanent surface water management measures used onsite.
- Consequence: the impact of run-off on aquatic ecology is unknown and is assumed to be material.

EIS: No change. The farm dam will be decommissioned as part of the proposal, with a dewatering management plan (as part of the Construction Management Plan) carried out to manage any environmental risks. The realigned overland flow path will improve aquatic habitats with new planting proposed.

Likelihood of impact following mitigation: likely or unlikely Issue and categorisation Consequences of impact: material or not material Fauna – artificial light Other issue Scoping Report: Likelihood: the proposal will introduce artificial light sources to the site which is likely to impact fauna and fauna habitat. Consequence: the impact on fauna and fauna habitat from the introduction of an artificial light source is **not material** as the site is located between existing light sources such as the M7 motorway and the Global Renewables facility. EIS: No change. The proposal will include a recessive lighting design which seeks to light buildings from within, rather than lighting facades., minimising light spill to surrounding areas. Landscape character and visual amenity Landscape and visual Key issue Scoping Report: • Likelihood: the proposal will introduce a new built form at a different mass and scale to the surrounding built environment which will likely affect visual amenity, however architectural design of the facility will make sure this impact is minimised. Consequence: the impact of the new built form on visual amenity would be material due to the scale of the stack and mass and scale of the main building compared to existing industrial built form in the surrounding area. EIS: No change. The proposal has been designed to mitigate bulk by integrating the stack and blade walls, incorporating green walls and using lowreflective materials. Greenhouse gas emissions Key issue GHG emissions Scoping Report: Likelihood: the proposal is **likely** to result in a net reduction in GHG emissions due to avoidance of emissions from landfill gas and generation of renewable energy. • Consequence: the impact of the GHG emissions reduction is material as it will contribute to NSW and National policy objectives regarding climate change and renewable energy generation. EIS: No change. The proposal would result in a net reduction in GHG emissions of around 390,000 tonnes CO₂-e.

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Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material

Airspace operations

Key issue

Airspace – intrusion

Scoping Report:

- Likelihood: the proposal is unlikely to intrude into the protected airspace of the new Western Sydney Airport (OLS and PAN-OPS) because of its distance from the Airport and the design of the facility. However, as the PAN-OPS for the Airport has not yet been defined, intrusion into the airspace is assumed to be **likely** for the purposes of the Scoping Report and until such time that the PAN-OPS is defined.
- Consequence: the impact of intrusion into protected airspace is **material** as it would present a risk to aviation safety.

EIS: No change. Consultation has been conducted with Western Sydney Airport, Airservices Australia and Civil Aviation Safety Authority, which has confirmed that the proposal will not cause a risk to aviation safety.

Contamination, geology and soils

Key issue

Contamination

Scoping Report:

- Likelihood: disturbance and mobilisation of soil contaminants during construction is **likely** but risks will be managed through construction environmental management and material handling procedures.
- Consequence: impacts of exposure to workers and offsite properties to soil contaminants is **material**.

EIS: No change. The contamination assessments have identified asbestos material and lead on site. These will be managed by a Remediation Action Plan to minimise the risk of impacts to human health and environment.

Other issue

Soils

Scoping Report:

- Likelihood: erosion and sedimentation dispersion during construction is unlikely when standard construction environmental management
 measures are used.
- Consequence: erosion and sedimentation dispersion during construction causing impacts on water quality is **not material** because of the distance to watercourses and the ability to manage erosion and sedimentation onsite with standard construction environmental management measures.

EIS: No change.

Issue and

Likelihood of impact following mitigation: likely or unlikely categorisation Consequences of impact: material or not material

Services and utilities

Key issue

Connection to electricity grid

Scoping Report:

- Likelihood: it is **likely** that the proposal will need a new connection to the electricity grid to allow the export of power from the EfW facility.
- Consequence: the capacity of the existing electricity grid infrastructure to accommodate a new connection to the site is unknown, therefore the impact is assumed to be **material**.

EIS: No change. Options to connect to the electricity grid have been identified. See Chapter 22 Related development.

Connection to other services

Scoping Report:

- Likelihood: it is **likely** that the proposal will need new connections to utility services such as water supply, drainage and wastewater.
- Consequence: the capacity of the existing services infrastructure to accommodate new connections to the site is unknown, therefore, the impact is assumed to be material.

EIS: No change. The proposal will need new connections to utility services. However, the impacts will not be material as consultation has been conducted with utility providers to confirm capacity is available. See Chapter 22 Related development.

Social

Key issue

Social

Scoping Report:

- Likelihood: the proposal is **likely** to have real and perceived impacts on people and communities through a combination of impact pathways described in the above sections. Impacts can be avoided, mitigated and managed. The proposal will carry out a comprehensive community and stakeholder engagement strategy during the preparation of the EIS to respond to community concerns – real and perceived – about the proposal.
- Consequence: impacts on people and communities, through a variety of impact pathways, is material.

EIS: No change. A comprehensive community and stakeholder engagement strategy has been employed in the preparation of the EIS (refer to Chapter 6 Engagement and Appendix F Community and Stakeholder Engagement Report). A community reference group will be created to represent the community during construction and operation of the proposal and among other responsibilities, will manage the community funding package.

Issue and categorisation	Likelihood of impact following mitigation: likely or unlikely Consequences of impact: material or not material
Heritage	
No further assessment required	 Heritage Scoping Report: The area is low-lying and next to a first order drainage line. It therefore within an area of low Aboriginal heritage sensitivity and potential. The lack of heritage and archaeological value can be further reinforced by the level of previous disturbance associated with extensive modern land use practices. Desktop studies and a site assessment confirmed a low-level of archaeological sensitivity and potential across the site based on the distribution of registered recorded archaeological sites supported by a credible and detailed heritage investigation record in the area. Consistent with these studies, neither the desktop assessment nor site inspection identified any sites, objects or archaeological potential onsite or locally. The evidence collected is therefore considered enough to discount heritage impacts. Based on the heritage assessment completed to date, heritage impacts are considered unlikely. EIS: The SEARs required an Aboriginal Cultural Heritage Assessment be prepared (Technical Report O). The report concludes that heritage impacts are unlikely, but if unexpected heritage was discovered during construction it could have a material impact.
Bushfire	
No further assessment required	Bush fire risk
	Scoping Report:
	The site is not mapped as Bush Fire Prone Land (BFPL), so no further assessment of bushfire risk is proposed.
	EIS: No change.

7.4 Environmental impact assessment: overview

Chapter 8 to Chapter 23 assess the proposal impacts. Each chapter is generally consistent in its presentation including:

- **Introduction:** briefly describing the overall assessment approach and guidelines followed.
- **Existing environment:** setting out the context, values and receivers that may be impacted by the proposal.

The existing environment is not necessarily limited to the current baseline. It may account for changes in the future through natural events (such as climate change) or future committed development in an area. Importantly, the impact assessment was carried out to assess the worst-case scenario – for example, when the existing environment is most valued/sensitive to change.

 Assessment: describes the predicted impacts likely to occur during construction and operation. Each assessment defines ratings (thresholds) appropriate to the nature of the environmental aspect and in line with accepted terminology where standardised methods are used.

Impacts may be direct, like the loss of threatened ecological community to the proposal footprint, or indirect, like pollution downstream arising from sedimentation during earthworks.

They may be short-term/temporary (dust associated with construction), medium-term (vegetation trimming and pruning that is allowed to regenerate after), or long-term/permanent (an improvement in local air quality).

They may be positive (screening of an existing eyesore) or negative (loss of an attractive landscape component).

The predictions were based on:

- Known or likely presence and sensitivity of values and receivers as determined by their designated status along with qualitative criteria such as rarity, status and condition
- o Number and sensitivity of affected receivers
- Extent, nature and duration of the physical changes from constructing, operating, maintaining and decommissioning the proposal
- Ability of the value and/or receiver to accommodate the predicted changes introduced under the proposal and how they would respond to mitigation measures.
- Mitigation measures: analyses how impacts have been avoided, minimised, offset or managed.