CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Moorebank Precinct West Stage 1

19 NOVEMBER 2020

SYDNEY INTERMODAL TERMINAL ALLIANCE

Moorebank Precinct West Stage 1

Construction Environmental Management Plan

Current Revision Author	[redacted]	[redacted]
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KEY TERMS AND ACRONYMS

Acronym/Term	Meaning
ACM	Asbestos Containing Material
ALARP	Mitigate risk to “As Low As Reasonably Practical”
CEMP	Construction Environmental Management Plan
CoA	Commonwealth Condition of Approval
CoC	Condition of Consent
DPIE	Department of Planning, Industry and Environment
DPI	Department of Primary Industries
EEC	Ecologically Endangered Communities
EP&A Act	Environment Planning and Assessment Act 1979
EMS	Environmental Management System
Environmental Aspect	Means the interaction, relationship or impact of an operation or activity with the Environment including Soil, Water Air
Environmental Law	Relating to the storage, handling or transportation of waste, dangerous goods or hazardous material relating to Workplace health and safety; or which has as one of its purposes or effects the protection of the Environment
Environmental Notice	Means any direction, order, demand, license or other requirement from a Government Agency to take action or refrain from taking any action in respect of the Site or the Works in connection with any Environmental Law
EPA	Environmental Protection Agency
EPBC	Environmental Protection and Biodiversity Act 1999 (EPBC)
HESQ	Health Environment Safety Quality
HSEQ	Health Safety Environment Quality
IMEX	Import and Export Terminal
IMT	Intermodal Terminal Site
JHA	Job Hazard Analysis
MA	Moorebank Aboriginal Heritage Artefact Site
MH	Moorebank Heritage Site/Location
Minor Amendment	Minor amendments would typically include those that: • are editorial in nature e.g. staff and agency/authority name changes; • do not increase the magnitude of impacts on the environment when considered individually or cumulatively; • do not compromise the ability of the Project to meet approval or legislative requirements; and

Acronym/Term	Meaning
	• do not result in new environmental impacts.
MPW	Moorebank Precinct West
MPW Stage 1	Moorebank Precinct West Stage 1 – Early Works as approved under SSD 5066
Non-compliance	An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Development Consent SSD 5066 Conditions of Consent or EPBC Act Approval or EPBC Act Approval (EPBC 2011/6086) Conditions of Approval but is not an incident
Non-conformance	Observations or actions that are not in strict accordance with the CEMP and the aspect specific subplan
OEH	Office of Environment and Heritage
PFAS	Per & Poly-Fluoroalkyl Substances
PFOA	Perfluoro octane Sulfonic Acid
RAP	Moorebank Intermodal Company Property West Land Preparation Works Stage 1 and Stage 2 Remediation Action Plan
REMM	The Moorebank Intermodal Terminal – Supplementary Responses to Submissions Report – Review of Environmental Mitigation Measures
RfMA	Request for a Minor Amendment
SIMTA	Sydney Intermodal Terminal Alliance
Site	Means the project site or work area where the Contractor is undertaking activities on behalf of SIMTA
TEU	Twenty-Foot Equivalent Unit
The Contractor	The company, companies or other legal entity appointed by SIMTA to undertake works under the Project Approval
The Secretary	The Secretary of the Department of Planning & Environment
UST	Underground Storage Tank

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1 INTRODUCTION

1.1 Background

The Moorebank Precinct West (MPW) Project is the construction and operation of an Intermodal Terminal (IMT) and associated infrastructure and warehousing. The key features/components of the Project comprise:

- an Import-Export (IMEX) freight terminal – designed to handle up to 1.1 million Twenty-Foot Equivalent Unit (TEU) per annum of IMEX containerised freight to service 'port shuttle' train services between Port Botany and the Project
- an Interstate freight terminal – designed to handle up to 500,000 TEU per annum of interstate containerised freight to service freight trains travelling to and from regional and interstate destinations
- warehousing facilities – with capacity for up to 300,000 m^2 of warehousing to provide an interface between the IMT and commercial users of the facilities, including freight forwarders, logistics facilities operations and retail distribution centre operations.

Stage 1 (Early Works) will involve the establishment of:

- construction site facilities
- site security
- utility services identification, protection, relocation and termination
- heritage salvage and relocation works
- demolition of existing infrastructure and buildings
- remediation of identified contamination in order to provide access for the next works package.

This CEMP addresses Stage 1 (Early Works) related to the construction of the Moorebank Intermodal Terminal as part of the MPW Project. Early Works commenced in February 2017.

1.2 Purpose of This CEMP

This Construction Environmental Management Plan (CEMP) has been prepared by SIMTA for the 'Early Works', at the MPW Project (MPW Stage 1).

This CEMP and Sub-Plans have been prepared in accordance with the relevant project approval documentation and the Guideline for the Preparation Environmental Management Plans (DIPNR, 2004). The CEMP will provide the necessary framework to enable the project to be completed with minimal environmental impact in accordance with the environmental objectives for this project.

It is the policy of SIMTA to ensure that the Project achieves a high standard of care to minimise the impact on the environment, immediate work sites and the local community.

This CEMP addresses the applicable requirements of:

- the conditions of Project Approval (SSD 5066) issued by the Minister of Planning on 3 of June 2016
- section 55 *Protection of the Environment Operations Act* 1997 - Environment Protection License No: 21054 - August 2019
- The Moorebank Intermodal Terminal - Supplementary Responses to Submissions Report - Review of Environmental Mitigation Measures (REMM) - 12 August 2015
- Commonwealth Approval (No. 2011/6086), under the *Environmental Protection Biodiversity Conservation Act* 1999 (EPBC Act)
- Project Plan Requires Annexure 2 Part A – Project Requirements
- applicable New South Wales and Commonwealth Legislation.

To meet these objectives, a systematic and planned approach for the management of environmental issues will be implemented on this project.

This CEMP is designed to provide the management framework with strategies to effectively manage all environmental risks during the demolition and remediation process during the Early Works. Implementing this CEMP effectively will ensure that the Project team meets the regulatory and policy requirements in a systematic manner and continually improves its performance.

In particular this CEMP:

- describes the Project in detail including activities to be undertaken and relative timing
- describes the environmental management roles and responsibilities of personnel
- states objectives and targets for issues important to the environmental performance of the Project
- identifies environmental aspects and impacts associated with each activity of the Project
- provides specific mitigation measures and controls that can be applied on-site to avoid or minimise negative environmental impacts
- provides specific mechanisms for compliance and conformance with applicable policies, approvals, licences, permits, consultation agreements and legislation
- outlines a monitoring regime to check the adequacy of controls as they are implemented during construction.

This CEMP is the overarching document in the environmental management system for the Project that includes a number of management documents. It is applicable to all staff and sub-contractors associated with the construction.

1.3 Consultation

Following internal review, and in accordance with the CoC D21, consultation with the EPA, DPIE Water and DPIE Fisheries, Office of Environment and Heritage (OEH) and Liverpool Council commenced on 16 September 2016.

It was communicated at this time that the consultation period for the CEMP would be concluded on the 14 November 2016.

Table 22 of Appendix G details communications between the Project and Agencies. DPIE Water and EPA were the only agencies to respond; DPIE Water provided comment and the EPA declined to comment (see Table 22 of Appendix G).

1.4 Distribution

This CEMP is available to all personnel and sub-contractors via the Project document control management system. An electronic copy can be found on the project drive. For the duration of the Project the provision of electronic information associated with the SSD will be via the SIMTA website www.simta.com.au. This website is subject to confidentiality, shall be published and maintained with up-to-date information including, but not necessarily limited to:

a) the current implementation status of the SSD

b) a copy of the documents listed in condition 4, and any documentation supporting modifications to this approval that may be granted

c) a copy of this approval and any future modification to this approval

d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the SSD

e) a copy of each current report, plan, or other document required under this approval

f) the outcomes of compliance tracking in accordance with condition A2 of this approval

g) details of contact point(s) to which community complaints and enquiries may be directed, including a telephone number, a postal address and an email address.

One controlled hard copy of the CEMP and supporting documentation will be maintained by the Construction Environmental Manager at the Project office(s). Copies will be distributed to:

- Project Manager
- Construction Manager
- Environmental Manager
- Environmental Representative (ER).

The document is uncontrolled when printed.

Once the CEMP has been approved a hardcopy will be kept onsite and updated as required by the Construction Environmental Manager, as well as a controlled PDF version being uploaded onto the Project Document Control Program (Aconex). All contractors and sub-contractors will be provided a copy to ensure their works are consistent with this CEMP.

1.5 Revision

This CEMP will be reviewed and revised (if required) in the following circumstances:

- non-conformance and/or non-compliance as a result of audits (by internal or external parties)
- changes to procedures, scope of works and/or systems after an incident or potential incident
- changes to the environmental management system (EMS)
- design changes
- changes to the CoC or other required licences and permits
- construction activity changes
- identification of opportunities for improvement or deficiencies in the Project system (e.g. through the course of site inspections)
- additional identified environmental aspects or processes
- following complaints.

In accordance with Conditions of Approval (CoC) D1 (e), the ER has the authority to approve/reject minor amendments to the CEMP through the Project's Request for Minor Amendment (RfMA) process. Minor amendments would typically include those that:

- are editorial in nature e.g. staff and agency/authority name changes
- do not increase the magnitude of impacts on the environment when considered individually or cumulatively
- do not compromise the ability of the Project to meet approval or legislative requirements
- do not result in new environmental impacts.

Where a change is not minor in nature, the amended CEMP will be provided to the Secretary of DPIE for approval.

Following updates to the CEMP, the site/project team will be advised of changes though a management review and communicated via toolbox talks, changes to the site-specific induction and prestart meetings.

1.5.1 Assessment Process

In order to maintain reporting consistency across the Precinct, an assessment process has been developed to facilitate the review and approval of minor amendments to the CEMP and associated Sub-Plans. The assessment process involves:

- preparation of an Accordance Assessment, developed by the Principal's Representative to assess the proposed change and satisfy themselves that the change is in compliance/in accordance with the CoC
- submission of a RfMA by the Principal's Representative to the ER to update the CEMP and Sub-Plans
- ER reviews RfMA and subsequently endorses / rejects the updated CEMP and Sub-Plans.

The term 'Minor Amendment' as it relates to this process is defined within Section 1.5 of this CEMP. Consideration of 'Minor Amendments' is also given to consistency with relevant Commonwealth CoA.

2 PROJECT OVERVIEW

The Moorebank Intermodal Terminal is located in Moorebank, NSW. The Site is located in Liverpool Local Government Area, approximately 30 km south-west of the Sydney CBD and 4 km south of the Liverpool CBD. It sits along the Georges River, immediately west of Moorebank Avenue and south of the M5.

Figure 1 - Location of Moorebank Intermodal Terminal

The Intermodal Site is land generally described as being located on the western side of Moorebank Avenue, between the M5 Motorway and the East Hills Passenger line, Moorebank comprising:

- Lot 1 DP 1197707
- Lot 100 DP 1049508
- Lot 101 DP 1049508
- Lot 2 DP 1197707.

2.1 General Description of the Site

The Site is located immediately east of Georges River at an approximate ground level height of 15 m above Australian Height Datum. It was formally used by Department of Defence (Defence), including the School of Military Engineering (SME) and other minor Moorebank units, as follows:

- The northern portion of the site known as 'Moorebank Barracks' is predominantly comprised of areas of open space interspersed with heavy vegetation. Land use within Moorebank Barracks appears to consist of administration and older accommodation buildings, a warehouse structure believed to be utilised for the storage and maintenance of vehicles and a concrete lined surface water drainage culvert, which runs east to west across the area and flows towards the Georges River.
- The southern portion of the site known as 'Steele Barracks', housed the Royal Australian Engineers (RAE) and was the regional headquarters of the NSW Brigade of the Australian Army Cadets and the RAE Museum and RAE Golf Club. Steel Barracks land was predominantly used for accommodation, administration offices, engineering workshops, sports ovals and military training areas including a parade ground, bomb detection and disposal compounds, a small arms range, firefighting training areas, a large bulk earth movement training area (known as the 'dustbowl'), a bridging yard and a dog training compound.

The site forms part of the Cumberland Plain Woodland of western Sydney. While much of the site's flora and fauna has been disturbed, it still contains Castlereagh Swamp Woodlands, Castlereagh Scribbly Gum Woodland, Riparian Forest and Alluvial Woodland. There are a number of sites of Aboriginal significance, including three mature scarred trees, primarily located in the riparian zone on the western boundary. The remainder of the site has been extensively developed for defence purposes, with a number of low rise buildings, parade grounds, and sporting ground. The site is subject to low or no flood hazard.

2.2 Scope of Work

This scope of work is to undertake demolition, heritage salvage, rehabilitation and remediation works on MPW Stage 1, in order to provide unencumbered access for the subsequent works package/s. It includes the following:

- establishment of construction site facilities and management of site security
- utility services and stormwater identification, termination and removal
- heritage salvage and relocation works
- demolition of existing infrastructure and buildings
- remediation/ management of identified contaminated areas
- rehabilitation of the Former Dust Bowl Fire Training Area (Dust Bowl)
- PFAS affected catchment capping and lining
- installation of environmental management measures.

The Early Works (MPW Site) Footprint is shown in Figure 2.

2.2.1 Plant and Personnel

Table 1 contains the expected plant and personal requirements for the project at the peak of works.

Table 1 - Expected Plant and Personnel Requirements

Plant/Personnel	Quantity (up to)
20-45 Tonne (T) Excavators	14
25-40TOff-Road Articulated Dump Trucks	6
On Road Trucks	2
25T Bulldozer	2
12-20T Smooth Drum and/or Pad Foot Roller	2

Plant/Personnel	Quantity (up to)
Diesel Silenced Generators	2
10- 20m Elevated Work Platforms	2
25T Front End Loader	1
3T Telehandler	1
Caterpillar Challenger 85E Tractor with High Energy Impact Compaction (HEIC) attachment	1
Skilled Labourers	5
The Contractor Management Staff	10
Consultants	10
Sub-contractors	6

2.3 Overall Program

Table 2 - Overall Early Works Program

Activity	2016		2017				2018				2019				2020			
	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr3	Qtr 4	Qtr 1	Qtr 2	Qtr3	Qtr 4	Qtr 1	Qtr 2	Qtr3	Qtr 4	Qtr 1	Qtr 2	Qtr3	Qtr 4
Establishment of construction site facilities and management of site security	X	X	X	X														
Utility services and stormwater identification, removal and backfill	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Heritage salvage and relocation works	X	X	X	X	X	X							X	X	X	X	X	X
Demolition of existing infrastructure and buildings			X	X	X	X												

Remediation of identified contaminated areas			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MPW Main Compound construction											X	X	X	X			
PFAS affected catchment capping and lining											X	X	X	X	X	X	X
Level make good and handover				X	X	X	X	X	X	X	X	X	X	X			
'Care-taker' period												X	X	X	X	X	X

3 CONSTRUCTION ACTIVITIES

3.1 Work Hours

As per CoC D5, Early Works shall generally be undertaken during the following standard construction hours:

- 7:00am to 6:00pm Mondays to Fridays, inclusive
- 8:00am to 1:00pm Saturdays
- at no time on Sundays or public holidays.

As per CoC D6, activities resulting in impulsive or tonal noise emissions shall only be undertaken:

- between the hours of 8:00 am to 5:00 pm Monday to Friday
- between the hours of 8:00 am to 1:00 pm Saturday
- in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block
- 'continuous' includes any period during which there is less than a one-hour respite between ceasing and recommencing any of the work.

As per CoC D7, notwithstanding the above (CoC D5 and D6), works may be undertaken outside the hours specified under those conditions in the following circumstances:

- Construction works that cause $L_{Aeq\ (15\ minute)}$ noise levels that are:
  - no more than 5 dB above rating background level at any residence in accordance with the *Interim Construction Noise Guideline (DECC, 2009); and*
  - No more than the noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive landuses; or
  - For the delivery of materials required by the police or other authorities for safety reasons; or
  - Where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or
  - Construction works approved through an Out-Of-Hours Work Protocol (refer to Noise and Vibration Management Sub-Plan); or
  - Identified works approved by the Secretary.

3.2 Establishment of Construction Site Facilities and Management of Site Security

The Contractor has established site compounds and indicative locations are shown in Figure 2. To minimise environmental impact these facilities are:

- where required, located at least 40 m away from drainage lines and waterways and in flat areas of high topography with minimal upstream catchment or have sufficient erosion and sediment controls to divert water around the site
- have suitable all-weather surfacing on car parks and main access roads to minimise the generation of turbid runoff and mud tracking to public roads
- located to minimise disturbance to significant vegetation and heritage sites.

As required, additional controls will be installed in accordance with this CEMP and Revised of Environmental Mitigation Measures (REMMs) 9A and 10G, located in Appendix B.

LEGEND

- MPW site
- MAUW compound
- Main compound
- Additional compound
- Site access via Chatham Avenue
- Stockpile Area (ACM)*
- Stockpile exclusion area
- Access road
- Existing road

Other materials, such a site-won material and ENM, may also be stockpiled in this area. Materials associated with unexpected finds will be stockpiled adjacent to the find.

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Aerial imagery supplied by Nearmap (Jan, 2020)

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Figure 2: Early Works Site Plan

3.3 Utility Services and Stormwater Identification, Protection, Relocation and/or Termination

As per CoC B16, utilities, services and other infrastructure potentially affected by construction and operation have been identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the Early Works is being undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required.

3.4 Heritage Salvage and Relocation Works

3.4.1 European Heritage

The European Heritage works involves the following:

- careful demolition of the concrete floor of the Cullen Universal Steel Truss (CUST) under the direction and attendance of a heritage representative in order to identify if the earthen floor is intact and if there is potential for relics and artefacts
- where no features/potential for relics of local, State or Commonwealth significance are identified, the former earthen floor is subject to archival recording by a heritage representative
- where features/potential for relics of local, State or Commonwealth significance are identified an archaeological salvage excavation must be conducted in accordance with a research design prepared by the heritage representative prior to the commencement of demolition
- archival recording of the Moorebank Heritage Sites/Locations (MH), MH6 Commemorative Garden by the heritage representative and relocation of the plants and plaques at the direction of the heritage representative. The remainder of the commemorative garden is then to be demolished at the direction of the heritage representative
- careful removal of sections of the Cullen Steel Truss (CUST) and RAAF STRARCH Hanger for future interpretative use onsite
- archival recording of the B99 Transport Compound Workshop by a heritage representative then demolition at the direction of the heritage representative
- heritage salvage of archaeological deposits at Moorebank Heritage Pad Sites/Locations (MHPAD); MHPAD1 and MHPAD2 in accordance with an archaeological salvage program prepared by the heritage representative
- archival recording of the remnants of the RAE chapel by the heritage representative then demolition at the direction of the heritage representative.

Figure 3 shows the location of European Heritage sites.

Figure 3 - Location of European Heritage Sites

3.4.2 Aboriginal Heritage

The Aboriginal heritage works involves the following:

- heritage salvage works of Moorebank Aboriginal Heritage Artefact Sites (MA), MA1, MA2, MA3, MA4, MA5, MA9 and MA14 in accordance with detailed salvage strategy and investigation program prepared by the heritage representative in consultation with the relevant stakeholders and authorities
- any further archaeological excavation works identified and recommended by the results of the salvage works and archaeological investigation program.
- Any further archaeological excavation works recommended by the results of the non-Aboriginal archaeological investigation program affecting non-Aboriginal sites MHPAD1 and MHPAD2.
- Relocate the Aboriginal scarred tree known as MA8 in accordance with the mitigation measures included within the Aboriginal heritage report and the approved relocation methodology prepared by the heritage representative.

Figure 4 shows the location of Aboriginal Heritage sites associated with the project.

Figure 4 - Location of Aboriginal Heritage Sites

3.5 Demolition of Existing Infrastructure and Buildings

The Contractor will demolish identified existing hardstands, pavements and associated civil infrastructure, utility services and building structures that occur within the Early Works (MPW Site) boundary (Figure 2).

The works involve:

- removal of hazardous materials in contaminated buildings including ACM
- demolition of the building structures including single and multi-storey residential buildings, office buildings of various sizes and open and enclosed warehouse buildings. The buildings are required to be demolished to the underside of the lowest floor slab
- demolition of the civil infrastructure including all existing roads, hardstands and external pavements to 500mm below finished ground level
- demolition and removal of underground utility services.

Hazardous materials will be managed and disposed of as detailed in Appendix D - Hazardous and Contaminated Materials Management Strategy and Waste Management Strategy.

General demolition waste will be removed from site except for materials that can be salvaged or deemed as suitable to remain on site for reuse.

The Contractor will ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001: The Demolition of Structures*.

Figure 5 shows the location of the buildings and identified services to be demolished.

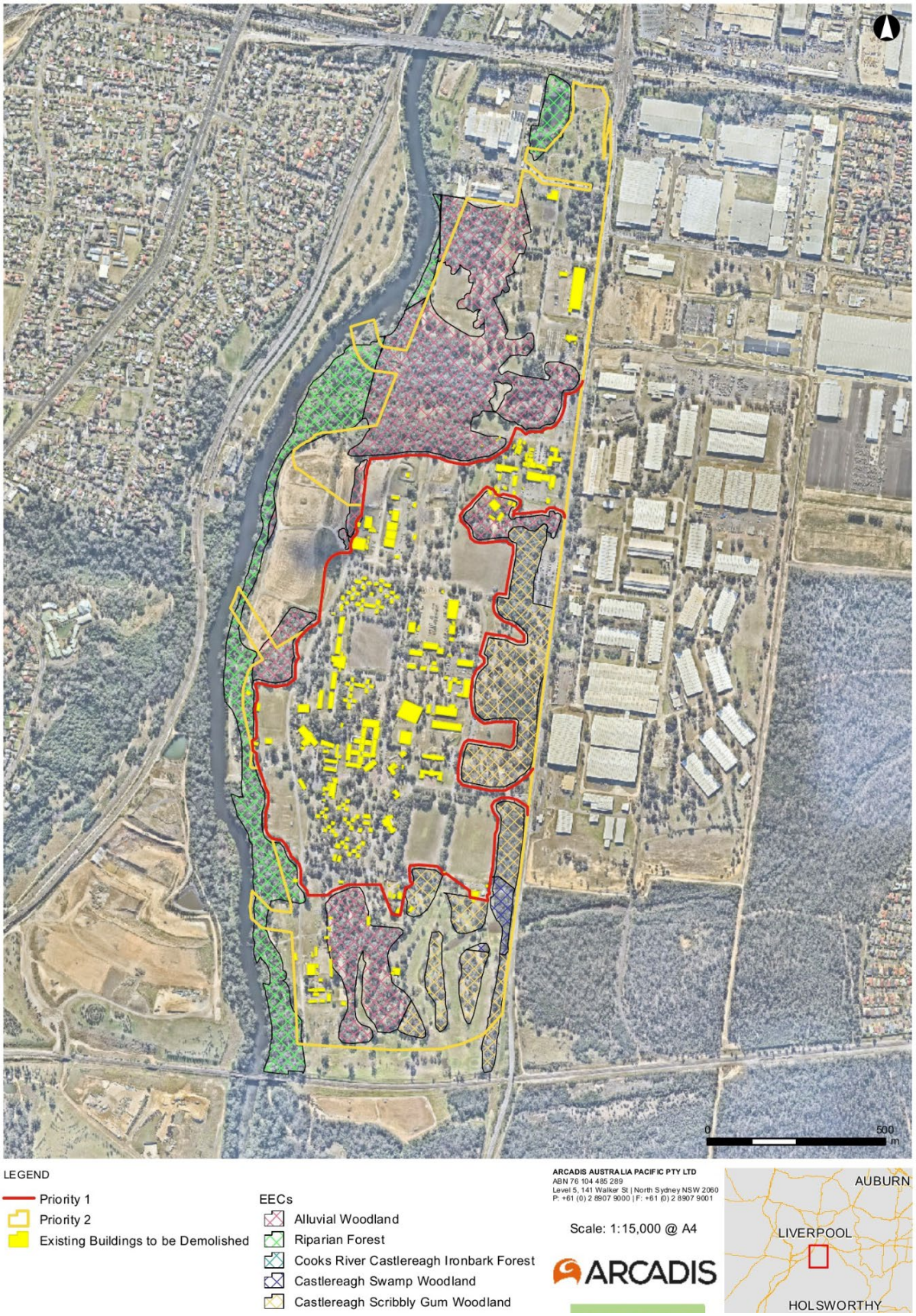


Figure 5 - Locations of Buildings to be demolished

3.6 Remediation of Identified Contaminated Areas

The extent of the remediation works involves:

- removal and disposal of underground storage tanks (UST) and associated infrastructure in accordance with UPSS Technical Note: Decommissioning, Abandonment and Removal of UPSS (DECCW, 2010), (ground validation by others) and backfilling of remediated excavations
- remediation of contaminated soils and hotspots, including areas known to contain asbestos, and removal of Unexploded Ordnance (UXO) and Explosive Ordnance Waste (EOW)
- remediation of contaminated stockpiles and anthropogenic fill waste/dump pits.

Figure 6 shows the approximate locations of the remediation areas.

The depth of the remediation excavations vary from 0.2-3m below ground surface. The groundwater at the site varies from 3-13m below ground surface, with the shallowest depths closest to the Georges River.

One excavation area exists close to the Georges River however the depth of this excavation is likely to be no greater than 2m. Most of the site exhibits groundwater depths of greater than 7m, where the majority of the Contractor's remediation areas are located and hence it is unlikely that groundwater will be encountered during excavations, excluding the PFAS and PFOS remediation works. Figure 6 also shows the riparian zone along the Georges River and that works will not impact on the riparian zone.

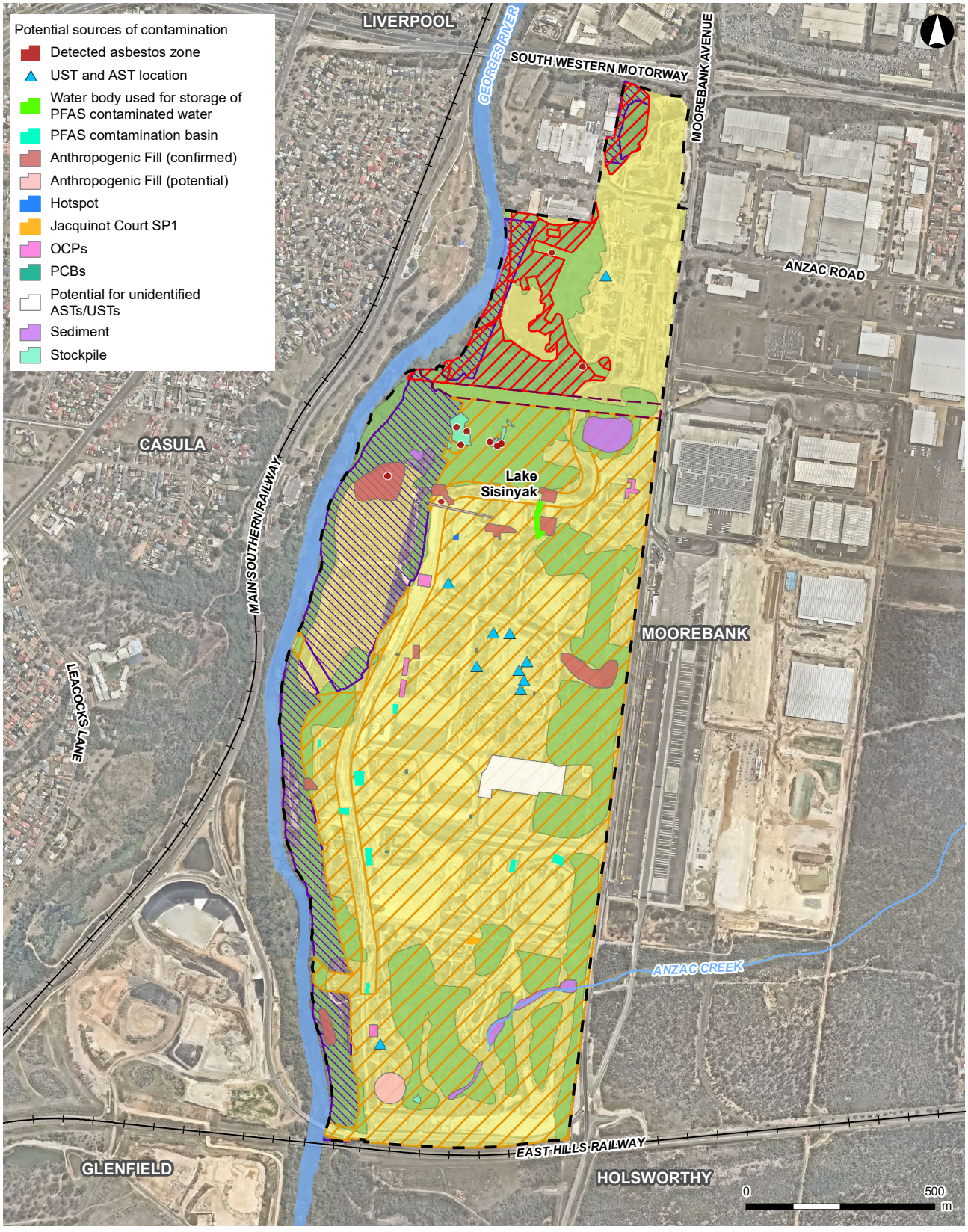
Contaminated Materials will be managed and disposed of as detailed in Appendix D – Hazardous Waste and Contaminated Materials Management Strategy and Waste Management Strategy.

The site is to be remediated in accordance with:

- The approved Remediation Action Plan (RAP) (Golder, 2016)
- State Environmental Planning Policy No. 55 – Remediation of Land
- The guidelines in force under the *Contaminated Land Management Act*, 1997
- The PFAS Management Plan (CARAS, 2018)
- The Technical Memorandum – Capping of Sediment Basin Catchments and Lining of Swales and Basins Impacted with PFAS Containing Stormwater[1] (EP Risk, 2018).

The location of the relocated early works compound (MPW Main Compound) has been validated as clear of any contamination. This will negate the need for any further compound relocations as well as minimising the rework and double handling of potentially contaminated soils. The Site Auditor will provide an interim audit statement within one month of the commencement of compound construction.

[1] Report EP0745.017



LEGEND

- MPW site
- Early Works area
- Early Works exclusion area
- Native vegetation
- BA 341 Biobanking
- Contamination remediation area
- Existing railway
- Watercourse

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Figure 6: Contamination sources and remediation area

3.6.1 PFAS Remediation

PFAS contamination has been identified in a number of locations on site as part of assessments associated with the PFAS Management Plan (CARAS, 2018) and Technical Memorandum (EP Risk, 2018). These contaminated soils and USTs have been identified as leachable under neutral pH conditions and at risk of being disturbed due to construction activities occurring as part of Early Works. These risks create potential exposure pathways for PFAS to leach out of the soil into stormwater during rainfall events.

In addition to the PFAS hotspots detailed below, PFAS remediation will be undertaken within surface water catchments of known PFAS contamination. The following hotspots have been identified as containing PFAS soil impacts and will undergo remediation during Early Works (see Figure 6):

- UST – 0367/S_UST_008
- UST – Waste Oil_3767S_UST_003
- UST – Waste Oil_UST_009
- UST – 03767S_UST_006
- Interceptor Pit SWSS0285
- UST – Waste Oil_UST_005
- UST – Waste Oil_03767_UST_010.

The PFAS contaminated areas outlined above will be remediated in accordance with the RAP (Golder, 2016) and the PFAS Management Plan (CARAS, 2018).

The presence of leachable PFAS in soils and PFAS concentrations in surface water within some sediment basin catchments trigger the requirement for additional management and a risk-based approach applied. In order to mitigate the direct contact of surface water with potential PFAS impacted shallow soils, a capping and lining management approach has been proposed to reduce the potential of PFAS impacted stormwater runoff. This management approach requires the following works to be undertaken:

- importation and placement of up to 120,000 m^3 of clean fill within sediment basin catchment boundaries (see Appendix F)
- temporary stockpiling of clean fill (if required) prior to placement of material
- capping of catchments contaminated with PFAS, with a minimum of 500 mm clean fill
- lining of the swales and basins within the PFAS impacted catchments with impermeable, flexible and durable liner such as linear low-density polyethylene (LLDPE) or high-density polyethylene (HDPE)
- lining and utilisation of waterbodies to store PFAS contaminated water
- rationalisation of surface water basins for efficient management of stormwater runoff.

PFAS contaminated groundwater occurs within two source areas, the former earthmoving and excavation training area (Dust Bowl) and Former Fire Fighting Training Area (FFTA). These areas require assessment and management but are separate to the current scope of Early Works. These areas are shown on Figure 7 and Figure 8.

Additional PFAS management procedures apply to spoil originating from the western portion of the site that have a potential to contain PFAS and Perfluoro octane Sulfonic Acid (PFOA) compounds above the remediation guidelines. The areas indicated by shading in Figure 7 and Figure 8 below, are to be managed in accordance with the PFAS Management Plan including measures for separate material tracking and compliance testing, sediment erosion and runoff controls and testing and OHS controls for workers in those locations.

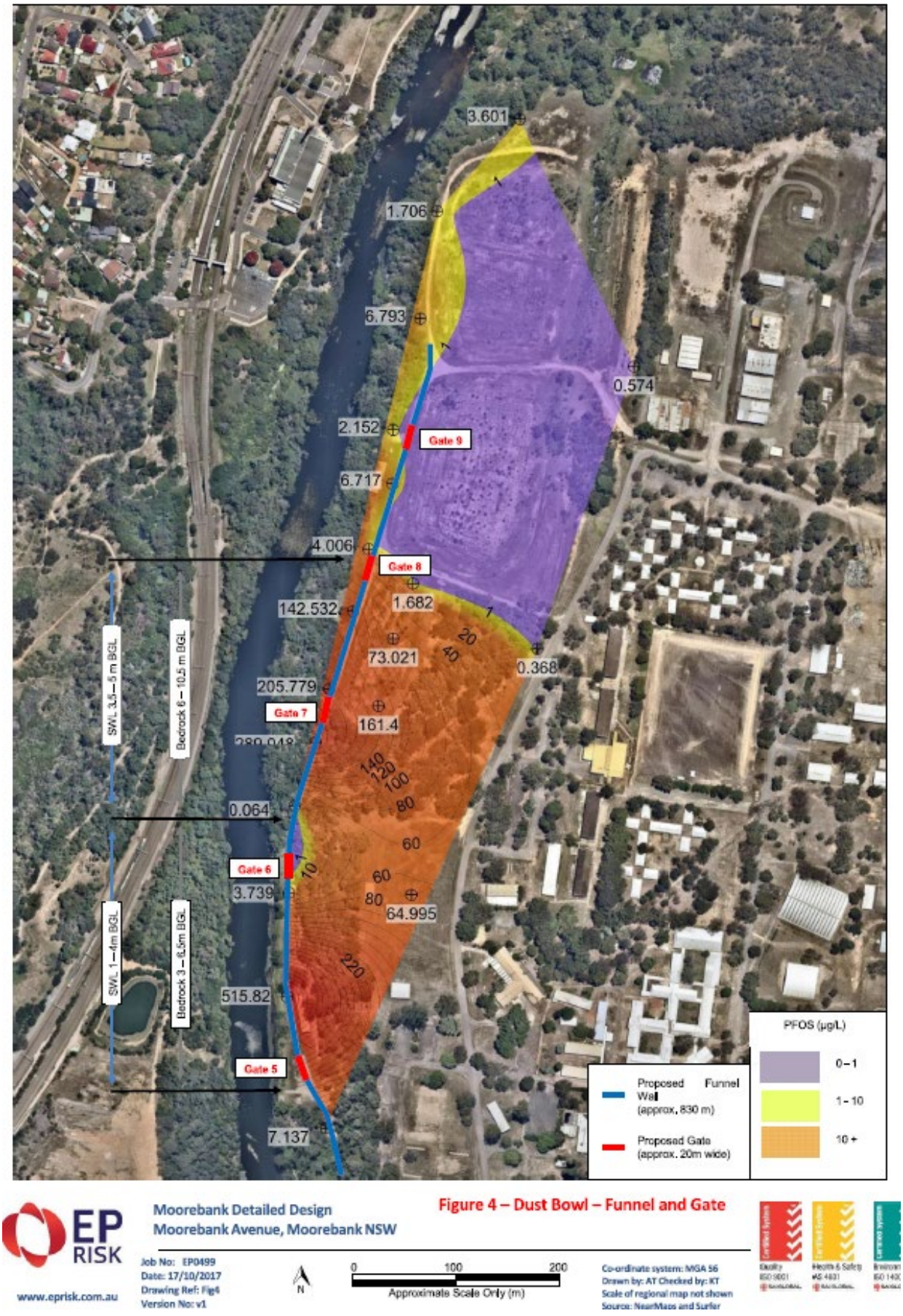
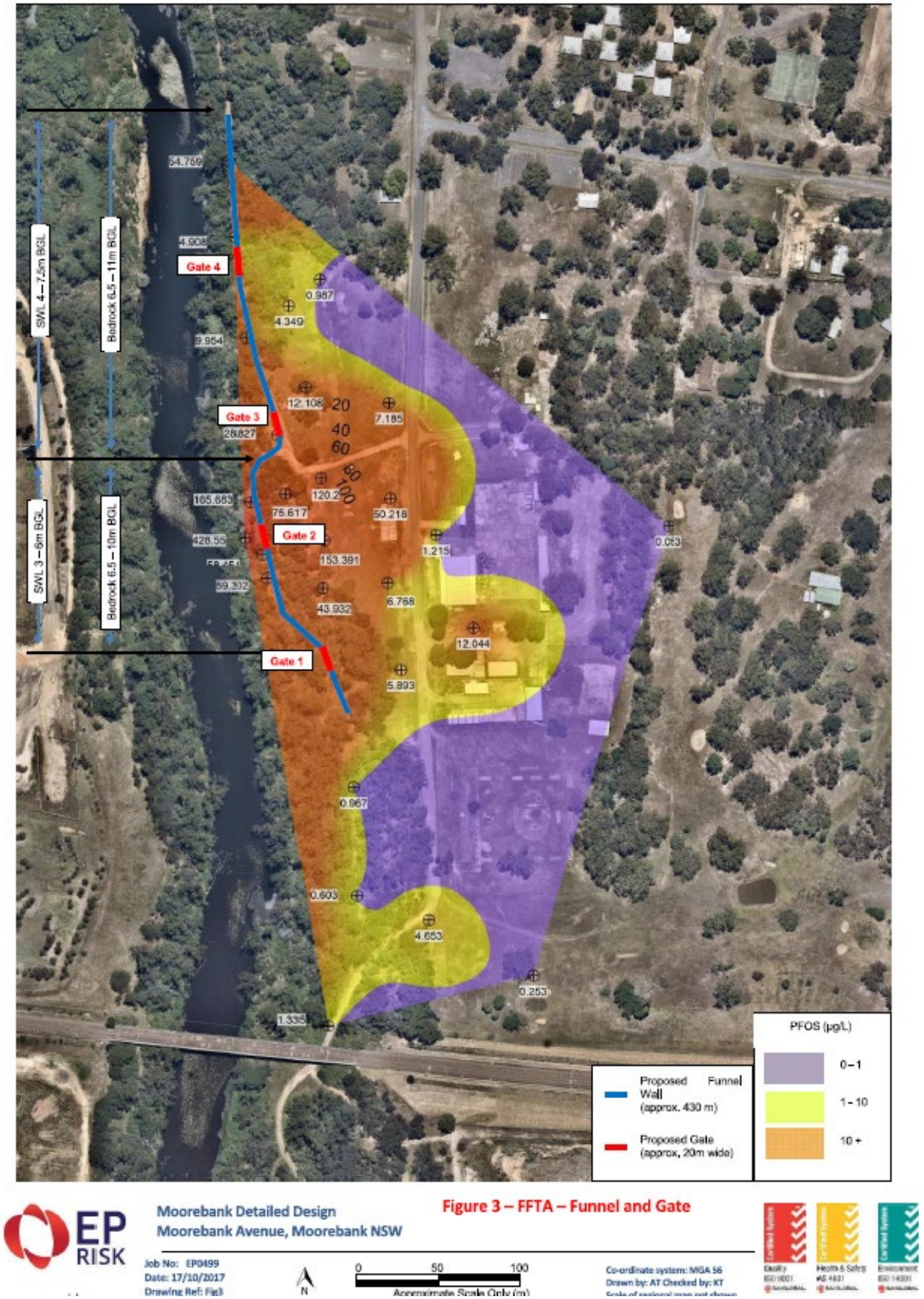


Figure 7 – PFAS Management Area (North)



EP RISK

Moorebank Detailed Design
Moorebank Avenue, Moorebank NSW

Figure 3 – FFTA – Funnel and Gate

Job No: EP0499
Date: 17/10/2017
Drawing Ref: Fig3

N

0 50 100
Approximate Scale Only (m)

Co-ordinate system: MGA 56
Drawn by: AT Checked by: KT

Figure 8 – PFAS Management Area (South)

3.7 Installation of Environmental Management Measures

The environmental management measures detailed in the CEMP and sub-plans will be implemented as a part of Early Works and will include (but not be limited to):

- long-term erosion and sediment (ERSED) control measures as per the Construction Soil and Water Management Sub-Plan (Appendix N). ERSED measures include:
  - sediment basins
  - catch drains
  - clean water diversion
  - swale construction
  - a separation layer to maintain clean surface water runoff separation from PFAS impacted soils
  - rationalisation and consolidation of surface water sediment basins
- weed control as detailed in the Construction Flora and Fauna Management Sub-Plan (CFFMP)
- establishment of environmental protection exclusion zones as detailed in the CFFMP (Appendix L)
- dust control measures as per the Construction Air Quality Management Sub-Plan (Appendix M) including:
  - the use of water carts for dust suppression
  - sign-posted speed limits
  - polymer sprays
  - Rumble grids and/ or wheel wash.

4 PLANNING AND LEGISLATIVE REQUIREMENTS

4.1 Environmental Obligations

All construction personnel working on the Project have the following obligations:

- comply with all environmental laws including authorisations, license and approvals required by any government agency for the lawful use of the site to carrying out of contracted work
- not contaminate or cause any pollution on or from the site due to the undertaking
- not use, keep or handle on the site any dangerous goods or hazardous material except as may be required to carry out contracted work
- operate in a proper and efficient manner and maintain in good working order, all plant used in connection with the carrying out the contracted work
- install and maintain pollution control equipment required by an environmental law to be installed and operated in connection with the site undertaking
- provide to the client's representative on demand any information held or controlled by the company required by the client relating to any:
  - contamination
  - environmental aspect, affecting the site at any time
- allow SIMTA and its representatives, agents and consultants access to the site to carry out environmental audits, assessments and investigations of the site
- promptly comply with any direction from the client's representative to implement any recommendation of an environmental audit, assessment, investigation or report in respect of the site and/or undertaking (whether or not such recommendation is required in order to comply with an environmental law)
- promptly notify the client in the event that:
  - it becomes aware, or as soon as a complaint is made, of a breach or alleged breach of an environmental law in respect of the site and/or any activity carried out on the site
  - an environmental notice is served on the site
  - the site becomes contaminated in any way
  - any pollution is emitted or discharged on or from the site
  - the company is in breach of any obligations under the contract
- remediate any contamination of the site if caused by the undertaking
- clean up, manage or abate any pollution occurring on and/or from the site
- remedy any breach of an environmental law that occurs on or affects the site as soon as it occurs (including by restoring the site to a state as close as practicable to the state it was in prior to that alleged breach)
- comply with every environmental notice relating to the site or issued in consequence of contracted work
- remedy any alleged breach of this document
- propose measures to reduce adverse impact on the environment such as:
  - ensure that all services are connected in the correct manner to the site accommodation, toilets and storage compounds and that rubbish disposal bins are available
  - private vehicle access is to be restricted
  - protection of vegetation that is not scheduled to be removed for early works
  - dust control using water carts or existing infrastructure
  - control of discharges from within the site.

4.2 Legislation, Standards and Codes of Practice

The Contractor commits to comply with all relevant sections of legislation, policies, guidelines and standards applicable to the project and those as specified in CoCs. These are listed below with their reference to the CoCs:

- AS/NZS ISO 19011:2014 – Guidelines for Auditing Management Systems (CoC A2)
- *Australian Standard AS 2601:2001: The Demolition of Structures* (CoC B1)
- State Environmental Planning Policy No. 55 – Remediation of Land; (CoC B3)
- *Contaminated Land Management Act,* 1997 (CoC B3)
- Section 120 of the *Protection of the Environment Operations Act,* 1997 (CoC B4)
- *Water Management Act,* 2000 (CoC B5)
- Environment Protection Manual for Authorised Officers: Bunding and Spill Management, Technical Bulletin (Environment Protection Authority, 1997) (CoC B10)
- Waste Classification Guidelines (CoC B14 Department of Environment, Climate Change and Water 2009)
- AS ISO 10002-2006 Customer satisfaction – Guidelines for complaints handling in organisations (ISO 10002:2004, MOD) (CoC C3)
- Managing Urban Stormwater -Soils and Construction Vols 1 and 2, 4th Edition (Landcom, 2004) (CoC D3)
- Interim Construction Noise Guideline (DECC, 2009) (CoC D7 and D21)
- Assessing Vibration: a Technical Guide (DECC 2006) (CoC D8)
- German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (CoC D8)
- NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014) (CoC D17)
- *Fisheries Management Act,* 1994 (CoC D19)
- NSW DPI Policy and Guidelines for Fish Habitat Conservation and Management (2013) (CoC D19)
- Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004). (CoC D20)
- UPSS Technical Note: Decommissioning, Abandonment and Removal of UPSS (DECCW, 2010).

While it is not envisaged that any of the Early Works will involve the need for a Road Occupancy Licence, as all works and loading unloading of plant and materials will occur within site boundaries, should a Road Occupancy Licence be required, an application will be sought.

Key legislation, objectives, application and relevance for the project are further listed and discussed in Table 3.

Table 3 - Key Legislation, Objectives, Application and Relevance to the Project

Legislation	Objectives & Application	Relevance to the Project

Protection of the Environmental Operations Act 1997 (POEO Act)	Objectives of the Act are:
	• To protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development;
	• To provide increased opportunities for public involvement and participation in environment protection;
	• To ensure that the community has access to relevant and meaningful information about pollution;
	• To reduce risks to human health and prevent the degradation of the environment by the use of mechanisms that promote the following:
	  ○ Pollution prevention and cleaner production,
	  ○ The reduction to harmless levels of the discharge of substances likely to cause harm to the environment,
	  ○ The elimination of harmful wastes,
	  ○ The reduction in the use of materials and the re-use, recovery or recycling of materials,
	  ○ The making of progressive environmental improvements, including the reduction of pollution at source,
	  ○ The monitoring and reporting of environmental quality on a regular basis.
	• To rationalise, simplify and strengthen the regulatory framework for environment protection;
	• To improve the efficiency of administration of the environment protection legislation; and
	• To assist in the achievement of the objectives of the *Waste Avoidance and Resource Recovery Act* 2001.
		There is a duty to report pollution incidents under section 148 of the POEO Act.
		Schedule 1 of the POEO defines activities that require an Environmental Protection Licence.
		The POEO Act classifies environmental offences and penalties.

Legislation	Objectives & Application	Relevance to the Project
Protection of the Environmental Operations (Clean Air) Regulation 2010	This Regulation: • Provides for the certification of domestic solid fuel heaters; • Controls burning generally by imposing an obligation to prevent or minimise emissions, by prohibiting the burning of certain articles and requiring approval for certain fires/incinerators; • Requires the fitting of anti-pollution devices to certain motor vehicles and prescribes an offence of emitting excessive air impurities; • Imposes certain requirements and standards on the supply of petrol; • Prescribes standards for certain groups of plant and premises to regulate industry's air impurity emissions; and • Imposes requirements on the control, storage and transport of volatile organic liquids.	Regulates atmospheric pollutants including dust and odour onsite.
Protection of the Environmental Operations (Waste) Regulation 2005	This Regulation: • Provides for the contributions to be paid by the occupiers of scheduled waste facilities for each tonne of waste received at the facility or generated in a particular area; • Exempts certain occupiers or types of waste from these contributions; • Allows rebates to be claimed in relation to certain types of waste; • Provides for certain reporting and record-keeping requirements in relation to scheduled waste facilities and scheduled landfill sites; • Exempts certain waste streams from the full waste tracking and recordkeeping requirements; • Makes requirements relating to the transport of waste to interstate destinations; • Makes special requirements including reporting requirements relating to asbestos waste as well as prohibiting the re-use and recycling of asbestos waste; • Imposes requirements on brand owners and retailers to recover, re-use and recycle packaging;	Regulates management and disposal of waste onsite.

Legislation	Objectives & Application	Relevance to the Project
	• Allows the EPA to issue exemptions from certain provisions of the Act and Regulations; • Allows the EPA to approve the immobilisation of contaminants in waste; and • Makes it an offence to apply, or to cause or permit the application of, residue waste to land that is used for the purpose of growing vegetation, subject to any exemptions.	
Protection of the Environmental Operations (Noise Control) Regulation 2008 (NSW)	This Regulation: • Provides for the sale and use of various motor vehicle and motor vehicle accessories devices such as horns and alarms; • Regulates noise emitted as a result of the use of marine vessels; • Prohibits the selling of certain articles that emit noise above prescribed levels, such as lawn mowers, edge-cutters, string trimmers and brush cutters; • Requires labelling of certain other noise emitting articles such as chainsaws, air conditioners, air compressors, pavement breakers, garbage compactors; and • Provides for the inspection and testing of certain articles.	Relates to noise generating activities during the works.
Fire Brigades Act 1989	This Act applies to; • Land-based hazardous material incidents (and to any fires that may result from them) that occur anywhere in the State except on State waters, as defined in the *Marine Pollution Act* 2012; and • A hazardous material incident that occurs in or on a building, bridge or other structure or on any body of water (not being part of State waters) is taken to be land-based.	Applies to emergency incidents and accidents involving hazardous materials.
Local Government Act 1993	The objectives of this Act are: • To provide the legal framework for an effective, efficient, environmentally responsible and open system of local government in New South Wales;	Referenced and assessed during approval process.

Legislation	Objectives & Application	Relevance to the Project
	• To regulate the relationships between the people and bodies comprising the system of local government in New South Wales; and • To encourage and assist the effective participation of local communities in the affairs of local government.	
EPBC Act	The objectives of this Act are: • To provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance; • To promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources; • To promote the conservation of biodiversity; • To provide for the protection and conservation of heritage; • To promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples; • To assist in the co-operative implementation of Australia's international environmental responsibilities; • To recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and • To promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.	Approval (No. 2011/6086) under the EPBC Act, is applicable to the project.
Contaminated Land Management Act 1997	The objectives of this Act are: • Establish a process for investigating and (where appropriate) remediating land that the EPA considers to be contaminated significantly enough to require regulation under Division 2 of Part 3; • To set out accountabilities for managing contamination if the EPA considers the contamination is significant enough to require regulation under Division 2 of Part 3;	Contamination on site must be assessed and managed in accordance with this Act.

Legislation	Objectives & Application	Relevance to the Project
	• To set out the role of the EPA in the assessment of contamination and the supervision of the investigation and management of contaminated sites; • To provide for the accreditation of site auditors of contaminated land to ensure appropriate standards of auditing in the management of contaminated land; and • To ensure that contaminated land is managed with regard to the principles of ecologically sustainable development.	
Environmental Planning and Assessment Act 1979 (EP&A Act)	The objectives of this Act are to encourage: • The proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment; • The promotion and co-ordination of the orderly and economic use and development of land, (iii) the protection, provision and co-ordination of communication and utility services, (iv) the provision of land for public purposes, (v) the provision and co-ordination of community services and facilities, and (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and (vii) ecologically sustainable development, and (viii) the provision and maintenance of affordable housing, and to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and • To provide increased opportunity for public involvement and participation in environmental planning and assessment.	Planning approval for the project is regulated by the DPIE under the EP&A Act.

Legislation	Objectives & Application	Relevance to the Project
Biosecurity Act 2015 (*Noxious Weeds Act* 1993 repealed)	The primary objective of this Act is: • To provide a framework for the prevention, elimination and minimisation of biosecurity risks posed by biosecurity matter, dealing with biosecurity matter, carriers and potential carriers, and other activities that involve biosecurity matter, carriers or potential carriers. The other objectives are: • To promote biosecurity as a shared responsibility between government, industry and communities; • To provide a framework for the timely and effective management of the following: – Pests, diseases, contaminants and other biosecurity matter that are economically significant for primary production industries, – Threats to terrestrial and aquatic environments arising from pests, diseases, contaminants and other biosecurity matter, – Public health and safety risks arising from contaminants, non-indigenous animals, bees, weeds and other biosecurity matter known to contribute to human health problems, – Pests, diseases, contaminants and other biosecurity matter that may have an adverse effect on community activities and infrastructure, • To provide a framework for risk-based decision-making in relation to biosecurity; • To give effect to intergovernmental biosecurity agreements to which the State is a party; and • To provide the means by which biosecurity requirements in other jurisdictions can be met, so as to maintain market access for industry.	The *Biosecurity Act* 2015 establishes a general duty requiring a person who is dealing with a biosecurity matter to ensure that, so far as is reasonably practicable the biosecurity risk is prevented, eliminated or minimised. The Project will be managed to avoid biosecurity risks in accordance with this Act and the CFFMP.
Biodiversity Conservation Act 2016	The objectives of this Act are: • To conserve biological diversity and promote ecologically sustainable development; • To prevent the extinction and promote the recovery of threatened species, populations and ecological communities;	*Biodiversity Conservation Act*, 2016 requires any threatened plant or animal species, populations or ecological communities associated with a proposed development to be identified and that acceptable recovery

Legislation	Objectives & Application	Relevance to the Project
	• To protect the critical habitat of those threatened species, populations and ecological communities that are endangered; • To eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities; • To ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed; and • To encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management.	and management strategies are implemented if a likely significant impact would occur. The Project will be managed to avoid impacts on threatened species and endangered ecological communities, as necessary.
Waste Avoidance and Resource Recovery Act 2001	The objectives of this Act are: • To encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development; • To ensure that resource management options are considered against a hierarchy of the following order: (i) Avoidance of unnecessary resource consumption (ii) Resource recovery (including reuse, reprocessing, recycling and energy recovery) (iii) Disposal • To provide for the continual reduction in waste generation; • To minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste; • To ensure that industry shares with the community the responsibility for reducing and dealing with waste; • To ensure the efficient funding of waste and resource management planning, programs and service delivery; • To achieve integrated waste and resource management planning, programs and service delivery on a State-wide basis;	Establishes the waste hierarchy. Promotes waste avoidance and resource recovery by developing waste avoidance and resource recovery strategies. Provides requirements for waste avoidance and resource recovery which are addressed in the Hazardous and Contaminated Materials Management Strategy and Waste Management Strategy (Appendix D).

Legislation	Objectives & Application	Relevance to the Project
	• To assist in the achievement of the objectives of the POEO Act	
Heritage Act 1977	The objectives of this Act are: • To promote an understanding of the State's heritage; • To encourage the conservation of the State's heritage; • To provide for the identification and registration of items of State heritage significance; • To provide for the interim protection of items of State heritage significance; • To encourage the adaptive reuse of items of State heritage significance; • To constitute the Heritage Council of New South Wales and confer on it functions relating to the State's heritage; and • To assist owners with the conservation of items of State heritage significance.	Approval must be gained from the Heritage Council when making changes to a heritage place listed on the State Heritage Register, or when excavating any land in NSW where an archaeological relic might be disturbed. The Construction Heritage Management Sub-Plan identifies controls and mitigation measures.
National Parks and Wildlife Act 1974	The objectives of this Act are: • The conservation of nature, including, but not limited to, the conservation of: (i) Habitat, ecosystems and ecosystem processes, and (ii) Biological diversity at the community, species and genetic levels, and (iii) Landforms of significance, including geological features and processes, and (iv) Landscapes and natural features of significance including wilderness and wild rivers. • The conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including, but not limited to: (i) Places, objects and features of significance to Aboriginal people, and	Aboriginal Heritage sites are managed under this Act by the Office of Environment and Heritage (OEH). Unexpected finds of heritage require stop work proceedings and approval sought from OEH to disturb site. The Construction Heritage Management Plan identifies controls and mitigation measures.

Legislation	Objectives & Application	Relevance to the Project
	(ii) Places of social value to the people of New South Wales, and (iii) Places of historic, architectural or scientific significance. • Fostering public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation; • Providing for the management of land reserved under this Act in accordance with the management principles applicable for each type of reservation; and • The objects of this Act are to be achieved by applying the principles of ecologically sustainable development.	

Legislation	Objectives & Application	Relevance to the Project

Radiation Control Act 1990	The objectives of this Act are:
	• To secure the protection of persons and the environment from exposure to ionising and harmful non-ionising radiation to the maximum extent that is reasonably practicable, taking into account social and economic factors and recognising the need for the use of radiation for beneficial purposes;
	• To protect security enhanced sources from misuse that may result in harm to people or the environment;
	• To promote the radiation protection principles;
	• The radiation protection principles are as follows:
	  • Justification of a practice by assessing that the benefits of the practice involving exposure to ionising radiation outweigh any detriment,
	  • Optimisation of protection by ensuring that each of the following is kept as low as reasonably achievable taking into account economic and social factors:
	  ○ (i) The magnitude of individual doses of ionising radiation,
	  ○ (ii) The number of people exposed to ionising radiation,
	  ○ (iii) The likelihood of exposure to ionising radiation,
	  • Dose and risk limitation by setting dose limits or imposing other measures so that the health risks to any person exposed to ionising radiation is kept below levels that are generally considered to be unacceptable;
	• A person is to take the radiation protection principles into consideration when exercising functions under this Act or under a licence;
	• To promote the radiation protection principles;
	• The radiation protection principles are as follows:
	  • *Justification of a practice* by assessing that the benefits of the practice involving exposure to ionising radiation outweigh any detriment,
	  • *Optimisation of protection* by ensuring that each of the following is kept as low as reasonably achievable taking into account economic and social factors:
		Is used to assess the two buildings that are known to have contained radioactive materials to ensure these buildings can be safely demolished.

Legislation	Objectives & Application	Relevance to the Project
	• (i) The magnitude of individual doses of ionising radiation, • (ii) The number of people exposed to ionising radiation, • (iii) The likelihood of exposure to ionising radiation. • *Dose and risk limitation* by setting dose limits or imposing other measures so that the health risks to any person exposed to ionising radiation is kept below levels that are generally considered to be unacceptable; and • A person is to take the radiation protection principles into consideration when exercising functions under this Act or under a license.	

Legislation	Objectives & Application	Relevance to the Project
Radiation Control Regulation 2013	This Regulation: • Provides for exemptions from radiation management and radiation user licensing requirements; • Prescribes the activities of consulting radiation experts and radiation security assessors that must not be carried out unless the expert or assessor is accredited; • Prescribes certain fees for the purposes of the Radiation Control Act 1990 (the Act) and this Regulation, and (d) prescribes additional matters that are to be dealt with in security plans; • Prescribes the security measures that a person responsible for a security enhanced source is required to ensure that the source complies with; • Imposes a duty to report breaches of security measures; • Prescribes certain matters in relation to identity checking requirements; • Provides for radiation safety in the workplace, including dose limits and requiring the radiation doses received by persons in the course of their employment to be monitored; • Requires adherence to certain standards where a person is exposed to ionising radiation for scientific or research purposes; • Imposes requirements relating to the safe disposal and transportation of regulated material; • Sets out the procedure for dealing with (including reporting and recording) radiation accidents; • Prohibits commercial cosmetic tanning services (and makes transitional arrangements to continue the existing restrictions on the use of tanning units until the commencement of the prohibition); • Provides for the appointment of radiation safety officers and committees; • Requires the reporting of the loss or theft of regulated material and security enhanced sources; • Requires warning signs to be displayed by the occupier of premises in or on which certain radiation apparatus and radioactive substances are kept;	Works with the two buildings onsite which have been known to contain radioactive substances must be undertaken in accordance with the Radiation Control Regulation 2013.

Legislation	Objectives & Application	Relevance to the Project
	• Provides for the exercise of certain functions of the Environment Protection Authority and the Chairperson of the Authority under the Act by the Director-General of the Department of Trade and Investment, Regional Infrastructure and Services; • Declares certain offences to be penalty notice offences and prescribes the penalty for such offences; • Provides for certain exemptions from compliance and conformance with all and certain specified provisions of the Act and this Regulation; and • Prescribes certain matters in relation to the definitions of radioactive ore, radioactive substance and security enhanced source.	

Legislation	Objectives & Application	Relevance to the Project
Fisheries Management Act 1994	The following objectives must be pursued by the Minister in the administration of this Act and by AFMA in the performance of its functions: • Implementing efficient and cost-effective fisheries management on behalf of the Commonwealth; and ensuring that the exploitation of fisheries resources and the carrying on of any related activities are conducted in a manner consistent with the principles of ecologically sustainable development (which include the exercise of the precautionary principle), in particular the need to have regard to the impact of fishing activities on non-target species and the long term sustainability of the marine environment; • Maximising the net economic returns to the Australian community from the management of Australian fisheries; • Ensuring accountability to the fishing industry and to the Australian community in AFMA's management of fisheries resources; • Achieving government targets in relation to the recovery of the costs of AFMA. In addition to the objectives mentioned in subsection (1), or in section 78 of this Act, the Minister, AFMA and Joint Authorities are to have regard to the objectives of: • Ensuring, through proper conservation and management measures, that the living resources of the AFZ are not endangered by over-exploitation; • Achieving the optimum utilisation of the living resources of the AFZ; • Ensuring that conservation and management measures in the AFZ and the high seas implement Australia's obligations under international agreements that deal with fish stocks; • To the extent that Australia has obligations: (i) Under international law; or (ii) Under the Compliance Agreement or any other international agreement. • In relation to fishing activities by Australian-flagged boats on the high seas that are additional to the obligations referred to in paragraph (c)—ensuring that Australia implements those first-mentioned obligations; but must	As per CoC D19 SIMTA shall prepare and implement a 'Threatened Dragonfly Species Survey Plan' to determine the presence or absence of threatened dragonfly species listed under the *Fisheries Management Act* 1994 on the Georges River, adjacent to the development site. The plan, including survey methodology, shall be prepared in consultation with DPI Fisheries prior to the commencement of Early Works. On implementing the plan, the survey results are to be forwarded onto DPI Fisheries. Should threatened dragonfly species be found at this site, DPI Fisheries should be contacted to agree on possible mitigation measures to avoid impacts in accordance with NSW DPI Policy and Guidelines for Fish Habitat Conservation and Management (2013).

Legislation	Objectives & Application	Relevance to the Project
	ensure, as far as practicable, that measures adopted in pursuit of those objectives must not be inconsistent with the preservation, conservation and protection of all species of whales.	
Water Management Act 2000	The objectives of this Act are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations and, in particular: • To apply the principles of ecologically sustainable development; • To protect, enhance and restore water sources, their associated ecosystems, ecological processes and biological diversity and their water quality; • To recognise and foster the significant social and economic benefits to the State that result from the sustainable and efficient use of water, including: (i) Benefits to the environment, (ii) Benefits to urban communities, agriculture, fisheries, industry and recreation, (iii) Benefits to culture and heritage, (iv) Benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water. • To recognise the role of the community, as a partner with government, in resolving issues relating to the management of water sources; • To provide for the orderly, efficient and equitable sharing of water from water sources; • To integrate the management of water sources with the management of other aspects of the environment, including the land, its soil, its native vegetation and its native fauna; • To encourage the sharing of responsibility for the sustainable and efficient use of water between the Government and water users; and • To encourage best practice in the management and use of water.	While it has not been envisaged that any activities will take place on waterfront as defined in the *Water Management Act* 2000, should activities on waterfront land occur these will be conducted generally in accordance with the NSW Office of Water's Guidelines for Controlled Activities.

Legislation	Objectives & Application	Relevance to the Project
State Environmental Planning Policy No 55—Remediation of Land	Objectives of this Policy; • The object of this Policy is to provide for a Statewide planning approach to the remediation of contaminated land; In particular, this Policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment: • By specifying when consent is required, and when it is not required, for a remediation work; • By specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular; and • By requiring that a remediation work meet certain standards and notification requirements.	The site is to be remediated in accordance with State Environmental Planning Policy No 55 - Remediation of Land.

4.3 Project Specific Approval

4.3.1 Development Consent to the Development Application (SSD 5066) by the Minister for Planning

Planning approval for the project is regulated by the DPIE under the EP&A Act. A compliance matrix has been included in Appendix B of this document to ensure all conditions are met.

4.3.2 Environmental Protection and Biodiversity Act 1999 (EPBC) Approvals

Approval (No. 2011/6086) under the EPBC Act, is required for the project.

4.3.3 Asbestos

The Hazardous Materials Survey and the Remediation Action Plan (RAP) anticipates the presence of asbestos located in 'hot spots' in the soil and in buildings.

All asbestos works will be carried out under and consistent with an Asbestos Removal Class A licence. This involved the submission of a Notification of Removal of Asbestos to WorkSafe NSW.

4.3.4 Hot Works during a Total Fire Ban

If hot works are to occur during a total fire ban, then a total fire ban exception application is to be submitted to the NSW Rural Fire Service for approval.

4.4 Environmental Policy

The company's aim is to achieve a high standard of care and minimise our impact on the natural environment in all activities in which we are engaged. This depends on the commitment of all worker(s) within the company this project.

The company will:

- conduct its operations in compliance and conformance with all relevant environmental regulations, licences and legislation as a minimum condition
- identify, monitor and manage environmental risks arising from its undertakings.

Seek continuous improvement in environmental performance, operational processes, waste management and use of resources by:

Monitoring and improving our demolition methods to minimise environmental impact

- analysing and continuously improving recycling rates
- Funding post graduate studies in waste minimisation
- Providing adequate training and awareness for all workers and sub-contractors on environmental issues
- Communicating and consulting regularly with our worker's about our policy and individuals responsibilities

Communicating with our Clients, suppliers, contractors and sub-contractors, community and external agencies about our environmental performance;

- Establishing and reviewing environmental objectives and targets
  - Developing, implementing and maintaining a Management System based on the elements of ISO 14001:2004.

SIMTA's Environmental Policy in detailed in Appendix A.

4.5 Objectives and Targets

Environmental objectives and targets have been established as a means of assessing environmental performance during the Early Works. These objectives and targets have been developed with consideration of the key issues identified through the environmental assessment and risk assessment process.

Table 4 - Objectives and Targets

Objective	Targets	Measurement Tools
Comply with all relevant environmental standards and approvals during the life of the Project	Full compliance with statutory approvals	Audits, compliance reporting, management review
Comply with statutory requirements, regulatory approvals and regulatory reporting (Commonwealth and NSW).	No regulatory infringements No formal regulatory warning	Audits, compliance reporting, management review
Protect people, the environment and property	Comply with the CEMP and all relevant legislation, standards and codes of practices	Compliance report, management review and audits
Continuously improve environmental performance	Develop and maintain a program of ongoing environmental training. Capture lessons learnt from environmental incidents to minimise repeat issues. Encourage and reward innovation and effort throughout the workforce	Compliance report, management review and audits
Establish, implement and maintain an EMS.	Establish and implement an EMS and address non-conformances, non-compliances and corrective actions within specific timeframes.	Audits, management reviews.

4.6 Aspects and Impacts

A risk management approach was used to determine the severity and likelihood of an activity's impact on the environment and to prioritise its significance. This process considers potential regulatory and legal risks as well as taking into consideration the concerns of the community and other key stakeholders. The objectives of the risk assessment are to:

- identify activities, events or outcomes that have the potential to adversely affect the local environment and/or human health/property
- qualitatively evaluate and categorise each risk item
- assess whether risk issues can be managed by environmental protection measures
- qualitatively evaluate residual risk with implementation of measures
- Appendix E contains an aspects and impacts register and risk assessment associated with the Project. Measures to mitigate the identified environmental risks are also provided. The key environmental aspects for this project include:
  - erosion and sediment control
  - contaminated land management
  - air quality management
  - hazardous material management.

5 IMPLEMENTATION AND OPERATION

This CEMP is the overarching management plan for a suite of environmental management documents for the Project. It provides a structured and systematic approach to environmental management. The primary purpose of the system of documentation is to:

- ensure compliance with all applicable environmental laws, specifications, obligations and approvals
- to minimise environmental impacts.

The CEMP forms part of the overall Project Management Plan as shown in Figure 9**Error! Reference source not found.**.

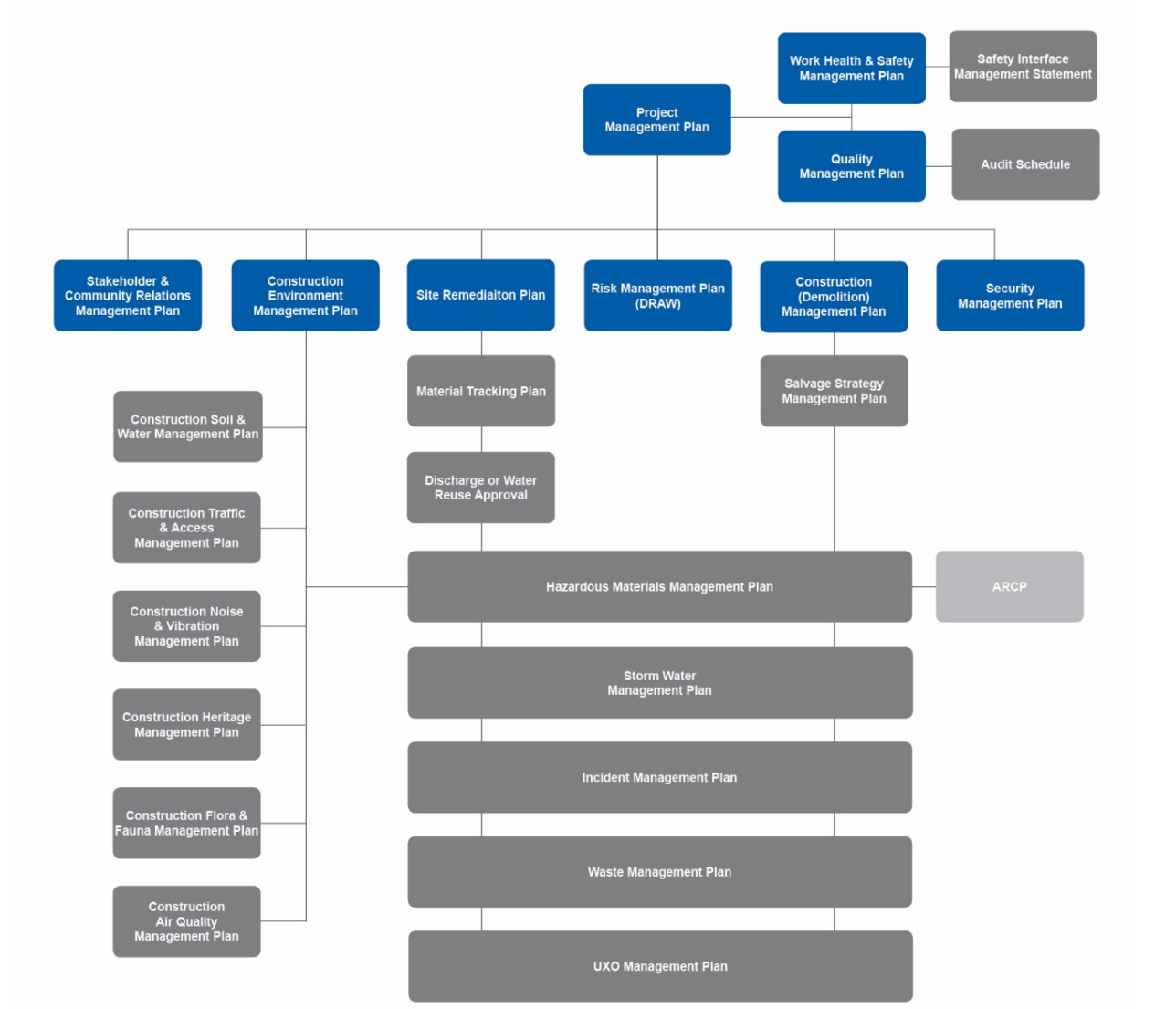


Figure 9 - Project Management Plan

5.1 Documentation

5.1.1 CEMP

This CEMP provides the system to manage and control the environmental aspects of the Project during Early Works. It identifies all requirements applicable to activities described in Section 3. It also provides the overall framework for the system and procedures to ensure environmental impacts are minimised and

legislative and other requirements are fulfilled. The strategies defined in this CEMP have been developed with consideration of the consent requirements, safeguards and mitigation measures presented in the REMMs and approval documents. This CEMP establishes the system for implementation, monitoring and continuous improvement to minimise impacts from the development on the environment.

This CEMP is consistent with:

- Guideline for the preparation of Environmental Management Plans (DIPNR, 2004)
- AS/NZS ISO14001: 2004, 'Environmental Management Systems - requirements with guidance for use.

This CEMP and Sub-Plans were provided to the DPIE for approval prior to commencement of Early Works.

5.1.2 CEMP Sub-Plans

A number of Sub-Plans support the CEMP. These documents are prepared to identify requirements and processes applicable to specific impacts or aspects of the activities described in Section 3 and address the requirements of the CoC, REMMs, and EPBC approval. They are used to define the operational controls required to ensure that each potential aspect and impact identified is eliminated, reduced or mitigated. The Sub-Plans are communicated to all employees, including sub-contractors. The project engineers and sub-contractors are responsible for incorporating the requirements into the site-specific risk assessments, staff training and briefings. Copies of the Sub-Plans are provided in Appendix I to Appendix N.

Table 5 detailes the Sub-Plans developed for the project.

Table 5 - CEMP Sub-Plans

Sub-Plans
Construction Traffic and Access Management Plan
Construction Noise and Vibration Management Plan
Construction Heritage Management Plan
Construction Flora and Fauna Management Plan
Construction Air Quality Management Plan
Construction Soil and Water Management Plan
Moorebank Precinct West - Early Works Per & Poly-Fluoroalkyl Substances (PFAS) Management Plan

5.2 Roles and Responsibilities

5.2.1 Environmental Representative

The ER is a suitably qualified and experienced person independent of the design and construction personnel, whose appointment is also approved by the Secretary. The ER is employed for the duration of construction of Early Works, (or as otherwise agreed by the Secretary). The ER shall:

CoC D1:

a) *Be the principal point of advice in relation to the environmental performance of the Early Works;*

b) *Monitor the implementation of environmental management plans and monitoring programs required under this approval and advise the Applicant upon the achievement of these plans/programs;*

c) *Have responsibility for considering, and advising the Applicant on, matters specified in the conditions of this approval, and other licences and approvals related to the environmental performance and impacts of the Early Works;*

d) *Ensure that environmental auditing is undertaken in accordance with the Applicant's Environmental Management System(s);*

e) *Be given the authority to approve/reject minor amendment to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan (Section 1.5);*

f) *Be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts; and*

g) *Be consulted in responding to the community concerning the environmental performance of the Early Works where the resolution of points of conflict between the Applicant and the community is required.*

CoC D2:

The Environmental Representative shall prepare and submit to the Secretary a three monthly report on the Environmental Representative's actions and decision on matters specified in CoC condition D1 for the preceding month. The reports shall be submitted within seven (7) days for the end of each month for the duration of Early Works, or as otherwise agreed by the Secretary. Notwithstanding, the Environmental Representative shall be given the independence to report to the Secretary at any time and/or at the request of the Secretary.

5.2.2 Project Organisation Chart

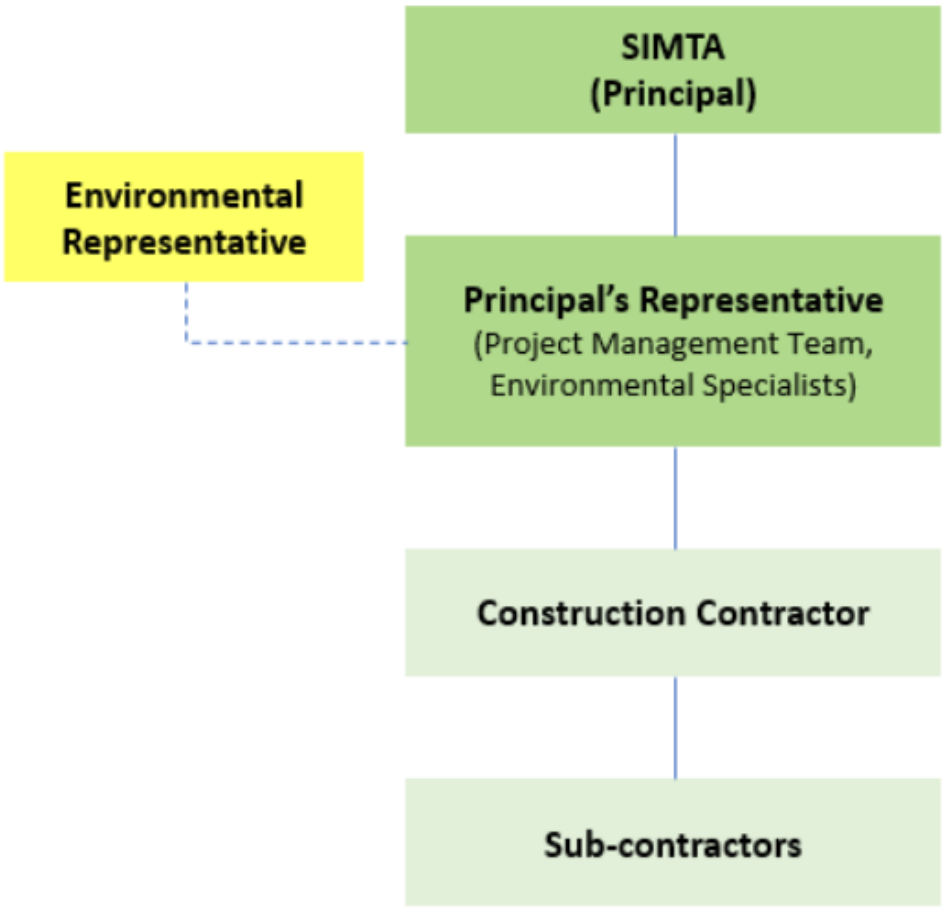


Figure 10 - Project Organisation Chart

5.2.3 Roles and Responsibilities Matrix

Table 6 - Roles and Responsibility Matrix

Responsibility	Persons Responsible (Contractor and Sub-contractor)									
	Project Directors	Project Manager	Environmental Manager/ Advisor	Contaminated Land Consultant	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager	Ecological Consultant
Develop environmental policy; objectives, targets and programs	X									
Review and approve environmental documents					X					
Conduct and keep record of inductions & attendance					X					
Implementation & recording of toolbox talks					X			X		
Daily prestart/conduct risk assessments in Job Hazard Analysis (JHA)								X		
Monitor works to ensure they are compliant with JHAs and environmental KPI			X					X		
Identify & coordinate training					X					
Conduct Environmental Inspections			X		X					
Conduct Internal Audits					X					

Responsibility	Persons Responsible (Contractor and Sub-contractor)									
	Project Directors	Project Manager	Environmental Manager/ Advisor	Contaminated Land Consultant	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager	Ecological Consultant
Tracking of Non-conformances/Non-compliances					X					
Review environmental reports and inspections and initiate actions to rectify			X							
Reporting of incidents	X	X	X	X	X	X	X	X	X	X
Notification of incidents (CoC A3 & A4)		X						X		
Manage Complains (CoC C2 & C3)		X								
Involvement in the investigation of environmental incidents		X	X		X					
Compile Monthly Reports		X								
Compliance racking and Monitoring (CoC A2)			X				X			
Implementation of mitigation measures in the CEMP and sub-plans		X	X		X					
Ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001* (CoC B1)		X						X		
Ensure all remediation works are undertaken in accordance with (CoC B2 & B3)			X	X						

Responsibility	Persons Responsible (Contractor and Sub-contractor)									
	Project Directors	Project Manager	Environmental Manager/ Advisor	Contaminated Land Consultant	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager	Ecological Consultant
Follow environmental instructions as detailed in the CEMP sub-plans	X	X	X	X	X	X	X	X	X	X
Verify heritage works are undertaken in accordance with CoC B6 & B9		X	X			X				
Verify dangerous goods and chemicals are stored correctly (CoC B10 & D4)			X					X		
Verify dust management mitigation is in accordance with CoC B11 & B12			X					X		
Verify that waste management is in accordance with CoC B13-B15 and relevant legislation guidelines and standards			X				X	X		
Verify traffic and transport measures are adhered to (CoC D11-D16)			X					X		
Verify approved construction hours and OOHW protocols are adhered to (CoC D5-D7)		X						X		
Implement and adhere to noise and vibration mitigation measures (CoC D8-D10)			X					X		
Verify compliance with applicable legal requirements and other requirements to which the organisation subscribes		X								

Responsibility	Persons Responsible (Contractor and Sub-contractor)									
	Project Directors	Project Manager	Environmental Manager/ Advisor	Contaminated Land Consultant	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager	Ecological Consultant
Maintain and implement the CEMP		X	X							
Undertake environmental monitoring (further details on specific environmental Monitoring is located in Section 9 Table 10)			X	X				X		
Manage environmental audits					X					
Review and update the CEMP			X							
Conduct habitat tree inspections and surveys										X
Supervise and manage the removal of habitat trees										X
Attend site, inspect and asses any unexpected EEC/ threatened species finds										X
Attend site, inspect and asses any unexpected heritage finds										X
Attend site, inspect and asses any unexpected contamination finds				X						
Monitor, measure and manage dust emissions from stockpiles, vehicles on unsealed roads and materials tracking			X					X		

Responsibility	Persons Responsible (Contractor and Sub-contractor)									
	Project Directors	Project Manager	Environmental Manager/ Advisor	Contaminated Land Consultant	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager	Ecological Consultant
from the construction site onto public roads (CoC 20(e)(i))										
Monitor, measure and manage waste generated during construction: general procedures for waste classification, handling reuse, disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealings with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins) (CoC D 20 (e)(iii))			X				X	X		
Monitor, measure and manage hazards and risks (CoC D20(e)(iv))					X			X		
Monitor, measure and rectify any impacts to third party property and infrastructure, including details of the process of rectification or compensation of affected landowners, and timeframes for rectification works or compensation processes (CoC D20 (e)(v))		X						X		
Monitor and report impacts on heritage items (if required) (CoC D21(c)(d))						X				

Responsibility	Persons Responsible (Contractor and Sub-contractor)									
	Project Directors	Project Manager	Environmental Manager/ Advisor	Contaminated Land Consultant	Site HSEQ Advisor	Heritage Consultant	Project/Site Engineer	Site Supervisor	National HSEQ Manager	Ecological Consultant
Report to the Principal's Representative on forecast traffic movements in accordance with the Fill Importation Management Protocol (Appendix F)		X								

6 MONITORING EFFECTS ON SURROUNDING INFRASTRUCTURE AND ROADS

A pre-construction dilapidation survey, by a suitably qualified and experienced independent expert has been completed for the purpose of carrying out a written and photographic record of existing damage to the road surface, footpaths, gutters, council assets and fences as per CoC B17 and CoC D16 at the following locations;

- both sides of Moorebank Ave 500 meters either way of Chatham Avenue
- Moorebank Avenue between Anzac Rd & Amiens Rd
- Anzac Road between Moorebank Ave & 90m East of Yulong Rd
- the complete length of Bapaume Rd.

Further inspections of these assets will be carried out on a weekly basis and reported to the Project Manager for review.

At the completion of the works a post-dilapidation survey will be undertaken in order to determine if any damage to the assets have occurred. The Contractor will carry out rectification work to the reasonable requirements of the owners for damage resulting from the completion of Early Works. Any rectification works will occur as soon as possible at a mutually agreed time between the affected parties, the Contractor and the Principal.

At any time throughout the project an affected party can raise an issue through the SIMTA 24 hour information line, which will be managed in accordance with Section 8 of this CEMP.

The Contractor will ensure that the construction and operation of the proposed development does not prevent the existing use of Moorebank Avenue as a public road to a standard commensurate to its current use prior to the development as per CoC B18.

As Per CoC D15, access to all properties affected by the carrying out of Early Works will be maintained, where feasible and reasonable, unless otherwise agreed by the relevant property owner or occupier. Any access physically affected by the carrying out of Early Works shall be reinstated to at least an equivalent standard, unless agreed with by the property owner.

7 COMPETENCE TRAINING AND AWARENESS

Onsite environment training will be coordinated and recorded by the Environment Advisor and Site Supervisor. Records including details of topics, attendees, and duration will be stored in a training register with the signed attendance sheets.

Internal and on-the-job training will be provided on a regular basis for all staff including sub-contractors.

Environmental awareness training will be delivered to staff and sub-contractors through the site induction, toolbox talks, and pre-start briefings. General awareness for site operatives and office-based staff will also be provided via notice boards, posters and environment bulletins.

7.1 Site Inductions

All workers and visitors shall undergo the following inductions/trainings prior to commencing work:

- The Contractor Project Specific Induction
- Flora and Fauna Awareness
- Aboriginal and European Heritage Awareness
- Stormwater and Spills Awareness
- UXO Induction.

All visitors will undergo a Visitors Induction prior to entering the site and will remain with a fully inducted person at all times.

7.2 Toolbox Talks

Toolbox talks will be undertaken on a regular basis. Where required, specific training will be provided to the relevant personnel on hazards associated within specific activities and the controls to be implemented to minimise environmental harm. This will include measures identified in the CEMP.

Toolbox talks will be tailored to specific environmental issues including:

- erosion and sedimentation control
- hours of work
- emergency and spill response
- Aboriginal and non-Aboriginal heritage
- threatened species, endangered ecological communities, clearing controls and vegetation protection
- weed management
- noise
- housekeeping and waste
- project and clearing limits
- dust control
- approved water treatment and discharge process.

Toolbox attendance is mandatory and attendees of toolbox talks are required to sign an attendance form. Records of toolbox attendance will be maintained.

7.3 Prestart Meetings

The pre-start meeting is a tool for informing the workforce of the day's/shift's activities, safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, hazards and other information that may be relevant to the day's work.

The site supervisor, or other appropriate site staff member, will conduct a daily pre-start meeting for the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. Pre-start meetings may be project-wide and/or held for specific work areas.

The environmental component of pre-starts will include any environmental issues that could potentially be impacted by, or impact on, the day's activities. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained. Pre-start topics, dates delivered and a register of attendees will be recorded and the records maintained.

7.4 Additional and Revised Training

Additional or revised training as a result of monitoring outputs and/or CEMP review will occur via pre-start meetings and toolboxes and if required the site induction will be updated. The need for additional training will be determined by the processes as outlined in Figure 11.

8 COMMUNICATION AND RECORDS

8.1 Communication

Communication typically occurs during daily pre-start meetings, weekly site meetings and monthly project meetings.

The Contractor shall immediately communicate and report all environmental concerns categorised as high risk as per the risk assessment in this CEMP, to the Project Manager.

8.2 Enquiries and Complaints Management

The Community Consultation Strategy developed for the project effectively manages enquiries and complaints and is critical to the successful delivery of the Early Works for the Moorebank Intermodal Terminal Development. The process for managing and responding to enquiries or complaints is designed to be consistent with AS ISO 10002-2006 Customer satisfaction - Guidelines for complaints handling in organisations. All community and stakeholder enquiries and complaints (except those received directly by the Contractor's delivery team on site), will be coordinated through a centralised service managed by SIMTA. The service will be responsible for receiving and recording complaints and enquires, and will also include a feedback handling and escalation protocol for addressing complaints that are received.

Any complaints received throughout the duration of the project shall be communicated to the Project Manager(s) immediately. The Project Manager(s) will then direct the complaint to SIMTA's representative on site so that the existing SIMTA's complaint procedure can be initiated (refer to contact below).

Figure 11 - Sydney Intermodal Terminal Alliance Complaints Communication

8.3 Consultation Manager Database

A record of all contact and correspondence with stakeholders and the community will be logged using the stakeholder management software platform 'Consultation Manager'. Information recorded will include:

- the distribution of newsletters, notifications (including email notifications)
- details of community drop in-events, stakeholder briefings, doorknocking and letterbox drops
- complaints or enquiries including:
  - name / address / contact details
  - time and date of complaint or enquiry
  - nature and status of complaint
  - action undertaken (where required)

- response / resolution.

8.3.1 Response Timeframes (Performance Standards)

The following timeframes have been set for managing enquiries or complaints received through the SIMTA centralised service or directly by the Contractor:

- **4hrs** –acknowledge enquiry /complaint received via 1800 community information number or email
- **24hrs** –provide verbal and or email response to enquirer or complainant regarding action undertaken (except where additional approval is required by SIMTA)
- **48hrs** – record outcome including action to resolve and close out enquiry or complaint in Consultation Manager; and provide a written response to letters within 48 hours.

Note: The timeframes noted above are an indicative upper limit. It is assumed that all urgent matters requiring immediate action will be forward to the SIMTA promptly and dealt with in the most efficient manner to ensure the complainant is responded to as quickly as practicable.

Non-urgent enquiries or complaints received outside of business hours will be responded to on the next business day.

8.3.2 Issues and Dispute Resolution

Should a dispute arise between the Contractor and another party, where a satisfactory resolution cannot be agreed, the Contractor through SIMTA will follow a three-step dispute resolution process.

- **Stage 1**: Issue recorded and acknowledged by SIMTA / the Contractor and forwarded to the Contractor's Project Director for action/response.
- **Stage 2**: If issue/dispute is not resolved, it will be escalated back to the Project Director and a nominated SIMTA representative (including the Environmental Representative, where appropriate) for review and alternative action including attempted resolution. Direct communication will be undertaken with complainant during this process.
- **Stage 3**: Should the issue/dispute remain unresolved, an experienced third party mediator would be engaged to facilitate a mediated resolution.

8.3.3 Complaints and Enquiries Handling Flowchart

The enquiry and complaints management/escalation process will be undertaken as per the chart below.

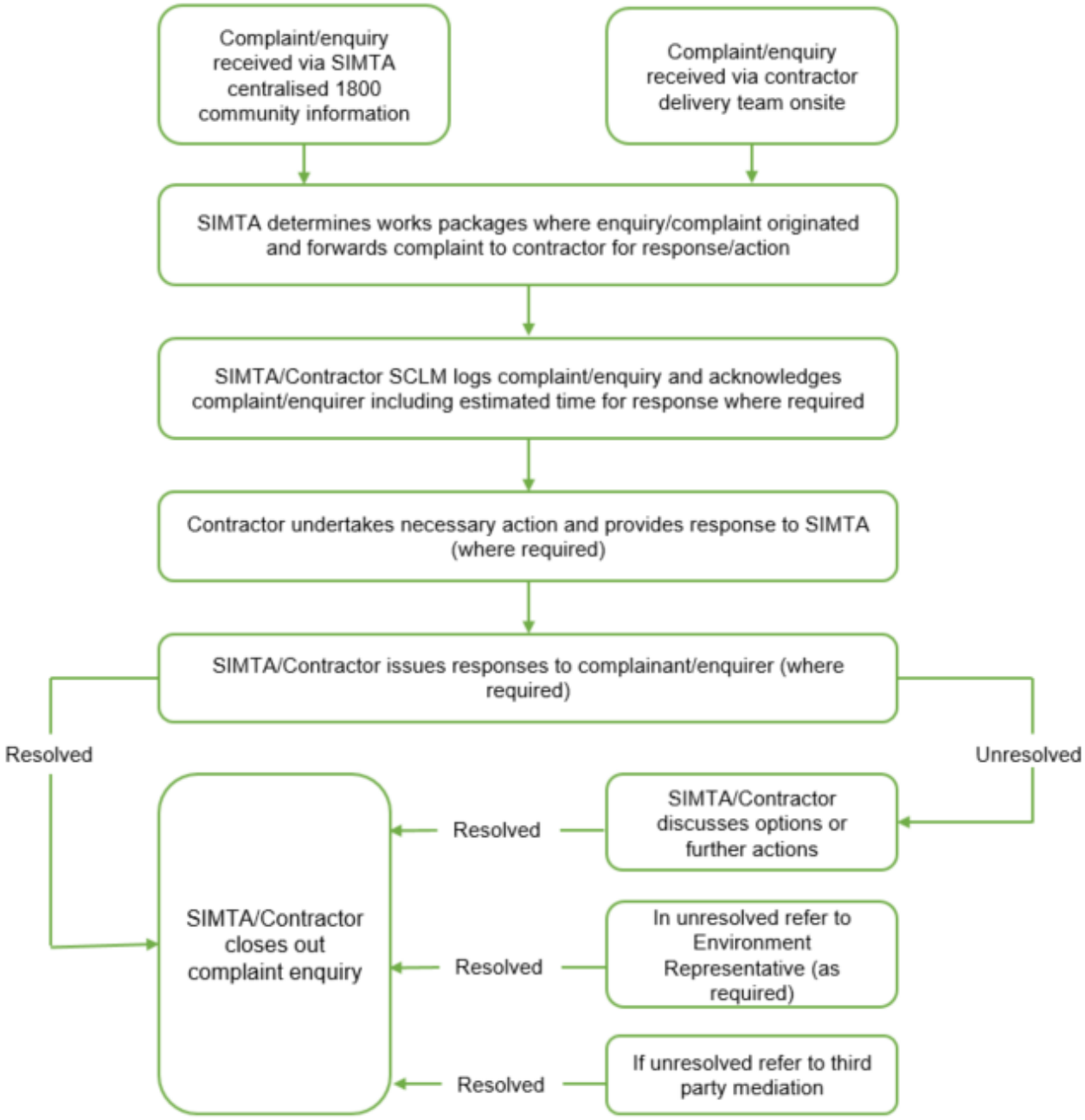


Figure 12 - Complaints and Enquiries Handling Flowchart

9 INSPECTIONS, MONITORING AND AUDITING

9.1 Methods of Evaluation

Progress and compliance against environmental requirements will be evaluated through:

- audits, both internal and external
- review of documents and/or records
- employee and client feedback
- project or work reviews and reporting
- direct observation
- Environmental inspections.

9.2 Inspections and Monitoring

The Contractor will undertake inspections and monitoring as outlined below. Dust and odour monitoring KPIs are further detailed in Table 8 of the CAQMP.

Table 7 - Environmental Monitoring and Inspection Table

Activity	Frequency	Location	Responsibility	KPI	Record
Dust	Daily, During Works and Weekly	All	Project Environment Advisor (Weekly) Site Supervisor (During Works)	No visible dust leaving the boundaries	Weekly Environmental Audit Work Permit
	Monthly	Dust gauges as nominated in CAQMP	Project Environment Advisor	Less than 4g/m^2/month	Monthly monitoring
Odour	Daily, During Works and Weekly	Remediation Work Areas	Project Environment Advisor (Weekly) Site Supervisor (During Works)	All non-detectable odour at boundary	Weekly Environmental Audit Work Permit
Discharge Water Quality	Prior to Discharge or reuse	Sediment Basins	Project Environment Advisor Environmental Consultant	No visible oil and grease pH between 6.5-8.5 Specific contaminants below ANZECC Guidelines TSS Below 50mg/L PFHxS/ PFOS <0.7 micrograms/L PFOA <5.6 micrograms/L	Water Discharge and Reuse Permit Laboratory Reports
Weather	Daily	Using Bureau of Meteorology	Project Environment Advisor	Review of work activities when adverse weather is described	Daily Prestart Meeting
Chemical Spillage	Daily	Chemical Storage Area	Project Environment Advisor	No spills to ground All chemicals correctly stored and bunded	Weekly Environmental Audit Work Permit
Plant	Daily	On all plant and equipment	Site Supervisor Plant Operators	No Excessive Smoke No leaks on Plant	Plant Pre-Start Checks
Sediment Control Devices	Weekly and Prior to and following rainfall	All current work areas	Project Environment Advisor Site Supervisor	All sediment control devices in good condition allowing adequate operation	Weekly Inspection Report Work Permit
Asbestos	Daily	Asbestos Removal Areas	Asbestos Supervisor Project Environment Advisor	All monitoring results for the project below a fibre count of 0.01 f/ml	Asbestos Air Monitoring Register

9.2.1 Records of Monitoring

All monitoring records as detailed in Table 9 are maintained on the Contractor Database utilising the forms in Appendix H.

Monitoring of the works and environmental controls is outlined on the Job Hazard Analysis (Appendix H JHA FRM-058) and is documented in the daily Work Permit (Appendix FRM-014). The site supervisor signs off the works daily to verify they are compliant with the requirements of this CEMP.

The Contractor will complete a Weekly Environmental Inspection (Appendix H FRM-007). Any non-conformance or non-compliance will be documented and the process outlined in Section 10.3 will be implemented.

9.3 Reporting

As a minimum the Project Manager will:

- establish and maintain necessary records for the recording and reporting of environmental incidents
- encourage worker's participation in reporting environmental incidents
- verify all environmental incidents are investigated and reported in accordance with company and client procedures
- notify the relevant Authority of environmental incidents, if required.

Reporting for the project is outlined in Table 8.

Table 8 - Reporting and Typical Content

Report	Typical Content
ER Inspections	Time, Date, Weather, Inspection Attendees, Current Activities, Review of Site Activities, Compliance and conformance, Follow up from Previous Site Based Aspects, Photo evidence
Environmental Incident Reports	Time, Date, Location, What happened, Influencing factors, Witness Names, Interim Actions and Comments, Photo Evidence
Weekly Environmental Inspection (the Contractor)	Time, Date, Work Location, KPIs, Comments, Photo Evidence, Compliance details

9.4 Compliance Reporting

A Compliance Tracking Program has been developed for the Project. The requirements of the Compliance Tracking Program, as prescribed in CoC A2, include:

a) provision for the notification to the Secretary prior to the commencement of construction;
b) provision for periodic review of the compliance status of the SSD against the requirements of this approval;
c) Provision for periodic reporting of compliance status to the Secretary, including but not limited to:
    i. A Pre-Construction Compliance Report prior to the commencement of early works,
    ii. Six-monthly, or other timing as agreed by the Secretary, Early Works Compliance Reports, for the duration of early works, and
    iii. Completion Compliance Report within one month of completion of the early works stage;
d) A program for independent environmental auditing in accordance with *AS/NZS ISO 19011:2014 - Guidelines for Auditing Management Systems*;
e) Mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;
f) Provision for reporting environmental incidents to the Secretary during construction, in accordance with conditions A3 and A4;
g) Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and

h) Provision for ensuring all employees, contractors and sub-contractors are aware of and comply with, the conditions of this approval relevant to their respective activities.

The Compliance Tracking Program describes how the requirements of CoC A2 will be met and sets out a program and frequency for compliance reporting and independent auditing. The compliance reporting requirements as described in the Compliance Tracking Program will record how the CoC have been addressed.

The compliance reporting schedule as discussed in the compliance tracking program is located in Table 12.

9.5 Audits

SIMTA and the Contractor will ensure that an independent audit of compliance against the CoC is conducted and a report submitted to the Minister. The independent auditor and audit criteria must be approved by the Minister prior to the commencement of the audit.

9.5.1 Audit Schedule

Table 9 - Compliance Reporting and Audit Schedule

Auditing Activity	2016	2017				2018				2019				2020			
	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Environmental Audit		X	X	X			X		X	X	X				X		
Pre-Construction Compliance Report	X																
Six Month Compliance Report				X		X		X		X		X		X		X	
CEMP Review				X		X									X		

9.6 Mechanisms for Feedback into Environmental Management Documentation

The CEMP is an overarching management plan for a suite of environmental management documents used for the Project. Figure 15 below is a diagram of how auditing and the compliance tracking program feed back into the Contractor's System of Work Method Statements (WMS) and JHA to improve these and ensure compliance with the CoC, EPBC, REMM and relevant legislation.

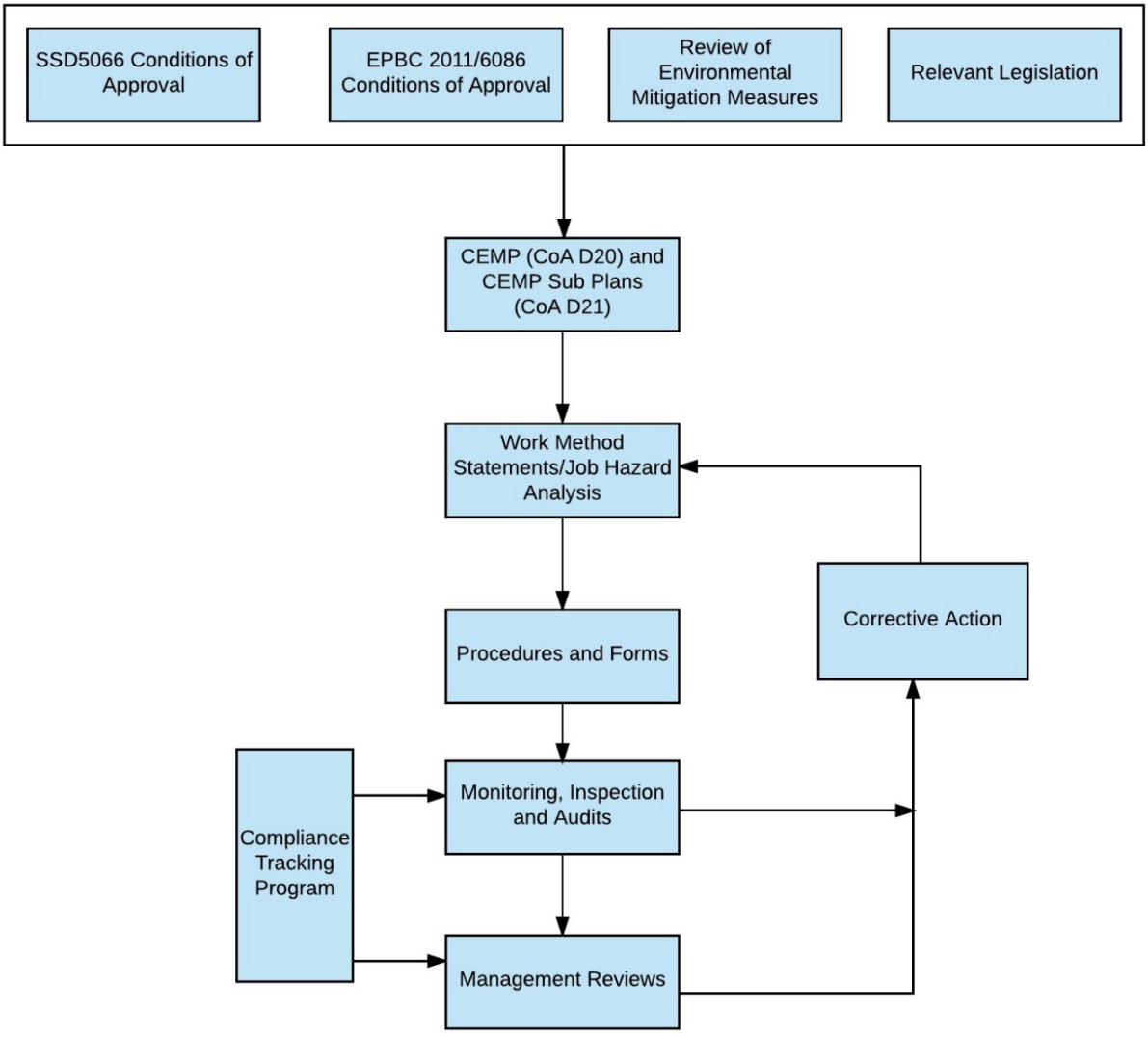


Figure 13 - Environmental Document Management Structure and Feedback Flowchart

10 INCIDENTS AND EMERGENCIES

SIMTA have developed a site specific Incident Management Plan (IMP).

The purpose of the IMP is to outline the procedure, practices and standards to be followed in the event of an on-site Incident & Emergency. This includes:

- an effective response to an Incident & Emergency
- evacuation procedures
- notifying Emergency service organisations promptly
- medical treatment and assistance
- effective communication between the authorised person who coordinates the Incident & Emergency response and all persons at the workplace.

10.1 Duty to Notify Environmental Incidents

Harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment.

There is a duty to notify 'relevant authorities' as specified in section 148(8) of the POEO Act (the EPA, local authority, Ministry of Health, WorkCover Authority and Fire and Rescue NSW) of pollution incidents where material harm to the environment is caused or threatened. Material harm includes actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial or that results in actual or potential loss or property damage of an amount over $10,000. Failure to do so is an offence.

However, any notification is not admissible in evidence against the person for an offence or for the imposition of a penalty. The duty to notify applies to the person carrying on the activity, an employee carrying on the activity and the occupier of premises where the incident occurs.

The Contractor will call 000 if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

If the incident does not require an initial combat agency, or once the 000 call has been made, the Contractor will phone the EPA environmental hotline on 131 555.

The Contractor will notify the Client Representative who will in turn inform the Secretary and relevant public authorities of any incident with actual or potential significant on-site or off-site impacts on human health or the biophysical environment within 24 hours of becoming aware of the incident. The Contractor will provide full written details of the incident to the Client Representative who will in turn inform the Secretary within seven days of the date on which the incident occurred as described in CoC A3.

The Contractor will meet the requirements of the Secretary or relevant public authority (as determined by the Secretary) to address the cause or impact of any incident as it relates to this approval, reported in accordance with CoC A3, within such period as the Secretary may require as described in CoC A4.

All incidents regardless of magnitude will be reported to the Client’s Representative and investigated during the works

10.2 Incident and Emergency Response

In the event of an Incident or Emergency, the Person-in-Charge (Project Manager, Site Safety Manager or delegated person) will classify the situation under the category of Minor (Level 1), Serious (Level 2) or Major (Level 3).

As note Emergency Spills being managed as per Appendix C - Emergency Spill Repose Procedure.

The Emergency response procedure shall address these three (3) levels of response in a site Incident & Emergency operation:

- containment
- notification
- mobilisation.

10.2.1 Minor Incident & Emergency (Level 1)

Minor (level 1) a minor Incident/Emergency is one that can be satisfactorily handled by site worker(s) and does not affect or threaten parties beyond the scope of the project operations.

Minor (level 1) is the initial step to control the site Incident/Emergency. At this level, on-site worker(s) must be prepared to follow the concise Incident & Emergency response procedure immediately.

The minor level exists from the moment a problem is discovered until Incident & Emergency response worker(s) are notified. Generally emergencies are contained by site worker(s) and do not go beyond this level. Specifically, the minor level consists of the following actions:

- discovery and reporting of the problem
- monitoring the situation
- early and immediate action.

At the minor level, frontline supervisors must obtain precise information about the Incident & Emergency. They need to evaluate the situation before they can initiate Emergency response plans. This information comes from the discoverer and other individuals who report on conditions in the affected area. Supervisory worker(s) then evaluate the information and initiate an appropriate and immediate response to control the problem or escalate.

10.2.2 Serious Incident & Emergency (Level 2)

A serious Incident & Emergency (level 2) is one that has implications beyond the control of local site worker(s). It would generally involve parties outside the direct scope of the site operations.

In an Incident or Emergency, the Project Manager or Site Safety/HSEQ Manager may decide that they need outside assistance to handle a situation or that additional communication is necessary. Action is taken immediately to minimise hazards to all persons and to get assistance as quickly and easily as possible.

If an Incident & Emergency occurs, all worker(s) are to be notified of the hazards and, if required, mobilise them to safety. Notify other key worker(s) in order to mobilise the Incident & Emergency response team if requires.

All supervisors and persons as named in a level 2 process must be trained in the appropriate response protocols.

10.2.3 Major Incident & Emergency (Level 3)

A major Incident or Emergency is an incident having major safety, environmental or public welfare implications.

The major Incident or Emergency level 3 takes affect when Incident or Emergency operations have been established and the Project Manager or the site Safety/HSEQ Manager has taken over directing Incident/Emergency operations until external Emergency services providers are available on location.

All Incident & Emergency response worker(s) shall report to the Project Manager in the first instance.

10.3 Non-conformance, non-compliance and action

10.3.1 Non-conformance

Non-conformances are observations or actions that are not in accordance with the CEMP or a Sub-Plan. These are not recorded as non-compliances as there may be activity-specific justification for a change in implementation of the requirements of the management plan.

Where a non-conformance is also considered to represent a possible non-compliance, it is to be recorded as a potential non-compliance. Depending upon the nature of the non-conformance, the non-conformance may require reporting to the DPIE as an incident (CoC A3).

It is the responsibility of all personnel to report non-conformances to their Site Supervisor and/or the Contractor's EM. The Contractor's EM will investigate non-conformances, log corrective actions, and delegate responsibility for corrective actions within assigned timeframes.

Non-conformances with the implementation of the CEMP or Sub-Plans shall be recorded and addressed by logging the issue within the Project Corrective Actions Register and handled in accordance with the Environmental Management System – Corrective and Preventative Action [SHEMS-QM-04-PR-0022]. Non-conformances shall be recorded and addressed through Aconex.

10.3.2 Non-compliance

A non-compliance is considered an occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Development Consent SSD 5066 or EPBC Act Approval (EPBC 2011/6086) CoC.

Incident notification and response requirements are outlined in Sections 10.1 and 10.2, respectively.

Potential non-compliances with the CoC can be identified by anyone and are to be reported to the Contractor's EM as a potential non-compliance. Whether the occurrence, set of circumstances, or development requires to be notified to the DPIE as a non-compliance is the responsibility of the project management team.

Non-compliance with the CoC shall be recorded and addressed by logging the issue within the Project Corrective Actions Register and handled in accordance with the Environmental Management System – Corrective and Preventative Action [SHEMS-QM-04-PR-0022]. Non-compliances shall be recorded and addressed through Aconex.

In line with the Compliance Reporting Post Approval Requirements (DP&E, June 2018), DPIE will be notified in writing to compliance@planning.nsw.gov.au within seven days after the Project becomes aware of any non-compliance. The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply, the reasons for the non-compliance (if known), and what actions have been, or will be, undertaken to address the non-compliance.

Documentary evidence providing proof of the date of publication and non-compliance with any of the CoC must be provided to DoTE at the same time as the compliance report is published.

10.3.3 Corrective and Preventative Actions

A corrective action request (CAR) will be issued by the Contractors Environmental Manager where there is a non-conformance or non-compliance with any of the requirements of this CEMP or Sub-Plan. CARs are differentiated by risk ranking. The nominated timeframes to resolve items on the CAR Register are detailed in Table 11.

Table 10- Corrective Actions Timeframe for Resolution

Risk Ranking	Issued to
1	Action needs to be commenced immediately to resolve the issue
2	Action needs to be resolved within 1 week
3	Action needs to be resolved within 1 month

Trends relating to environmental incidents, non-compliance or non-conformances will be reviewed at the Construction Contractor's Management Team meetings to identify any recurring or systemic issues that are indicative of the need to take preventative action.

Preventive actions are dependent on the issue, but examples include:

- progressive landscaping
- early identification of the requirement for out of hours works
- stopping of works based on forecast inclement weather
- preparation of site to manage inclement weather.

Corrective actions may be required as a result of the following:

- internal inspection outcomes that cannot be rectified immediately
- incidents and associated corrective actions
- internal audit observations/non-compliance
  client audits or other notice of non-compliance
- notices or action from regulatory authorities
- breach of legislative requirements or permit/licence conditions and consents
- repetitive observations which have not been resolved in a timely manner.

Corrective actions are dependent on the issue but may include:

- site remediation and rehabilitation
- increased environmental awareness (re-training, toolbox meetings)
- review and improve existing environmental controls and update of environmental controls maps, or erosion sediment control plans.

Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management are also documented in the Compliance Tracking Program.

Where deemed necessary by the Project Environmental Manager and as a result of revisions to project scope or changes to project risks, additional Environmental Risk Action Plans to control potential impacts will be developed.

10.4 Emergency Contacts

Table 11 - Emergency Contacts

Organisation	Phone Number	Address
Fire	000	NA
Ambulance	000	NA
Police	000	NA
EPA Environment Line	131 555	NA
Liverpool Police Station	02 9765 9499	148 George Street, Liverpool, NSW 2170
State Emergency Service – Liverpool	1300 362 170	Pearce St, Liverpool, NSW 2170

10.5 Risk Assessment

Risk Assessment involves the identification of hazards (potential to cause harm), the assessment of the risks posed by those hazards, the development of controls to eliminate and minimise risks and the ongoing management of the risk controls.

Risk Assessment and risk management strategies will be used consistently throughout the project. JHA will be conducted prior to the commencement of each activity as detailed in Appendix H - Forms. The JHA is used to identify both work health and safety and environmental hazards and if a task changes significantly or a change occurs in the environment, or other hazards are identified, the JHA will be reviewed.

A copy of the JHA will be available at the workface and the original filed in the Project Office.

The Project HSEQ Manager is responsible for ensuring risk controls are implemented and monitored for effectiveness. The Project Manager is responsible for providing sufficient resources to ensure risk controls are implemented.

A project risk assessment has been included in Appendix E.

10.5.1 Hazard Identification and Reporting

Any worker identifying a hazard shall:

- report the hazard immediately to the supervisor
- stand guard until the supervisor arrives to assess the hazard
- the responsible supervisor shall ensure identified hazards are promptly reported and recorded on the hazard register.

All hazards shall be actioned and signed off as completed in a timely manner.

Hazards will be reported to the supervisor as soon as possible. If the hazard can be corrected or controlled by the worker(s) that identify it they must do so immediately. If the hazard cannot be corrected or controlled the hazard must be isolated and other worker(s) protected from the hazard.

10.5.2 Take 5

Workers are encouraged to be accountable for their own and others' actions, and to immediately address issues that are unsafe or have unacceptable risk.

To facilitate this behaviour, the company will use the Take 5 System where all employees carry a formatted note book to help identify a hazard or potential hazard, which requires the individual to take action and document the action taken. All employees and sub-contractors will be operating under this system and will be instructed in its use during the site induction.

All tasks will have a Take 5 carried out immediately before that task is under taken.

Take 5 is a simple hazard identification and risk assessment, undertaken immediately prior to starting the task. It is designed to ensure that personnel assess each task for risk by completing the checklist as follows:

- think through the task – break into steps
- spot the hazard – "What if"
- assess the risk
- make the changes
- do the job safely.

10.5.3 Hazard Investigation

All environmental hazards and issues are to be reported as soon as practicable to the relevant supervisor and then passed onto the Project Manager.

The supervisor will investigate hazards reported immediately; the investigation findings will be detailed and reported back to the workgroup at the next opportunity (normally pre-shift meeting).

The intent of Take 5 Hazard Identification is to be pro-active in identifying, evaluating and controlling hazards that may result in incidents involving injury, environmental issues or equipment damage.

Should the matter remain unresolved, it will then be addressed between the employee, their supervisor, and the Project Manager.

The Contractor(s) will provide all workers on the project will the necessary knowledge, awareness and skills to fulfil their environmental responsibilities. This will be done through the company inductions and any required specific awareness training, either prior to commencement of the project, or during daily team pre-start consultation meeting.

APPENDIX A QUBE'S ENVIRONMENT POLICY

Qube's Safety, Health and Environment Policy (F) describes the Project's commitment to continual improvement in environmental performance and compliance with applicable legislative requirements. The Project and its nominated contractors will operate in accordance with these policies which will be:

- displayed at prominent locations on the project site
- communicated to site personnel during induction and training
- made publicly available and accessible to clients and concerned / interested members of the public.

All personnel associated with the Project, including sub-contractors, must comply with the spirit and intent of these policies.

The Sustainability Policy and the Sustainable Procurement Policy are currently being prepared and will be included in the Sustainability Plan for the Project.

Safety Health & Environment Policy

Qube is committed to providing a safe and healthy workplace, and ensures the protection of the environment.

Effective safety is a shared responsibility. Our commitment and encouragement of personal accountability is summarised by our program:

ZERO HARM

Zero Harm reflects our belief that we operate in an environment where risks are managed, and that work does not impact upon our people's health and wellbeing.

The Company demonstrates a commitment to ensuring the health and safety of all our workers and protection of the environment, by:

- Striving for continuous improvement by establishing safety and environment performance targets and then measure and monitor performance through effective audit programs.
- Providing resources which enable communication, the sharing of safety and environment knowledge and ideas, and effective consultation with Workers and other Stakeholders.
- Ensuring relevant legislative and regulatory compliance is achieved.
- Preventing injuries and environmental incidents through the implementation of the Qube Safety and Environment Management System based on hazard management principles (hazard identification, risk assessment, hazard control and review).
- Ensuring all incidents are reported and investigated to prevent recurrence and serious incidents are reported to relevant state authorities.
- Implementing effective injury management to reduce the personal and financial cost of work related injuries.

Environmental Management

Through the adoption and promotion of sound and sustainable environmental practice in business, it is Qube's objective to be the company of choice in creating value for workers, shareholders, business partners, customers and suppliers, by:

- Managing day to day operations in a manner that seeks to prevent any harmful impact on the environment
- Complying with and aim to exceed all applicable environmental legislation nationally
- Implementing and maintaining an Environmental Management System that

conforms with or exceeds AS/NZS ISO 14001:2004

- Promote leadership in environmental protection through employee training and support for third party educational and training initiatives
- Develop business, community and political relationships with like-minded partners to foster a culture of environmentally sustainable growth and development
- Communicate proactively, promptly and transparently with all stakeholders, the community, media and government on environmental issues
- Engage proactively in thought leadership, development, implementation and promotion of new environmentally sustainable business practices

Maurice James

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Review Date: 28.04.2018

QH-SHE-PO-012 (Version 1.0)

Figure 14 – Qube's Environment Policy

APPENDIX B COMPLIANCE MATRIX

SCHEDULE 1 DEVELOPMENT CONSENT

Table 12 – Development Consent Schedule 1

Application No.:	SSD 5066
Applicant:	SIMTA as Qube Holdings Limited
Consent Authority	Minister for Planning
Land:	Moorebank Precinct West Intermodal Site (MPW): Land generally described as being located on the western side of Moorebank Avenue, between the M5 Motorway and the East Hills Passenger Line, Moorebank, comprising: - Lot 1 DP 1197707 - Lot 101 DP 1049508 - Lot 100 DP 1049508 - Lot 2 DP 1197707 - Part Lot 3 DP 1197707 - Part Anzac Road and Moorebnak Avenue public road reserves Rail Corridor: Land generally described as being located between the intermodal site and the East Hills Passenger Line to the south, and the northern portion of the Glenfield Waste Disposal Facility to the west, comprising: - Lot 5 DP 833516 - Lot 103 DP 1143827 - Lot 51 DP 515696 - Lot 102 DP 1143827 - Lot 104 DP 1143827 - Lot 4 DP 1186349
Development	Concept Proposal The Concept involves: - the use of the site as an intermodal facility for intrastate, interstate and port shuttle freight, including a rail terminal, rail link to the Southern Sydney Freight Line and warehouse estate (including a freight village) servicing the intermodal terminal facility. - Importation of up to 1.6 m,illion cubic metres of uncompacted fill to raise the site by up to 3.6 metres. Early Works (Stage 1) involves: - the demolition of buildings, including services termination and diversion; - rehabilitation of the excavation/ earthmoving training area; - remediation of contaminated land; - removal of underground storage tanks; heritage impact remediation works; and - the establishment of construction facilities and access, including site security.

SCHEDULE 2 TERMS OF APPROVAL

Table 13 - Schedule 2 Terms of Approval

Development Description	
1	Except as amended by the conditions of this consent, development consent is granted only to the Concept Proposal and Early Works as described in Schedule 1 and the Environmental Impact Statement dated October 2014, as amended by the Response to Submissions, dated May 2015 (as further amended by the Supplementary Response to Submissions dated August 2015), subsequent modifications as outlined in Condition 4 below and the conditions contained in this development consent.
Determination of Future Applications	
2	In accordance with section 4.22 of the EP&A Act, all future development under the Concept Proposal (for the avoidance of doubt, excluding the Early Works) shall be the subject of future development application(s).
3	The determination of the future development application(s) are to be generally consistent with the terms of this development consent as described in Schedule 1, and subject to the conditions in Schedule 4
Development in Accordance with Plans and Document	
4	The applicant shall carry out the development generally in accordance with the: a) Environmental Impact Statement titled Moorebank Intermodal Terminal Project Environmental Impact Statement, prepared by Parsons Brinckerhoff Australia Pty Limited, dated October 2014; b) Response to Submissions report titled, Moorebank Intermodal Terminal Response to Submissions Report, prepared by Parsons Brinckerhoff Australia Pty Limited, dated May 2015; c) Supplementary Submissions report titled, Moorebank Intermodal Terminal Supplementary Response to Submissions Report, prepared by Parsons Brinckerhoff Australia Pty Limited, dated August 2015; d) MOD 1 Report titled, Moorebank Precinct West Intermodal Terminal Facility Concept Plan Approval (SSD 5066) Modification, prepared by Arcadis, dated June 2016; e) MOD 1 Response to Submissions report titled, Moorebank Precinct West – Concept Modification Response to Submissions – SSD 5066 MOD 1, prepared by Arcadis, dated December 2016; f) MOD 1 Supplementary Response to Submission report titled, Moorebank Precinct West – Concept Modification Supplementary Response to Submissions – SSD 5066 MOD 1, prepared by Arcadis, dated August 2017; and g) the conditions of this consent
5	In the event of an inconsistency between: (a) the conditions of this approval and any document listed from condition 4(a) to 4(f) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and (b) any document listed from condition 4(a) to 4(f) inclusive, and any other document listed from condition 4(a) to 4(f) inclusive, the most recent document shall prevail to the extent of the inconsistency.
Limits of Approval	

Development Description	
6	Projects carried out under this staged development consent are to be assessed with the objective of not exceeding the capacity of the transport network, including the local, regional and State road network
7	Concept approval is granted for a container throughput of up to 500,000 TEU p.a. (excluding IMEX freight) if the combined movement of container freight on the Subject Site does not exceed 1.05 million TEU p.a. The consent authority must also be satisfied that the Traffic Impact Assessment demonstrates that the container throughput would not exceed the capacity of the transport network with or without mitigation measures/upgrades.
8	For IMEX freight, concept approval is granted for container throughput: a) initially, 250,000 TEU p.a. if the consent authority is satisfied that the Traffic Impact Assessment demonstrates the proposal would not exceed the capacity of the transport network with or without mitigation measures/upgrades; b) after the facility has been in operation, an increase of up to an additional 300,000 TEU p.a. if the consent authority is satisfied that monitoring and modelling of the operation of the intermodal terminal facility demonstrates that traffic movements resulting from the proposed increase in TEU will achieve the objective of not exceeding the capacity of the transport network. The combined movement of container freight on the Subject Site must not exceed 1.05 million TEU p.a.
9	Concept approval is granted for an intermodal terminal facility incorporating either: a) the rail link; or b) if a rail link is under construction or has been constructed associated with the SIMTA development as identified in development application MP10_0193, then only a short connection from the intermodal terminal facility to the SIMTA rail connection on the eastern side of the Georges River.
10	Port shuttle operations must use: a) Locomotives that incorporate available best practice noise and emission technologies. Prior to construction of the rail link connecting to the site, the Applicant is to submit a report to the Secretary for consideration and approval that has been prepared in consultation with TfNSW and the EPA that justifies the technology proposed and how it meets the objective of best practice noise and emission technologies; and b) Wagons that incorporate available best practice noise technologies including as a minimum, permanently coupled 'multi-pack' steering wagons using Electronically Controlled Pneumatic (ECP) braking with a wire based distributed power system (or better practice technology). Prior to the commencement of operation, the Applicant is to submit a report to the Secretary for consideration and approval that has been prepared in consultation with TfNSW and EPA that justifies the technology proposed and how it meets the objective of best practice noise technologies.
11	The Applicant shall install and maintain a rail noise monitoring system on the rail link at the commencement of operation to continuously monitor the noise from rail operations. The system shall capture the noise from each individual train passby noise generation event, and include information to identify: a) Time and date of freight train passbys; b) Imagery or video to enable identification of the rolling stock during day and night; c) LAeq(15hour) and LAeq(9hour) from rail operations; and d) LAF(max) and SEL of individual train passbys, measured in accordance with ISO3095; or e) Other alternative information as agreed with, or required by, the Secretary. The results from the noise monitoring system shall be publicly accessible from a website maintained by the Applicant. The noise results from each train shall be available on the website within 24 hours of it passing the monitor, unless unforeseen circumstances (ie a system malfunction) have occurred. The LAeq(15hour) and LAeq(9hr) results from each day shall be available on the website within 24 hours of

Development Description	
	the period ending. Prior to the commencement of operation, the Applicant shall submit for the approval of the Secretary, justification supporting the appropriateness of the location for rail noise monitoring, including details of any alternative options considered and reasons for these being dismissed. The rail noise monitoring system shall not operate until the Secretary has approved the proposed monitoring location. The Applicant shall provide an annual report to the Secretary with the results of monitoring for a period of 5 years, or as otherwise agreed with the Secretary, from the commencement of operation of intermodal terminal facility. The Secretary shall consider the need for further reporting following a review of the results for year 5.
12	Prior to submitting any Development Application for the intermodal terminal facility, the Applicant shall convene a meeting with regard to proposed traffic assumptions and mitigation measures. The Applicant must: a) Invite SIMTA, TfNSW, RMS, Liverpool City Council and Campbelltown City Council. Each Council may also invite a maximum of two community representatives to attend. b) At the meeting, present the scope and assumptions of the mesoscopic/microsimulation traffic modelling, the draft Traffic Impact Assessment and any proposed mitigation measures including timing on the delivery of any proposed measures; c) Publish the meeting minutes and a schedule of action items arising from the meeting, including responsibilities and timeframes on its website; d) Prepare a written report responding to the action items and consult with RMS on the action items and final mitigation measures; and e) Provide details of the undertaking and outcomes of this condition in the EIS.
13	Containers must be transferred from Port Botany to the site and from the site to Port Botany by rail, unless there is planned track maintenance or where unforeseen circumstances have occurred (eg an incident, breakdown, derailment or emergency maintenance on the rail line). The Secretary may at any time request the Applicant to demonstrate that the transport of containers between the site and Port Botany container terminals is by rail. This is to be demonstrated upon request by the Secretary for the prior 12 month period.
14	Operations on the Subject Site cannot commence until a rail connection to the SSFL is operational.
15	The warehousing and distribution facilities must only be used for activities associated with freight using the intermodal terminal facility unless otherwise approved in a subsequent Development Application.
16	Building heights are to be a maximum of 21 metresabove finished surface levels which must be in accordance with Condition 19B and other structures are to be generally consistent with Appendix D Landscape and Visual Impact of the Response to Submissions dated May 2015.
17	Building setbacks are to be generally consistent with Appendix D Landscape and Visual Impact of the Response to Submissions dated May 2015 and allow for stabilised fill batters.
17A	The maximum GFAs for the following uses apply: (a) 300,000m^2 for the warehousing and distribution facilities; and (b) 800m^2 for the freight village.
18	The layout of the site shall not prevent a possible future pedestrian connection to Casula Railway Station across the Georges River.
18A	The layout of the site must not prevent the provision of vegetated wildlife corridors linking the Georges River riparian corridor and Moorebank offset area with the Wattle Grove offset area as shown in the Appendix.

Development Description	
18B	The site must include provision of a riparian corridor, comprising the following: (i) a buffer zone to the most inland of: - 40 metres from the top of bank, as surveyed by a registered surveyor, or - the 1% AEP flood extent, excluding the localised depression at the existing major east-west drainage channel, and (ii) an additional 10 metre extension to the buffer zone established in (i) above, where native vegetation is located on or within 10 metres east of the buffer.
19	The layout of the site shall be designed to ensure heavy vehicles associated with the operation of the intermodal terminal facility can be accommodated on site in the event of an incident blocking access to the M5 Motorway/ Moorebank Avenue to avoid queuing on public roads.
19A	Only VENM, ENM, or other material approved in writing by the EPA is to be brought onto the site.
19B	The total volume of uncomplacted fill to imported must not exceed 1,600,000m^3 unless it can be demonstrated in a future development application that the proposed finished surface level of any filled section of the site does not exceed 16.6 m AHD.
19C	Clearing native vegetation and earthworks including fill importation and placement for a future Development Application must be undertaken in a phased manner to minimised dust and native fauna impacts, with no long term stockpiling of imported fill and no stockpiling of imported material for use as part of a subsequent future Development Application.
Lapsing of Approval	
20	This approval will lapse ten years from the date of this approval unless works the subject of Early Works (Stage 1) or any related application are physically commenced, on or before that lapse date.
Secretary as Moderator	
21	In the event of a dispute between the Applicant and a public authority, in relation to this approval, either party may refer the matter to the Secretary for resolution. The Secretary's resolution of the matter shall be binding on the parties.
Legal Notices	
22	Any advice or notice to the consent authority shall be served on the Secretary

SCHEDULE 3 COMPLIANCE TABLES

Table 14 - CoC Compliance Table

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
A2	The Applicant shall prepare and implement a Compliance Tracking Program, to track compliance with the requirements of this approval. The Program shall be submitted to the Secretary for approval prior to the commencement of construction and operate for the duration of the Early Works stage. The Program shall include, but not be limited to: (a) provision for the notification to the Secretary prior to the commencement of construction; (b) provision for periodic review of the compliance status of the SSD against the requirements of this approval; (c) provision for periodic reporting of compliance status to the Secretary, including but not limited to: (i) a Pre-Construction Compliance Report prior to the commencement of early works, (ii) Six-monthly, or other timing as agreed by the Secretary, Early Works Compliance Reports, for the duration of early works, and (iii) a Completion Compliance Report within one month of completion of the early works stage; (d) a program for independent environmental auditing in accordance with AS/NZS ISO 19011:2014 - Guidelines for Auditing Management Systems; (e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents; (f) provision for reporting environmental incidents to the Secretary during construction, in accordance with conditions A3 and A4; (g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and			X	The Compliance Tracking Program

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
	h) provision for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.				
A3	The applicant shall notify the Secretary and Relevant public authorities of any incident with actual or potential significant on-site or offsite impacts on human health or the biophysical environment within 24 hours of becoming aware of the incident. The Applicant shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred			X	CEMP Section 10.1
A4	The Applicant shall meet the requirements of the Secretary or relevant public authority (as determined by the Secretary) to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition A3, within such period as the Secretary may require.			X	CEMP Section 10.1
B1	The Applicant shall ensure that all demolition work is carried out in accordance with; Australian Standard AS 2601:2001: The Demolition of Structures, or its latest version.		X		Demolition Work Plan
B2	The approved works (including any excavation required for remediation) must not occur below 5 metres AHD and lower the water table below 1m AHD on adjacent class 1, 2, 3, 4 land in accordance with the Liverpool Local Environmental Plan 2008		X		CEMP Appendix D
B3	The subject site is to be remediated in accordance with: a) The approved Remedial Action Plan; b) State Environmental Planning Policy No. 55 – Remediation of Land; and c) The guidelines in force under the Contaminated Land Management Act. Amendments to the approved Remedial Action Plan required as a result of further site investigations must be approved by the site auditor, in consultation with the EPA. Within 3 months after the completion of the remediation works, a notice of completion, including a validation and/or monitoring report is to be provided to the Secretary. This notice must be consistent with State Environmental Planning Policy No. 55 – Remediation of Land. The validation and/or monitoring report is to be independently audited and a Site Audit Statement Issued. The audit is to be carried out by an			X	CEMP Appendix D

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
	independent auditor accredited by the Environment Protection Authority. Any conditions recorded on the Site Audit Statement are to be complied with.				
B4	The Early Works shall be undertaken to comply with section 120 of the Protection of the Environment Operations Act 1997, which prohibits the pollution of waters.		X		CEMP Appendix D & CSWMP Section 6.1.1
B5	All activities taking place in, on or under waterfront land, as defined in the Water Management Act 2000 should be conducted generally in accordance with the NSW Office of Water's Guidelines for Controlled Activities		X		CSWMP Section 6.1.1
B6	The Applicant shall not harm, modify or otherwise impact any heritage items outside the subject site.		X		CEMP/ CHMP
B7	Prior to the commencement of Early Works affecting Aboriginal sites MA1, MA2, MA3, MA4, MA5 and MA9, the Applicant shall: (a) develop a detailed salvage strategy, prepared in consultation with the OEH (Aboriginal heritage) and the Aboriginal stakeholders. The investigation program shall be prepared to the satisfaction of the Secretary; and (b) undertake any further archaeological excavation works recommended by the results of the Aboriginal archaeological investigation program. Within twelve months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall submit a report containing the findings of the excavations, including artefact analysis and Aboriginal Site Impacts Recording Forms (ASIR), and the identification of final storage location for all Aboriginal objects recovered (testing and salvage), prepared in consultation with the Aboriginal stakeholders, the OEH (Aboriginal heritage) and to the satisfaction of the Secretary.		X		CEMP/ CHMP/ Salvage Strategy
B8	Prior to the commencement of Early Works affecting non-Aboriginal sites MHPAD1 and MHPAD2, the Applicant shall undertake any further archaeological excavation works recommended by the results of the non-Aboriginal archaeological investigation program. Within 12 months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall submit a report containing the findings of the excavations,		X		CEMP/ Salvage Strategy/ CHMP

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
	including artefact analysis, and the identification of a final repository for finds, prepared in consultation with the OEH (Heritage branch) and to the satisfaction of the Secretary.				
B9	Prior to the commencement of Early Works affecting the CUST Hut, RAAF STRARCH Hangar, the Dog Cemetery and Commemorative Gardens, the Applicant shall prepare a report in consultation with the Heritage Council of NSW, the local Council and the local Historical Society which considers the options for mitigation of these items. In relation to the Dog Cemetery, consultation should also occur with the School of Military Engineering's Explosive Detection Dog's Unit. The report shall include the archival recordings and the historical research, where required, to the Secretary, the Heritage Council of NSW, the local Council and the local Historical Society.				CEMP/ Salvage Strategy/ CHMP
B10	Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with: a) all relevant Australian Standards; b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997). In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.		X		CEMP Appendix D
B11	The Applicant shall carry out all feasible and reasonable measures to minimise dust generated by the Development		X		CAQMP Section 5
B12	During Early Works, the Applicant shall ensure that: a) all vehicles on site do not exceed a speed limit of 30 kilometres per hour; and b) all loaded vehicles entering or leaving the site have their loads covered; and all loaded vehicles leaving the site are cleaned of dirt, sand and other materials before they leave the site, to avoid tracking these materials on public roads.		X		CAQMP Section 5
B13	The reuse and/or recycling of waste materials generated on site shall be maximised as far as practicable, to minimise the need for treatment or disposal of those materials offsite.		X		CAQMP Section 5

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
B14	All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with Waste Classification Guidelines (Department of Environment, Climate Change and Water 2009).		X		CEMP Appendix D
B15	All waste materials removed from the subject site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.		X		CEMP Appendix D
B16	Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the Early Works shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Applicant, or as otherwise agreed between the parties.		X		CEMP Section 3.3
B17	The Applicant shall prepare dilapidation surveys and reports on the condition of local roads, footpaths, services and utilities affected by Early Works. The Applicant shall carry out rectification work at the Applicant's expense and to the reasonable requirements of the owners for damage resulting from the completion of Early Works.		X		CEMP Section 6
B18	The Applicant shall ensure that the construction and operation of the proposed development will not prevent the existing use of Moorebank Avenue as a public road to a standard commensurate to its current use prior to the development.		X		CEMP Section 6
C1	Community Communication Strategy C1 Prior to the commencement of Early Works, or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Community Communication Strategy to the satisfaction of the Secretary. The Strategy shall provide mechanisms to facilitate communication between the Applicant (and its contractor(s)), the Environmental Representative (see condition D1), the relevant Council and community stakeholders (particularly adjoining landowners) on the design and construction environmental management of the Early Works. The Strategy shall include, but not be limited to: (a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners, key community and business groups, and community and social service organisations;				Community Communications Strategy (CCS) Section 4

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
	(b) procedures and mechanisms for the regular distribution of accessible information to community stakeholders on construction progress and matters associated with environmental management, including provision of information in appropriate community languages; (c) procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Applicant and/or Environmental Representative in relation to the environmental management and delivery of the SSD; (d) procedures and mechanisms through which the Applicant can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of the SSD; and (e) procedures and mechanisms that would be implemented to resolve issues/disputes that may arise between parties on the matters relating to environmental management and the delivery of the SSD, including but not limited to disputes regarding rectification or compensation for impacts to third party property and infrastructure. These procedures and mechanisms may include the use of a suitably qualified and experienced independent mediator.				
C2	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary, the Applicant shall ensure that the following are available for community enquiries and complaints for the duration of Early Works: (a) a 24 hour telephone number(s) on which complaints and enquiries about the SSD may be registered; (b) a postal address to which written complaints and enquires may be sent; (c) an email address to which electronic complaints and enquiries may be transmitted; and (d) a mediation system for complaints unable to be resolved. The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.			X	(CCS) Section 4 CCS Section 6

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
C3	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Construction Complaints Management System consistent with AS ISO 10002-2006 Customer satisfaction – Guidelines for complaints handling in organisations (ISO 10002:2004, MOD) and maintain the System for the duration of Early Works and up to 12 months following completion of this stage. Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by this approval. The information contained within the System shall be made available to the Secretary on request.			X	CCS Section 6
C4	Prior to commencement of the Early Works, or as otherwise agreed by the Secretary, the Applicant shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the SSD, for the duration of Early Works. The Applicant shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages	X			CEMP Section 1.4
D1	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary, the Applicant shall appoint a suitably qualified and experienced Environmental Representative(s) that is independent of the design and construction personnel, and that has been approved by the Secretary. The Applicant shall employ the Environmental Representative(s) for the duration of construction of this stage,	X			CEMP Section 5.2
D2	The Environmental Representative shall prepare and submit to the Secretary a three monthly report on the Environmental Representative's actions and decision on matters specified in condition D1 for the preceding month. The reports shall be submitted within seven (7) days for the end of each month for the duration of Early Works, or as otherwise agreed by the Secretary. Notwithstanding, the Environmental Representative shall be given the independence to report to the Secretary at any time and/or at the request of the Secretary	X			CEMP Section 5.2
D3	Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition (Landcom, 2004) shall be employed during Early Works to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.		X		CSWMP

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
D4	The Applicant shall store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's Storing and Handling Liquids: Environmental Protection – Participants Handbook.		X		CEMP CSWMP
D5	Early works shall be undertaken during the following standard construction hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; and (b) 8:00am to 1:00pm Saturdays; (c) at no time on Sundays or public holidays.		X		CEMP Section 3
D6	Activities resulting in impulsive or tonal noise emissions shall only be undertaken: (a) between the hours of 8:00 am to 5:00 pm Monday to Friday; (b) between the hours of 8:00 am to 1:00 pm Saturday; and (c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block.		X		CEMP Section 3
D7	Notwithstanding conditions D5 and D6, works may be undertaken outside the hours specified under those conditions in the following circumstances: (a) construction works that cause LAeq (15 minute) noise levels that are: (i) No more than 5 dB above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and (ii) No more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC, 2009) at other sensitive landuses; or (b) for the delivery of materials required by the police or other authorities for safety reasons; or (c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or (d) construction works approved through an Out-Of-Hours Work Protocol prepared as part of the Construction Noise and Vibration Management Plan required by condition D21(b), provided the relevant Council, local residents and other affected stakeholders and		X		CEMP Section 3 CNVMP Section 7.1

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
	sensitive receivers are informed of the timing and duration at least 48 hours prior to the commencement of the works; or (e) identified works approved by the Secretary				
D8	The Applicant shall implement all feasible and reasonable noise mitigation measures with the aim of achieving the following construction noise management levels and vibration criteria: (a) construction noise management levels established using the Interim Construction Noise Guideline (DECC 2009); (b) vibration criteria established using the Assessing Vibration: a Technical Guide (DECC 2006) (for human exposure); and (c) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage). Any construction activities identified as exceeding the construction noise management levels and/or vibration criteria shall be managed in accordance with the Construction Noise and Vibration Management Plan required by condition D22(b).		X		CEMP NVMP
D9	The Applicant is to ensure that construction vehicle contractors operate so as to minimise any construction noise impacts from the subject site. Measures that could be used include toolbox talks, contracts that include provisions to deal with unsatisfactory noise performance for the vehicle and/or the operator, and specifying non-tonal movement alarms in place of reversing beepers or alternatives such as reversing cameras and proximity alarms, or a combination of these, where tonal alarms are not mandated by legislation.		X		CEMP NVMP
D10	No use of compression brakes shall be permitted for construction vehicles associated with the Early Works in the vicinity of the subject site.		X		CEMP NVMP
D11	Construction heavy vehicle access to and from the site via Moorebank Avenue (south) / Cambridge Avenue during Early Works is not permitted, with the exception of heavy vehicles travelling to and from the Glenfield Waste Facility.		X		CTAMP Section 5.3

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
D12	The Early Works shall be carried out to, where feasible and reasonable, to avoid the use of local roads (through residential streets) by heavy vehicles to gain access to the site and/or ancillary facilities.		X		CTAMP Section 5
D13	Construction vehicles (including staff vehicles) associated with the Early Works shall be managed to: (a) minimise parking or queuing on public roads; (b) minimise idling and queuing in local residential streets where practicable; (c) adhere to the nominated haulage routes identified in the Construction Traffic and Access Management Plan required under condition D22(a); and (d) ensure access and egress from construction compounds is undertaken in a safe and lawful manner.		X		CTAMP Section 4
D14	Safe pedestrian and cyclist access through or around worksites shall be maintained during early works. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route shall be provided and signposted, including provision of permanent footpaths where pedestrian access is reliant on grassed verges.		X		CTAMP Section 3c
D15	Access to all properties affected by the carrying out of Early Works shall be maintained, where feasible and reasonable, unless otherwise agreed by the relevant property owner or occupier. Any access physically affected by the carrying out of Early Works shall be reinstated to at least an equivalent standard, unless agreed with by the property owner		X		CEMP Section 6
D16	Upon determining the haulage route(s) for construction vehicles associated with subject site, and prior to Early Works, a suitably qualified and experienced independent expert shall prepare a Road Dilapidation Report. The Report shall assess the current condition of roads and describe mechanisms to restore any damage that may result due to its use by traffic and transport related to the Early Works. The Report shall be submitted to the Secretary for information and the relevant Council for review prior to the commencement of haulage. Following completion of Early Works, a subsequent Report shall be prepared to assess any damage to the road that may have resulted. Measures undertaken to restore or reinstate roads affected by the Early Works shall be undertaken in a timely manner, in		X		CEMP Section 6 Dilapidation Report

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
	accordance with the reasonable requirements of the relevant Council, and at the full expense of the Applicant.				
D17	Within 12 months of the commencement of Early Works, the Applicant shall develop and implement a Biodiversity Offset Package for the approval of the Secretary. The Package shall detail how the ecological values lost as a result of the SSD will be offset. The Package shall be consistent with the NSW Biodiversity Offsets Policy for Major Projects (OEH 2014), unless otherwise agreed by the Secretary.	X			Biodiversity Offsets Package
D18	Subject to future Development Applications, no threatened species or communities can be cleared other than that required for Early Works. Any hollow bearing trees shall be relocated to areas to be determined by a suitably qualified ecologist in areas identified for conservation.		X		CEMP FFMP
D19	The Applicant shall prepare and implement a 'Threatened Dragonfly Species Survey Plan' to determine the presence or absence of threatened dragonfly species listed under the Fisheries Management Act 1994 on the Georges River, adjacent to the development site. The plan, including survey methodology, shall be prepared in consultation with DPI Fisheries prior to the commencement of Early Works. On implementing the plan, the survey results are to be forwarded onto DPI Fisheries. Should threatened dragonfly species be found at this site, DPI Fisheries should be Contacted to agree on possible mitigation measures to avoid impacts in accordance with NSW DPI Policy and Guidelines for Fish Habitat Conservation and Management (2013).	X			Biodiversity Offsets Package
D20	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary the applicant shall prepare and implement a Construction Environmental Management Plan (CEMP). The CEMP is to be prepared in consultation with the EPA, OEH, DPI Water, DPI Fisheries, and the relevant Council, for approval of the Secretary. The CEMP shall outline the environmental management practices and procedures that are to be followed during construction. The CEMP is to be prepared in accordance with the Guideline for the preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004)		X		This CEMP
	a) a description of activities to be undertaken during the Early Works		X		CEMP Section 3 & Section 1

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
	b) Statutory and other obligations that the applicant is required to fulfil during Early Works, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies		X		CEMP Section 4
	c) A description of the roles and responsibilities for relevant employees, including contractors and sub-contractors, are aware of their environmental and compliance obligations under these conditions of approval.		X		CEMP Section 4 & Section 5
	d) An environmental risk analysis to identify the key environmental performance issues associated with the early works; and		X		CEMP Appendix D
	e) Details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the CEMP.		X		CEMP Section 9
	i) Measures to monitor and manage dust emissions including dust from stockpiles, traffic on unsealed roads and materials tracking from construction sites onto public roads		X		CEMP Appendix M
	ii) Measures for the handling, treatment and management of hazardous and contaminated materials (including asbestos)		X		CEMP Appendix C
	iii) Measure and monitor and manage waste generated during construction but not necessarily limited to: general procedures for waste classification, handling reuse, disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealings with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins)		X		CEMP Appendix C
	iv) Measure and monitor and manage hazards and risks		X		CEMP Appendix D
	v) Measure and monitor and rectify any impacts to third party property and infrastructure, including details of the process of rectification or compensation of affected landowners, and timeframes for rectification works or compensation processes and		X		CEMP Section 6

CoC No.	Requirement	Responsibility			Reference
		Principal	Contractor	Shared	
	vi) The issues identified in condition D21		X		CEMP Appendix I - Appendix N
D21	As part of the CEMP for the SSD, the Applicant shall prepare and implement		X		CEMP
	a) Construction Traffic and Access Management Plan		X		CTMP Sub-Plan
	b) Construction Noise and Vibration Management Plan		X		CNVMP Sub-Plan
	c) Construction Heritage Management Plan		X		CHMP Sub-Plan
	d) Construction Flora and Fauna Management Plan		X		FFMP Sub-Plan
	e) Construction Air Quality Management Plan		X		CAQMP Sub-Plan
	f) Construction Soil and Water Management Plan		X		SWMP Sub-Plan

SCHEDULE 4 REMM CONDITIONS OF CONSENT

In order to streamline the document, the Revised Environmental Mitigation Measures (REMMs) from the Supplementary Responses to Submissions Report that relate to the Early Works have been included. These are detailed below in Table 16.

Table 15 - REMMs Compliance Table

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
1A	An EMS that complies with AS/NZS ISO 140001:2004 would be developed and implemented on the Project site.		✓		CEMP and Sub-Plans
1B	EMPs including CEMPs and OEMPs (or equivalent) would be prepared for the Project. At this point, Provisional EMPs (included in Volume 2, Appendix H of the EIS) have been prepared and would be updated as more is known about the Project phasing including detailed design, construction and operation		✓		CEMP and Sub-Plans
2A	A Community Engagement Plan (CEP) (or equivalent) would be prepared to outline community involvement and consultation activities during early works, construction and operation phases. As a minimum, the CEP would include appropriate measures for community involvement, including: • a direct telephone number (24 hour); • an email address; • a postal address;		✓		CEMP CCS

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	• regular project updates; • a community liaison representative; and scheduled meetings with a local representative body such as a community consultative (or liaison) committee. The CEP would also set out a guide on expectations for responding to relevant information received from community members.				
2B	The CEP would be prepared to ensure: • The community and stakeholders have a high level of awareness of all processes and activities associated with the Project; • Accurate and accessible information is made available; and • A timely response is given to issues and concerns raised by stakeholders and the community.			✓	CEMP CCS
3B	Implementation of sustainability initiatives would be monitored in accordance with the monitoring framework developed as part of the EMS for the next stage of approvals. This framework would identify sustainability indicators for monitoring.	✓			(Ongoing)
4I	Reducing the volumes of construction vehicles travelling during peak periods, especially if the increase in traffic generated by		✓		CTAMP Section D

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	construction activities impedes on the operation of Moorebank Avenue.				
4J	Maintain access to neighbouring properties. It is particularly important that the ABB site has access throughout the construction stages		✓		CTAMP Section 3g
4K	In addition to the Community Engagement Plan (or equivalent) (Refer to 2A), a communication plan will be developed to provide information to the relevant authorities and bus operators in addition to the local community. The communication plan will need to incorporate a contact list with the chain of command		✓		CTAMP Section 3g
4L	Implement relevant traffic control measures to inform drivers of the construction activities and locations of heavy vehicle access locations.		✓		CTAMP Section D
4O	Traffic on Moorebank Avenue would be monitored during peak periods to ensure that queuing at intersections does not impact on other road users.		✓		CTAMP Section D
6A	Following detailed design and before construction, detailed flora and fauna mitigation measures would be developed and presented as part of the CEMP. These detailed measures would incorporate the measures listed in 6B to 6W. The CEMP would address:		✓		CFFMP Section 6 and 7

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	• general impact mitigation; • staff/contractor inductions; • vegetation clearing protocols; • pre-clearing surveys and fauna salvage/translocation; • rehabilitation and restitution of adjoining habitat; • weed control; • pest management; and • monitoring. The plans would include clear objectives and actions for the Project including how to: • minimise human interferences to flora and fauna; • minimise vegetation clearing/disturbance; • minimise impact to threatened species and communities; • minimise impacts to aquatic habitats and species; and • undertake flora and fauna monitoring at regular intervals.				
6B	Vegetation clearing would be restricted to the construction footprint and sensitive areas would be clearly identified as exclusion zones.		✓		CFFMP Section 6/ CEMP Appendix E
6C	The exclusion zones would be marked on maps, which would be provided to contractors, and would also be marked on the ground using		✓		CFFMP Section 6/ CEMP Appendix E

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	high visibility fencing (such as barrier mesh).				
6D	A trained ecologist would accompany clearing crews to ensure disturbance is minimised and to assist in relocating any native fauna to adjacent habitat.		✓		CFFMP Section 6/ CEMP Appendix E
6E	A staged habitat removal process would be developed and would include the identification and marking of all habitat trees in the area. Where reasonable and feasible, clearing of hollow-bearing trees would be undertaken in March and April when most microbats are likely to be active (not in torpor) but are unlikely to be breeding or caring for young, and when threatened hollow-dependent birds in the locality are also unlikely to be breeding. Pre-clearing surveys would be conducted 12 to 48 hours before vegetation clearing to search for native wildlife (e.g. reptiles, frogs, Cumberland Land Snail) that can be captured and relocated to the retained riparian vegetation of the Georges River corridor. Vegetation would be cleared from a 10 m radius around habitat trees to encourage animals roosting in hollows to leave the tree. A minimum 48 hour waiting period would allow animals to leave. After the waiting period, standing habitat trees would be shaken		✓		CFFMP Section 6/ CEMP Appendix E

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	(where safe and practicable) under the supervision of an ecologist to encourage animals roosting in hollows to leave the trees, which may then be felled, commencing with the most distant trees from secure habitat. Felled habitat trees would either be immediately moved to the edge of retained vegetation, or left on the ground for a further 24 hours before being removed from the construction area, at the discretion of the supervising ecologist. All contractors would have the contact numbers of wildlife rescue groups and would be instructed to coordinate with these groups in relation to any animal injured or orphaned during clearing. Within areas of high quality intact native vegetation proposed to be removed: • topsoil (and seedbank) is to be collected from native vegetation that are to be permanently cleared and used in the revegetation of riparian areas; and • Native plants in areas that are to be permanently cleared are to be relocated and transplanted in riparian areas identified for rehabilitation.				
6F	Relocation of fauna to adjacent retained habitat would be		✓		CFFMP Section 6/ CEMP Appendix E

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	undertaken by an ecologist during the supervision of vegetation removal				
6G	An ecologist would supervise the drainage of any waterbodies on the Project site and would relocate native fish (e.g. eels), tortoises and frogs to the edge of the Georges River and/or the existing pond at the northern end of the IMT site.		✓		CFFMP Section 6/ CEMP Appendix E
6H	The design of site fencing and any overhead powerlines would consider the potential for collision by birds and bats and minimise this risk where practicable.		✓		(Not Required)
6I	The potential for translocation of threatened plant species as individuals or as part of a soil translocation process would be considered during the detailed development of the CEMP.		✓		CFFMP / CEMP Appendix E
6O	Erosion and sediment control measures such as silt fencing and hay bales would be used to minimise sedimentation of streams and resultant impacts on aquatic habitats and water quality		✓		CFFMP / CEMP Appendix E
8B	Before construction, a remediation program would be implemented in accordance with the Moorebank Intermodal Terminal Preliminary Remediation Action Plan (RAP) (or equivalent). The program will have been formally reviewed and approved by the Site Auditor under		✓		CEMP Appendix E RAP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	Part 4 of the NSW *Contaminated Land Management Act 1997* (CLM Act).				
8C	A CEMP would be prepared by the contractor for all excavation and remediation works and would include requirements for decontamination facilities at the Project site.		✓		CEMP A5/RAP
8D	An unexploded ordnance (UXO) management plan (or equivalent) would be developed for the Project site. This plan would detail a framework for addressing the discovery of UXO or explosive ordnance waste (EOW) to ensure a safe environment for all Project staff, visitors and contractors.		✓		UXO Management Plan
8I	Contaminated soil/fill material present will be 'chased out' during the excavation works based on visual, olfactory and preliminary field test results.		✓		CEMP Appendix D
8J	Excavated soil would be temporarily stockpiled, sampled and analysed for waste classification processes. Subject to receipt of waste classification results, the material would be transported to a licensed offsite waste disposal facility as soon as practicable to minimise dust and odour issue through storage of materials on site.		✓		CEMP Appendix D RAP
8K	Stockpiled soils would be stored on a sealed surface and the stockpiled		✓		CEMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	areas would be securely bunded using silt fencing to prevent silt laden surface water from entering or leaving the stockpiles or the Project site.				RAP SWMP
8L	All excavation works associated with potential contaminated lands would be undertaken by licensed contractors, experienced in remediation projects and the handling of contaminated soils.		✓		CEMP RAP SWMP
8M	All asbestos removal, transport and disposal would be performed in accordance with the *Work Health and Safety Regulation 2011* (WHS Regulation).		✓		CEMP RAP
8N	The removal works would be conducted in accordance with the National Occupational Health and Safety Commission Code of Practice for the Safe Removal of Asbestos, 2nd Edition [NOHSC 2002 (2005)] (NOHSC 2005a).		✓		CEMP RAP
8RO	An appropriate asbestos removal licence issued by WorkCover NSW would be required for the removal of asbestos contaminated soil		✓		CEMP RAP
8P	Environmental management and WHS procedures would be put in place for the asbestos removal during excavation to protect workers, surrounding residents and the environment		✓		CEMP RAP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
8Q	Temporary stockpiles of asbestos containing material (ACM) soils would be covered to minimise dust and potential asbestos release.		✓		CEMP RAP
8R	An asbestos removal clearance certification would be prepared by an occupational hygienist at the completion of the removal work. This would follow the systematic removal of asbestos containing materials and any affected soils from the Project site, and validation of these areas (through visual inspection and laboratory analysis of selected soil samples).		✓		CEMP RAP
8S	Asbestos fibre air monitoring would be undertaken during the removal of ACMs and in conjunction with the visual clearance inspection. The monitoring would be conducted in accordance with the National Occupational Health and Safety Commission Guidance Note on the Membrane Filter Method For the Estimating Airborne Asbestos Fibre, 2nd Edition [NOHSC 3003 (2005)] (NOHSC 2005b).		✓		CEMP RAP
8T	All stockpiles would be maintained in an orderly and safe condition. Batters would be formed with sloped angles that are appropriate to prevent collapse or sliding of the stockpiled materials		✓		CEMP RAP SWMP
8U	Stockpiles would be placed at approved locations and would be		✓		CEMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	strategically located to mitigate environmental impacts while facilitating material handling requirements. Contaminated or potentially contaminated materials would only be stockpiled in unremediated areas of the Project site or at locations that did not pose any risk of environmental impairment of the stockpile area or surrounding areas (e.g. hardstand areas).				RAP
8V	Stockpiles would only be constructed in areas of the Project site that had been prepared in accordance with the requirements of the Project Preliminary RAP in Appendix F of Technical Paper 5 – Environmental Site Assessment (Phase 2), Volume 5A and 5B. All such preparatory works would be undertaken before material is placed in the stockpile. Stockpiles must be located on sealed surfaces such as sealed concrete, asphalt, high density polyethylene or a mixture of these, to appropriately mitigate potential cross contamination of underlying soil.		✓		CEMP RAP SWMP
8W	Any stockpiles of contaminated material would be covered with a waterproof membrane (such as polyethylene sheeting) to prevent increased moisture from rainwater		✓		CEMP RAP SWMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	infiltration and to reduce windblown dust or odour emission.				
8X	Before the reuse of any material on site, it would be validated so that the lateral and vertical extent of the contamination is defined.		✓		CEMP RAP
8Y	Where required, contaminated materials and wastes generated from the Project remediation and construction works would be taken to suitable licensed offsite disposal facilities.		✓		CEMP RAP
8Z	Where necessary, consider undertaking further investigations to determine whether other buildings have organochlorine pesticides (OCP) impacts subgrade materials, and to quantify the volume of OCP impacted materials across the site.		✓		RAP
8AA	Additional Aqueous Film Forming Foam Assessment (AFFF) be undertaken to determine if any direct remedial and/or management actions are required. A stage approach is considered appropriate and is detailed in the Preliminary AFFF Assessment (Golder Associates 2015b).		✓		RAP
9A	A soil and water management plan (or equivalent) would be developed before work begins in the conservation area. This plan would include erosion and sediment control plans (ESCPs) and procedures to manage and minimise		✓		SWMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	potential environmental impacts associated with developing this area.				
9B	Site compounds, stockpiling areas and storage areas for sensitive plant, equipment and hazardous materials would be located above an appropriate design flood level, which would be determined based on the duration of the construction works.		✓		CEMP SWMP
10A	A Dust Management Plan (DMP) (or equivalent) would be prepared as part of the CEMP.		✓		CAQMP
10B	Dust minimisation measures would be developed and implemented before commencement of construction. The NSW CoCl Mining Benchmarking Study: Measures to Prevent and/or Minimise Emissions of Particulate Matter from CoCl Mining (OEH 2011) would be considered.		✓		CAQMP
10C	Methods for management of emissions would be incorporated into Project inductions, training and pre-start talks.		✓		CAQMP
10D	Activities with the potential to cause significant emissions, such as material delivery and load out and bulk earthworks, would be identified in the CEMP. Work practices that minimise emissions during these activities would be investigated and		✓		CAQMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	applied where reasonable and feasible.				
10E	A mechanism for raising and responding to complaints would be put in place for the duration of the construction phase.		✓		CAQMP
10F	Vehicle movements would be limited to designated entries and exits, haulage routes and parking areas. Project site exits would be fitted with hardstand material, rumble grids or other appropriate measures to limit the amount of material transported offsite (where required).		✓		CAQMP
10G	Work site compounds and exposed areas would be screened to assist in capturing airborne particles and reduce potential entrainment of particles from areas susceptible to wind erosion		✓		CAQMP
10H	Dust would be visually monitored during construction and the following measures would be implemented where necessary: Apply water (or alternative measures) to exposed surfaces that are causing dust generation. Surfaces may include any stockpiles, hardstand areas and other exposed surfaces (for example recently graded areas). Regular watering would ensure that the soil is moist to achieve 50% control of dust emissions from scrapers, graders and dozers.		✓		CAQMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	Appropriately cover loads on trucks transporting material to and from the construction site. Securely fix tailgates of road transport trucks before loading and immediately after unloading Prevent, where possible, or remove, mud and dirt being tracked onto sealed road. Apply water at a rate of >2 litres (L) per square metre per hour (L/m2/hr) to internal unsealed access roadways and work areas. Application rates would be related to atmospheric conditions (e.g. prolonged dry periods) and the intensity of construction operations. Paved roads should be regularly swept and watered when necessary.				
10I	Where reasonable and feasible, dust generating activities (particularly clearing and excavating) would be avoided or minimised during dry and windy conditions.		✓		CAQMP
10J	Project site speed limits of 20 km/h would be imposed on all construction vehicles travelling within the Project site		✓		CAQMP
10K	Graders would be limited to a speed of 8 km/h to reduce potential dust emissions		✓		CAQMP
10L	Material stockpiles would not exceed an area of 1 ha and would		✓		CAQMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	be regularly watered to achieve 50% control of potential dust emissions				
10M	Exposed areas and stockpiles would be limited in area and duration. For example, vegetation stripping or grading would be staged where possible, unconsolidated stockpiles would be covered, or hydro mulch or other revegetation applicant applied to stockpiles or surfaces left standing for extended periods		✓		CAQMP
10N	Revegetation or rehabilitation activities would proceed once construction activities were completed within a disturbed area.		✓		CAQMP
10O	Construction plant and equipment would be well maintained and regularly serviced so that vehicular emissions remain within relevant air quality guidelines and standards		✓		CAQMP
10P	Excavation works in potentially contaminated soils should be managed to ensure that they are completed during optimal dispersive conditions to minimise odorous emissions.		✓		CAQMP RAP
10Q	Emissions from trucks would be regulated in accordance with the requirements prescribed in the National Environmental Protection Measure (NEPM) (Diesel Vehicle Emissions) (NEPC 2001) or suitably relevant standards		✓		CAQMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
10R	All construction vehicles would be tuned to avoid releasing excessive smoke from the exhaust and would be compliant with OEH Smokey Vehicles Program under the NSW *Protection of the Environment and Operations Act 1997* (POEO Act) and *POEO Regulations* (NSW) (2010).		✓		CAQMP
10S	All on-road trucks are to comply with the Euro V emission standards or suitably relevant standards			✓	CAQMP
10T	All new off-road construction equipment would be required to meet, at minimum, the US Environmental Protection Agency (EPA) Tier 3 emission standards (or suitably relevant standards) for non-road diesel engines.		✓		CAQMP
10U	Establishment of Action Response Levels (ARLs) for use with realtime dust management. These aid in the assessment of impact potential, and establish an early warning system during adverse trends, reducing complaint potential and non-compliance issues. An ARL trigger would be a defined measurement of elevated dust levels for a prolonged period		✓		CAQMP
11A	Where possible, establish and maintain areas of native flora and vegetation within the Project site to			✓	CAQMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	generate significant carbon sequestration benefits.				
11B	Where possible, implement the use of biofuels (e.g. biodiesel, ethanol, or blends such as E10 and B880) to reduce GHG emissions from plant and equipment.			✓	CAQMP
11C	Consider the use of vehicles with minimum GHG emissions ratings of 7.5 for passenger vehicles and 6 for light commercial vehicles, as described in the Green Vehicle Guide			✓	CAQMP
12A	Where reasonable and feasible, options would be explored to conserve moderate to high significance sites in situ.			✓	HMP
12B	An Aboriginal heritage interpretation strategy for the Project would be developed in close consultation with the registered Aboriginal parties			✓	HMP
12C	Options for managing impacts at sites MA6 and MA7 would be explored during the detailed design phase in consultation with registered Aboriginal parties (RAP). If the scars are considered to be of Aboriginal origin, possible management options include: • Conservation of the tree(s) in situ. This would involve designing the project to ensure that the tree(s) would not be impacted.			✓	HMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	• Salvage and conservation of the tree(s), or the scarred portion of the tree's trunk, at a location outside the project area. In the event there is not a consensus of views among all of the RAPs, it is recommended that a precautionary approach be taken. This would involve acting upon statements of the tree(s) holding cultural value, even if only a minority of RAPs view either or both trees as holding cultural value.				
12D	An archaeological salvage excavation program would be implemented to preserve archaeological deposits of moderate to high archaeological/scientific significance located within the construction footprint (items recorded at MA5 and MA9). Consideration would be given to conserving both sites in situ, within open space reserves, or as an extension of the proposed conservation zone.			✓	HMP
12E	A surface salvage program would be carried out to conserve surface artefacts located within the construction footprint (items recorded at MA1, MA2, MA3 and MA4). Salvage of surface artefacts would be undertaken before any impacts in these areas			✓	HMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
13D	Where avoidance of impacts on a heritage item is not reasonable or feasible, mitigation works inclusive of archival recordings, salvage of archaeological deposits, relocation of significant elements of the built environment and/or adaptive reuse would be undertaken.			✓	HMP
13E	A European heritage interpretation strategy would be developed in close consultation with local historical societies, former and current staff and military personnel			✓	HMP
13F	No impacts would occur within the potential archaeological deposits (PAD) boundaries of Moorebank Historical Potential Archaeological Deposit (MHPAD) 1 and MHPAD2 without prior archaeological salvage, as these sites contain archaeological deposits, inclusive of in-situ building remains, that are assessed to be of local significance in the context of the history of military housing and training at Moorebank			✓	HMP
13G	In addition to archival recording of the Transport Compound Workshop (B99), consideration would be given during the detailed design stage to the in-situ conservation or adaptive reuse of this structure within the Project site. This would assist with mitigation of heritage impacts on the			✓	HMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	structure itself and the Moorebank Cultural Landscape as a whole.				
13H	In addition to archival recording, the Dog Cemetery (MH1) would be repositioned and the individual graves reinterred. This would be carried out in accordance with the wishes of the SME's Explosive Detection Dogs unit and respecting the social value of the site.			✓	HMP
13I	In addition to archival recording, consideration would be given during detailed design to the in-situ conservation of the Commemorative Garden (MH6). If in situ conservation is not possible, the plaques and planting should be relocated to an alternative location on public display within the Project			✓	HMP
13M	Further consideration would be given to options for the retention and/or relocation and adaptive reuse of the CUST Hut and the RAAF STRARCH Hangar to mitigate impacts on heritage values associated with these structures and to broaden their cultural landscape.			✓	HMP
13K	The Unanticipated Discoveries Protocol (detailed in Appendix 7 of Technical Paper 11 – European Heritage Impact Assessment in Volume 8) would be followed in the event that historical items or relics or suspected burials are			✓	HMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	encountered during excavation works				
13L	The Unanticipated Discoveries Protocol (detailed in Appendix 7 of Technical Paper 11 – European Heritage Impact Assessment in Volume 8) would be followed in the event that historical maritime items or relics are encountered during bridge works within the Georges River.			✓	HMP
15B	Implement 'dial before you dig' protocols for all potential utilities affected by the Project			✓	HMP
16A	A Project contact phone number and website would be maintained during construction and operation to enable the community, including local business owners and/or operators, to access information on the Project and receive responses to any concerns			✓	HMP
16B	A complaints line and resolution process would be set up and maintained.			✓	CEMP CCS
18A	A construction waste management plan (or equivalent) would be prepared as part of the overall CEMP. This would implement key principles of relevant waste guidelines, and the waste management hierarchy of reduction, reuse, recycling and recovery.		✓		CEMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
18B	The waste hierarchy would be investigated and implemented where possible with avoidance of waste, re-use and recycling incorporated into construction methodologies			✓	CEMP
18C	Consideration would be given to the selection of materials for use in construction to minimise waste generated throughout their lifecycle.			✓	CEMP
18D	Where practicable, construction materials that contain minimal embodied energy would be preferred.			✓	CEMP
18E	Opportunities would be explored where practicable to recycle or re-use materials arising from demolition works, with a preference for onsite re-use where possible (or recycling through an appropriate recycling contractor).			✓	CEMP
18F	Where possible, site disturbance and unnecessary excavation would be minimised.			✓	CEMP
18G	Formwork would be re-used where possible.			✓	CEMP
18H	Sewage waste would be disposed of by a licensed waste contractor in accordance with Sydney Water and OEH requirements.			✓	CEMP
18Y	Measures to minimise the use of energy and fuel would be			✓	CEMP

REMM	Requirement	Responsibility			Reference
		Principle	Contractor	Shared	
	investigated and implemented where appropriate. These may include using non-renewable sources such as petroleum, diesel, natural gas and liquefied natural gas.				
18Z	Where practicable, water would be re-used onsite, including water stored in sediment basins.			✓	CEMP

APPENDIX C EMERGENCY SPILL RESPONSE AND UNEXPECTED FINDS PROTOCOL

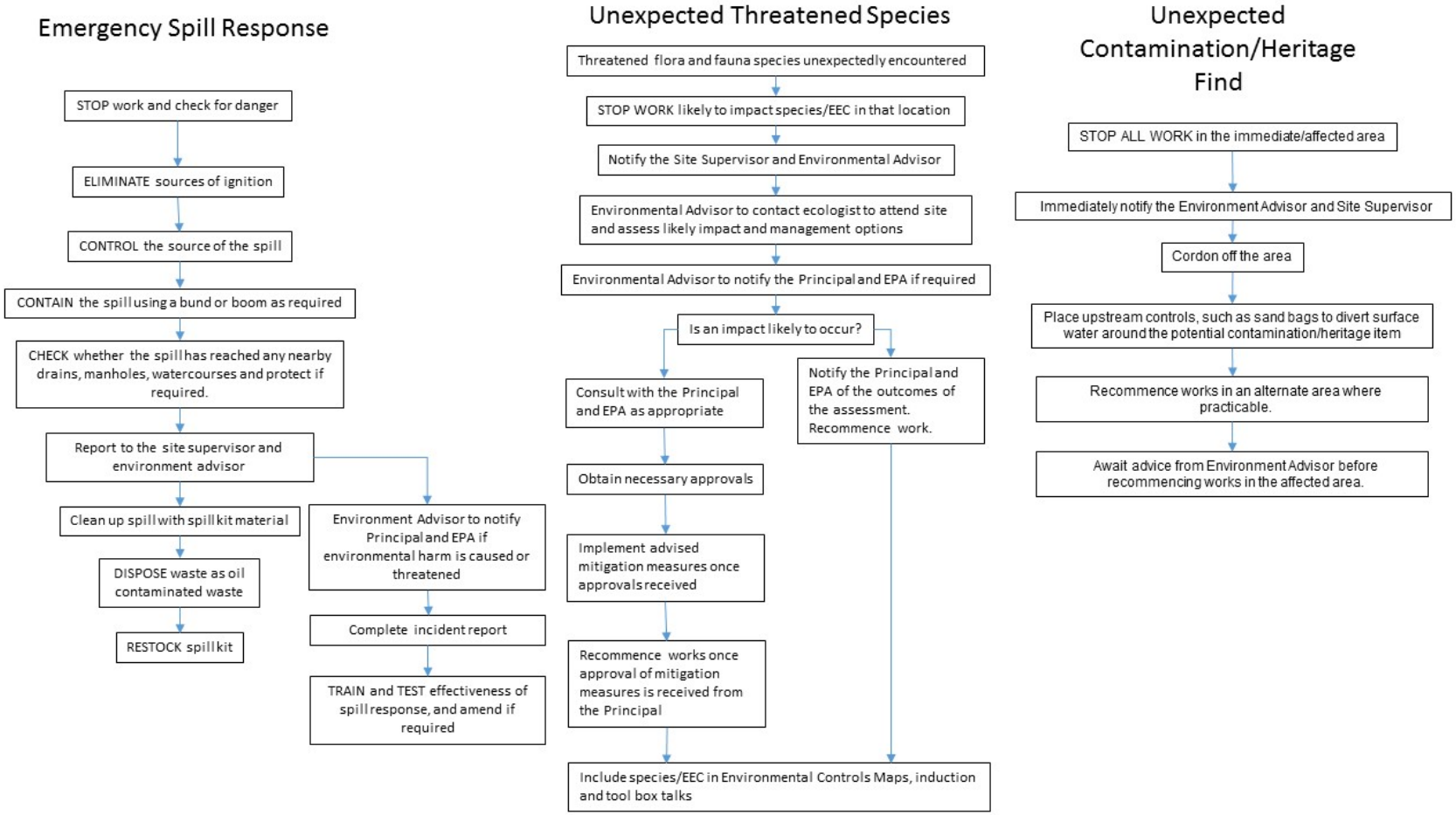

Figure 15 - Emergency Spill Reponses and Unexpected Finds Protocol

APPENDIX D HAZARDOUS AND CONTAMINATED MATERIALS MANAGEMENT STRATEGY AND WASTE MANAGEMENT STRATEGY

Table 16- Hazardous and Contaminated Materials Management Strategy and Waste Management Strategy Compliance Table

CoC No.	Requirement	Reference
B2	The approved works (including any excavation required for remediation) must not occur below 5 metres AHD and lower the watertable below 1m AHD on adjacent class 1, 2, 3, 4 land in accordance with the Liverpool Local Environmental Plan 2008.	Appendix D Contaminated Materials Management
B3	The subject site is to be remediated in accordance with: a) The approved Remedial Action Plan; b) State Environmental Planning Policy No. 55 – Remediation of Land; and c) The guidelines in force under the Contaminated Land Management Act. Amendments to the approved Remedial Action Plan required as a result of further site investigations must be approved by the site auditor, in consultation with the EPA. Within 3 months after the completion of the remediation works, a notice of completion, including a validation and/or monitoring report is to be provided to the Secretary. This notice must be consistent with *State Environmental Planning Policy No. 55 – Remediation of Land.* The validation and/or monitoring report is to be independently audited and a Site Audit Statement Issued. The audit is to be carried out by an independent auditor accredited by the Environment Protection Authority. Any conditions recorded on the Site Audit Statement are to be complied with.	Appendix D Contaminated Materials Management
B4	The Early Works shall be undertaken to comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters.	Appendix D Management of Hydrocarbons and Dangerous Goods
B10	Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with: a) all relevant Australian Standards; b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and c) the Environment Protection Manual for Authorised Officers: Bunding and Spill *Management, technical bulletin* (Environment Protection Authority, 1997). In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.	Appendix D Management of Hydrocarbons and Dangerous Goods
B13	The reuse and/or recycling of waste materials generated on site shall be maximised as far as practicable, to minimise the need for treatment or disposal of those materials off site	Appendix D Waste Management
B14	All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with *Waste Classification Guidelines* (Department of Environment, Climate Change and Water 2009).	Appendix D Waste Management
D4	The Applicant shall store all chemicals, fuels and oils used on-site in appropriately	Appendix D Management of

	bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's Storing and Handling Liquids: Environmental Protection – Participants Handbook.	Hydrocarbons and Dangerous Goods
B15	All waste materials removed from the subject site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.	Appendix D Waste Management
D20(e) (ii)	measures for the handling, treatment and management of hazardous and contaminated materials (including asbestos);	Appendix D Hazardous Materials
D20(e) (iii)	measures to monitor and manage waste generated during construction including but not necessarily limited to: general procedures for waste classification, handling, reuse, and disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealing with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins);	Appendix D Waste Management Appendix E - Table 22-Project Risk Analysis

HAZARDOUS MATERIALS

All residual Asbestos Containing Material (ACM) (as registered in the 2013 Parsons Brinckerhoff Asbestos Register), Synthetic Mineral Fibres, Polychlorinated Biphenyl etc. (as registered in the 2015 Golder Associates Remediation Action Plan), and other contaminants and hazardous materials discovered during the demolition and remediation processes will be removed in accordance with statutory requirements and specific Work Method Statements will be developed for their removal.

Disposal of these materials will occur at a licensed facility and will be tracked under the current EPA waste tracking requirements (WasteLocate).

All asbestos removal, transport and disposal will be performed in accordance with the *Work Health and Safety Regulation 2011*). The removal works will also be conducted in accordance with the National Occupational Health and Safety Commission Code of Practice for the Safe Removal of Asbestos, 2nd Edition (NOHSC 2005a).

An asbestos removal clearance certification will be prepared by an occupational hygienist at the completion of the removal work following the systematic removal of asbestos containing materials and any affected soils from the Project site, and validation of these areas (through visual inspection and laboratory analysis of selected soil samples).

Asbestos fibre air monitoring will be undertaken during the removal of ACMs and in conjunction with the visual clearance inspection. The monitoring will be conducted in accordance with the *National Occupational Health and Safety Commission Guidance Note on the Membrane Filter Method For the Estimating Airborne Asbestos Fibre, 2nd Edition (NOHSC 2005b).*

RADIOACTIVE MATERIALS

Two buildings on site are known to have contained radioactive materials. Prior to any demolition work, the radiation levels within these two buildings will be tested by Australian Nuclear Science and Technology Organisation Radiation Protection Constancy Services to determine the levels of contamination. Should levels above background concentrations be encountered, then a Radiation Waste Management Strategy will be prepared to ensure the safe demolition and disposal of these materials, in accordance with statutory requirements of the Radiation Control Act 1990 and *Radiation Control Regulation 2013*.

CONTAMINATED MATERIALS MANAGEMENT

The approved works including any excavation required for remediation will not occur below 5 metres AHD and lower the water table below 1m AHD on adjacent class 1, 2, 3, 4 land in accordance with the Liverpool Local Environmental Plan 2008.

The subject site is to be remediated in accordance with:

- The approved Remedial Action Plan;
- State Environmental Planning Policy No. 55 – Remediation of Land; and
- The guidelines in force under the *Contaminated Land Management Act*.

Amendments to the approved Remedial Action Plan required as a result of further site investigations must be approved by the site auditor, in consultation with the EPA. Within 3 months after the completion of the remediation works, a notice of completion, including a validation and/or monitoring report is to be provided to the Secretary. This notice must be consistent with *State Environmental Planning Policy No. 55 – Remediation of Land.*

The validation and/or monitoring report is to be independently audited and a Site Audit Statement Issued. The audit is to be carried out by an independent auditor accredited by the Environment Protection Authority. Any conditions recorded on the Site Audit Statement are to be complied with.

Based on the information provided in the Remediation Action Plan (RAP) developed by Golder Associates on 9th August 2016 the likely contaminants onsite, include the following:

- Asbestos Contaminated Materials;
- Anthropogenic Fill (Material that requires management for geotechnical purposes);
- Petroleum Impacted Material;
- Polychlorinated biphenyls Impacted Material;
- Organochlorine Pesticide Impacted Material;
- Polycyclic Aromatic Hydrocarbons Impacted Material;
- Heavy Metals Impacted Material;

The contaminated materials works include the remediation of contaminated soils by:

- Undertaking excavation of nominated areas;
- Segregation, carting and onsite treatment (i.e. land farming and stabilisation), stockpiling for future onsite containment or offsite disposal of materials; and
- Backfilling of remediation excavations with Material Suitable for reuse or imported Virgin Excavated Natural Material or Excavated Natural Material.

All materials will be managed to ensure all materials are tracked from the source, during their treatment and to their final location. Source ID's, tipping locations and material classification will be provided to the drivers by the Project Engineer or Site Supervisor during site meetings or as required.

Prior to construction, a remediation program will be implemented in accordance with the Moorebank Intermodal Terminal Preliminary Remediation Action Plan (RAP). The program will have been formally

reviewed and approved by the Site Auditor under Part 4 of the NSW *Contaminated Land Management Act 1997* (CLM Act).

All works will be conducted under the supervision of a suitably qualified Environmental Consultant by a suitably licensed contractor, experienced in remediation projects and the handling of contaminated soils. Environmental management and WHS procedures will be put in place for the asbestos removal during excavation to protect workers, surrounding residents and the environment as outlined in the Asbestos Removal Control Plan.

Contaminated soil/fill material present will be 'chased out' during the excavation works based on visual, olfactory and preliminary field test results.

Excavated soil would be temporarily stockpiled, sampled and analysed for waste classification processes under the NSW Waste Classification Guidelines. Subject to receipt of waste classification results, the material will be transported to a licensed offsite waste disposal facility as soon as practicable to minimise dust and odour issue through storage of materials onsite.

Stockpiled soils will be stored when possible on a sealed surface and bunded to a minimum of 500mm high using to minimise the potential for surface water from entering or leaving the stockpiles or the Project site.

Decontamination facilities will be provided at the work areas for personnel equipment and plant. Procedures for decontamination of personnel and equipment involved in asbestos removal work will be consistent with the *Code of Practice; How to Safely Remove Asbestos*

Decontamination facilities for plant working with contaminants other than asbestos will involve removing all contaminated soil and material debris under the direction of the environmental consultant using field screening methods. Any materials in removed in this process will be treated as contaminated.

All stockpiles will be maintained in an orderly and safe condition. Batters will be formed in accordance with relevant guidelines with sloped angles that are appropriate to prevent collapse or slumping of the stockpiled materials.

MANAGEMENT OF HYDROCARBONS AND DANGEROUS GOODS

The Contractor will inspect all plant to be used on the works for oil and fuel leakage before it enters the site, and shall inspect all plant and equipment at regular intervals during the period it's on site.

Entry of oil, grease or fuel into any watercourse is prohibited. Drainage from any area likely to be so contaminated shall be effectively diverted to a suitable collection point.

The Contractor shall provide, operate and maintain adequate facilities for the collection of leaking fuels, lubricants, oils, greases and the like, and for the transportation and lawful disposal of these materials off-site at lawful facility.

If contamination of the soil occurs due to the use of plant or spillage of any contaminant, then all contaminated soil shall be either removed from the site or be left for the remediation process to commence. Any disposed will be accordance with the requirements of the Environmental Protection Authority.

In order to minimise the risk of polluting a watercourse, all servicing and fuelling of company plant shall be carried out at locations remote from any watercourse.

As per CoC B10, dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with:

a) all relevant Australian Standards;

b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and

c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997).

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

Service trucks and other vehicles used for the transportation of hydrocarbons and chemicals shall be fitted with appropriate spill catchment facilities to prevent drips and leaks to ground, and spill response equipment Generators, welders, pumps or other stationary engines shall be fitted with pumps, drip trays, or placed in secondary containment facilities at all times.

The company will ensure at least one person in each work group is trained in competency-based Spill Response Techniques.

The Contractor will store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's Storing and Handling Liquids: Environmental Protection – Participants Handbook.

Spill clean-up materials shall be readily available at each work site where hydrocarbons and chemicals are stored and/or used.

Spills inside and outside containment facilities shall be picked up immediately with appropriate clean up material. Contaminated soil shall be picked up and contained for removal to a licensed facility. Contaminated clean up material shall be managed as oily waste.

Oily waste materials shall be segregated from general wastes and removed from site within 1 month by a licensed contractor.

Receipts shall be maintained as verification of type and amount of waste oil and oily materials removed from site.

The Contractor will ensure all Works shall be undertaken to comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters.

PFAS MATERIALS MANAGEMENT

In addition to the Contaminated materials management procedure outlined above, PFAS and PFOS materials will be managed in accordance with the PFAS Management Plan including:

- PFAS/suspected PFAS impacted soils and sediments encountered are to be stored in an area separate to other materials.
- A separate PFAS stockpile area.
- PFAS waste must be classified in accordance with the NSW EPA Waste Classification guidelines and the Addendum to the Waste Classification Guidelines (October 2016) (PFos + PFHxS and PFOA addendum) and disposed of at an appropriately licensed landfill or treatment facility
- PFAS waste will be tracked in accordance with the Waste Tracking Management Plan
- In accordance with section 9.2.1 of the PFAS Management Plan, the reuse of PFAS contaminated material that has concentrations above 50mg/kg, is not permitted. Soils with PFAS concentrations above 50mg/kg can not be diluted and should therefore be disposed of offsite as 'Hazardous' in accordance with the Stockholm convention.
- Site surface water and run off from the PFAS storage area is to be tested to confirm compliance and conformance with the Surface water and groundwater investigation levels, in accordance with the CSWMP. Site water that does not meet the investigation levels will be:
    - Prevented from infiltrating or running off from the site, by use of suitably designed storage
    - Transported offsite by tanker for licensed disposal; or
    - Treated on site by a licensed Water Treatment Plant (WTP)

WASTE MANAGEMENT

During the course of the project domestic and industrial waste will be generated. These wastes may include timber, oils, paints and solvents, sewage and general domestic refuse.

In order to minimize any risk to the environment or the health of any personnel, the Project Manager will utilise approved procedures to manage the collection, storage and removal of waste from site

All liquid and/or non-liquid waste generated on the site will be assessed and classified in accordance with Waste Classification Guidelines (Department of Environment, Climate Change and Water 2009).

Monitor and Measure

The Contractor will monitor the site waste and record all waste movements from site utilising the waste register and EPA waste consignments information and (Waste Locate) as the tracking medium.

All waste materials removed from the subject site will only be directed to a waste management facility or premises lawfully permitted to accept the materials.

Information that is imported on a daily basis into the waste register include

- Type of Waste
- Date & Time of Disposal
- Disposal Facility
- Disposal Weights
- Transport Company and Truck/Container Registration
- Consignment information (if applicable)
- In addition to this, monthly waste statistics that will also be reported will be
- If the Waste is/was recyclable
- Percent Recycled by Weight
- Overall Disposal Weights

Waste tracking audits will be undertaken to ensure compliance and conformance with all relevant legislation and this CEMP.

As detailed in table 8 (Roles and Responsibly Matrix) ensuring waste management complies with this CEMP guidelines and standards will be responsibility of the Environment Advisor, Project/Site Engineer and Site Supervisor

Reporting Requirements

Waste Register Reports will be produced quarterly and include the following details:

- Audits and inspections;
- Corrective actions;
- Training and awareness;
- Water use data;
- Waste disposal;
- Recycled materials

External Waste Tracking Requirements

The *Protection of the Environment (Waste) Regulation 2014* determines waste tracking requirements. All wastes that must be tracked as described *by* this regulation will be managed through the EPA *Wastelocate*

website. Wastes not requiring tracking via the *Wastelocate* website will still be tracked and managed by the Contractor's Materials and Waste tracking registers

- All waste will be correctly characterised
- Waste will only be sent to facilities legally authorised to receive the waste.
- A separate transport certificate shall accompany each load of waste being transported.

Waste Hierarchy

The company adheres to the waste hierarchy as detailed in the below table;

Table 17 - Waste Hierarchy

Hierarchy	Action	Result
Most Desired	Avoid	Unnecessary resource consumption.
	Reduce	Waste generation and disposal.
	Re-use	Waste resources without further manufacturing.
	Recycle	Waste resources to make the same or different products.
	Recover	Waste resources, including the recovery of energy.
	Treat	Waste before disposal, including reducing the hazardous nature of waste.
Least Desired	Dispose	Of waste only if there is no viable alternative.

Waste separation and segregation will be promoted on-site to facilitate reuse and recycling as a priority of the waste management program as follows:

Waste segregation onsite – Waste materials, including spoil and demolition waste, will be separated onsite into dedicated bins/areas for either reuse onsite or collection by a waste contractor and transport to offsite facilities.

Waste separation offsite – Wastes to be deposited into one bin where space is not available for placement of multiple bins, and the waste is to be sorted offsite by a waste contractor.

RESOURCE MINIMISATION

Options for resource minimisation will be explored through the use of maximisation of recycling and beneficial reuse practices and the use of sustainable materials and reduction in energy practices.

Recycling and Beneficial Reuse of Onsite Materials

During the Project the Contractor will commit to maximise recycling and beneficial reuse of materials as much as practicable. Details of this are outlined below

- **Brick and Concrete** – Recycled onsite for beneficial reuse as engineered fill;
- Ferrous and Non-Ferrous Metals– Recycled offsite;
- **Soft Strip materials such as Gyprock, Timber and Carpet** – Sorted onsite or transported to a sorting facility for Recycling;
- **Contaminated Soils** - Onsite treatment for beneficial reuse;
- **Vegetation Waste** – Remain onsite for beneficial reuse (no mulch will be placed within 50m of a waterway);

- **Water collected from Sediment Basins** – Beneficial reuse for dust suppression under direction from the Environmental Consultant.

The disposal of materials to landfill without prior sorting will be limited to contaminated soils, which cannot be treated onsite and hazardous materials

Materials Sourced to Site

While there is limited scope for the use of recycled materials to be brought onsite as the works package is limited to demolition and remediation, where possible and by the approval of the environmental consultant, recycled materials will be sourced as opposed to a quarried or Virgin Earth Natural Material.

Energy Reduction

Energy usage and associated carbon emissions will be minimised by investigation the feasibility of the following:

- Use of well-maintained plant and equipment and ensuring plant are maintained consistent with manufacturer specifications;
- Plant and equipment will not be left on idle when not in use;
- Including in prestart the requirement to conserve energy;
- Use of local suppliers whenever possible.

APPENDIX E ENVIRONMENTAL RISK ASSESSMENT ASPECTS AND IMPACTS

RISK ASSESSMENT MATRIX

The following risk assessment matrix has been used to determine the risk of each individual environmental aspect relevant to the Demolition and Remediation Works at the Moorebank Intermodal Terminal Site. The level of risk determined from the matrix identifies the level of control measures required for that environmental aspect.

Table 18 - Risk Matrix

Likelihood	Consequence				
	1 - Low	2 - Minor	3 - Moderate	4 - Major	5 - Critical
A - Almost certain	High (11)	High (16)	Extreme (20)	Extreme (23)	Extreme (25)
B - Likely	Moderate (7)	High (12)	High (17)	Extreme (21)	Extreme (24)
C - Possible	Low (4)	Moderate (8)	High (13)	Extreme (18)	Extreme (22)
D - Unlikely	Low (2)	Low (5)	Moderate (9)	High (14)	Extreme (19)
E - Rare	Low (1)	Low (3)	Moderate (6)	High (10)	High (15)

Tolerable	ALARP		ALARP	INTOLERABLE

RISK MATRIX EXPLANATION

Table 19 - Risk Matrix Explanation

Probability			Consequences		
A	Almost Certain	Expected to occur, quite common.	25	Critical	• Major environmental harm. E.g. critical pollution incident causing significant damage or potential to health or the environment. • Fines and prosecution likely.
B	Likely	Will probably occur, has happened.	21	Major	• Long term or serious environmental damage. • Numerous complaints received. • Potential for prosecution. • Loss of reputation
C	Possible	Might occur at some time.	13	Moderate	• Moderate environmental impact. • Will cause complaints. • Possible fine.
D	Unlikely	Could occur at some time although unlikely.	5	Minor	• Minimal environmental harm. • Potential for complaints. • Fine unlikely.
E	Rare	Might occur at some time in exceptional circumstances.	1	Low	• Little or no environmental harm. • Little potential for fines or complaints.

An environmental Project risk has been conducted for the project and is detailed in Table 22.

PROJECT RISK ANALYSIS

An environmental project risk Analysis was conducted by the project team, where applicable risks identified in the CoC and REMM have been considered and noted in the following table.

Table 20 - Project Risk Analysis

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
Prior to Works Commencing								
1	Planning of works	Works commencing without approval	17	In order to undertake works an EMS SSD & EPBC approval will need to occur (REMM 1A, 1B)	Once	Prior to commencement of works	5	Environmental Representative Site Supervisor Project Manager Environment Advisor
2	Provide training to all personnel and sub-contractors	Non-compliance and/non-conformance with agreed work methods and procedures	13	All personnel to be inducted on to site; induction to include site-specific environmental requirements including ecology, heritage and unexploded ordnance. All personnel to be tool boxed on the requirements of this CEMP including erosion and sediment control plans, locations of heritage items, locations of EEC's and protection requirements, noise mitigation measures.	As required	Prior to commencement (Induction)Through out the Duration of Project (Toolboxes and Prestart)	5	Site Supervisor
3	Early Works Footprint	Disturbance of land outside of	17	No personnel permitted to access the areas outside of the Early Works Footprint including	Ongoing	Throughout the Duration of the Project	5	Environment Advisor Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
		Early Works Footprint.		but not limited to pedestrian access, parking vehicles, stockpiling of materials. To be included in site specific induction. Personnel to be made familiar with Early Works Footprint zone. To be included in site specific induction. Early Works Footprint will be delineated using flagging onsite (REMM 6C)				
Mobilisation to site								
4	Driving to site, around site and offsite	Disturbance to EEC areas/ heritage sites	17	Stay on pre-existing road infrastructure wherever possible. Ensure site speed limits are maintained i.e. 20kmh (REMM 10J) Use of water carts where necessary to suppress dust on exposed and trafficable areas. Park on hard stand areas where possible, or outside of the drip line of trees. Do not access EEC areas by vehicle.	Ongoing	Prior to works commencing and throughout the Duration of the Project	9	Environment Advisor Site Supervisor
5		Generation of dust leading to complaint/ impact	12	Stay on pre-existing road infrastructure wherever possible. (REMMS 10F)	Ongoing	Throughout the Duration of the Project	8	Environment Advisor Site Supervisor Project Manager

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
		on EEC habitat (CoC B11, B12)		Ensure site speed limits are maintained i.e. 20kmh and speed limits are signposted. (REMM 10J) Use of water carts where necessary to suppress dust on exposed and trafficable areas. Site compound to be screened to assist in capturing airborne particles and reduce potential entrainment of particles from areas susceptible to wind erosion. Truck loads to be covered.				
6		Introduction or spread of weeds	17	Plant and equipment to be free of mud and vegetation prior to arriving to site Plant and equipment known to be working in a weed infested area must be cleaned of spoil and vegetation prior to mobilising to a non-weed area of site. Areas of weed infestation will be identified in preclearing surveys defined on project mapping and adequately identified on the ground (See also #13 & #17 for further details)	On arrival and when plant is leaving an area	Prior to works commencing and throughout the Duration of the Project	9	Site Supervisor
7	Mobilise plant/equipment/labour to site	Excessive noise and congestion leading to noise	12	Mobilise plant only within normal working hours.	Ongoing	Throughout the Duration of the Project	7	Site Supervisor Project Manager

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
		complaint (CoC D5-D7)		Parking areas to be nominated for plant, equipment and vehicles. No Out of Hours (OOH) works, including deliveries and plant mobilisation unless OOH works have been approved by the ER. If OOH works are to occur, the Liverpool City Council, local residents and other affected stakeholders must be notified 48 hours prior to scheduled works. No parking, queuing or idling of engines on public roads. All site staff vehicles must enter the construction site and park within designated parking areas. If access to public areas is required (e.g. to undertake surveys), then road rules must be obeyed and engines must be switched off. No use of compression brakes shall be permitted for construction vehicles associated with the Early Works in the vicinity of the subject site. Access to and from site must be through the main access gate only and undertaken in a safe and lawful manner; no access to/from site via Moorebank Avenue South. No other access				

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				will be used for heavy vehicles during the duration of early works No heavy vehicle right turn out of site, or left turn into site i.e. no travel south onto Cambridge to access Moorebank Avenue from the M5. Obtain Road Occupancy Licenses as necessary.				
8		Inability of emergency services to access site	18	Ensure access tracks are designed to allow emergency services to access site if required; do not block site accesses. Water supply available at all times, ensure water carts are full of water when on standby	Ongoing	Throughout the Duration of the Project	8	Site Supervisor Project Manager
Heritage Management (CoC B6-B9) (REMM 12,13)								
9	Heritage fencing	Disturbance on items of heritage significance and EEC	12	Heritage areas (unless otherwise specified for specific heritage items) for heritage items within the Early Works Footprint will be defined in all project mapping and will be adequately identified on the ground, including signage and flagging informing all personnel to keep out. Flagging used will be hi visibility safety flagging or temporary fencing when required.	Once or as unexpected heritage items are discovered	Prior to works commencing and throughout the Duration of the Project	8	Heritage Specialist Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				As part of the project induction all personnel will receive an induction relating to all heritage areas and items. This will include unexpected finds protocols and management measures. For the historical excavations fencing of deep excavations will be undertaken in accordance with the confined spaces protocol and OH&S guidelines. No unauthorised entry to heritage sites.				
10	Heritage salvage		12	The salvage of heritage items and structures is to be managed in accordance with the Heritage Salvage Strategy.	Once	Prior to site establishment	7	Heritage Specialist Site Supervisor
Vegetation Clearing Process (CoC 21(d))								
11	Ecologist to undertake pre-clearing surveys	Clearing / damage to endangered / threatened flora or fauna	18	Project Ecologist to undertake a pre-clearing survey of the vegetation within the works area within 12-48 hours of clearing to identify any potential threatened species, endangered vegetation, weed infestation, habitat trees. The ecologist will identify at a minimum: The species and location of any weeds;	Ongoing	Throughout the Duration of the Project	8	Project Ecologist Site Supervisor Environmental Advisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				Locations of threatened flora species and habitat or hollow bearing trees; Trees which require limbs to be removed; Native wildlife (e.g. reptiles, frogs, Cumberland Land Snail) that can be captured and relocated to the retained riparian vegetation of the Georges River corridor. Identification of pest fauna species. If hollow-bearing or habitat trees are identified as requiring removal the two-staged clearing process is to be implemented and the clearing supervised by an ecologist (REMMS 6E)				
12	Mark up habitat trees, trees suitable for mulch, and waste tree's.	Damage to flora, fauna	12	Limited clearing may be undertaken to allow for safe demolition of structures in Early Works. Mark trees to be removed as follows: H Habitat logs (spray paint). Ecologist previously assessed and ready for removal Ecologist previously assessed but requires pre-inspection by ecologist immediately prior to, and during removal. Two stage clearing process to be followed.	Ongoing	Prior to works commencing and throughout the Duration of the Project	8	Project Ecologist Site Supervisor Environmental Advisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
13	Weed identification and treatment	Spread of noxious weeds	8	If weeds are identified within Work zone, then: Weeds to be flagged. Weeds to be sprayed two weeks prior to clearing or stripped and disposed of off-site at a licenced waste facility. Weedy material must not be mulched or retained on site. Weed contaminated topsoil is to be segregated from non-weed contaminated topsoil or removed from site to a designated licensed landfill. Stockpile to be bunded and covered to minimise potential of seed washing away. Plant/equipment used in weed contaminated areas to be washed down and declared weed free before moving to a non-weed area.	Ongoing and during Weekly environmental Audit	Prior to works commencing and throughout the Duration of the Project	5	Project Ecologist Site Supervisor
14	Clearing (REMM 6E)	Injury to fauna	17	Two-Staged Clearing Process Environment Advisor to issue 'Permit to Clear' once pre-clearing survey is complete and signed off. No clearing shall be undertaken without Permit to Clear. Clearing of vegetation outside of the defined clearing permit boundary is not permitted. no permit exists	Once	At the time of Clearing	5	Project Ecologist Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				Local wildlife and vets to be contacted to assist in treating injured animals if necessary. Ecologist to be present on site during the clearing process for red flagged trees and relocate fauna for release at designated area where required. Non-habitat vegetation removal first to a radius of 10m around habitat trees. Habitat trees are to remain standing overnight before further clearing to allow fauna to vacate the habitat. After remaining standing overnight habitat trees are to be shaken (where safe and practicable) under the supervision of an ecologist to encourage roosting fauna to leave the trees, which may then be felled, commencing with the most distant trees from secure habitat. Felled habitat trees are to be immediately moved to the edge of retained vegetation, or left on the ground for a further 24 hours before being removed from the construction area, at the discretion of the supervising ecologist.				

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				Important habitat elements (e.g. large woody debris) are to be moved to locations within the conservation area nominated by the ecologist, which will not be cleared during the Project, or to stockpiles for later use in vegetation/habitat restoration. Select appropriate size/type of machines and equipment for clearing. Remove trees so as not to cause damage to surrounding vegetation or to areas outside the project boundary (ensuring groundcover disturbance is kept to a minimum). Only the ecologist or fauna handler to touch or move fauna. If fauna is present, allow to move through worksite or contact the ecologist, fauna handler or WIRES to assist in relocation to adjacent retained habitat.				
15		Damage to retained trees and EEC habitat	17	As a minimum the following will be implemented to protect retained trees and threatened vegetation: Fencing (such as flagging) is to be placed along the edge of the EEC clear of tree drip line. Signage to be placed to inform all personnel of the exclusion zone.	Ongoing	Prior to works commencing and throughout the Duration of the Project	5	Project Ecologist Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				Retained trees will be fenced off and marked as exclusion zones within Environmental Control Plans. Fencing will be placed at the drip line of the tree at a minimum. Where roots or branches are identified as being within the pre-construction zone, an arborist will be contacted to assess the likely impact on the tree prior to works commencing. All personnel to stay out of the exclusion zone. Ensure no materials are stockpiled and no vehicles are parked within the tree drip line. No excavation or placing of fill near any tree without advice from an ecologist. Route haul roads and access tracks clear of the tree drip line.				
16		Contamination of Georges River or Anzac Creek due to tannins.	13	Do not use mulch within 50m of waterways or drainage lines. Remove unused mulch to designated stockpile locations.	Ongoing, daily check and during weekly environmental audit	Throughout the Duration of the Project	8	Project Ecologist Site Supervisor Environmental Advisor
Earthworks (CoC 20, 21(e)(f))(REMM 8, 9, 10)								

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
17	Earthworks and remediation including topsoil strip, erosion and sediment control install, compound install, service capping and install and stockpiling	Mobilisation of contaminated soil and/or water Pollution of surface water through discharge of untreated water	12	Prior to any ground disturbance a pre-remediation asbestos survey and removal (where necessary) must be conducted. Erosion and sediment control plan to be drawn and approved by the Principal, then implemented prior to works commencing. “EEC areas and vegetation will be defined in all project mapping and will be adequately identified on the ground, including signage and flagging informing all personnel to keep out.” Stage clearing and rehabilitation activities and stabilise exposed areas and stockpiles wherever possible with vegetation, polymer, geofabric, or plastic. Restrict vehicular movements to designated access tracks. Test and treat water prior to offsite discharge; permit to pump to be issued prior to discharge. **Sediment basins:**	Ongoing, daily check and during weekly environmental audit	Throughout the Duration of the Project	4	Site Supervisor Environmental Advisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				Sediment basins to be sized in accordance with Blue Book guidelines; specific measures for sediment basin included within the erosion and sediment control plans. Topsoil to be stripped and stockpiled separately to subsoil. Excavated subsoil to be classified and segregated in designated stockpiles. Shape ground to fall to drainage lines or inlet of the sediment basin. Stabilise sediment basins with vegetation as soon as practicable. **Stockpiles:** (CoC D3) Must be stabilised if not in use for greater than 7 days and have sediment controls placed around them as per Blue Book requirements Must be bunded to divert water around the stockpile and minimise runoff from the				

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				stockpile and not placed away from waterways and overland flow paths. Vegetation or mulch not to be placed within 50m of waterways . Must not exceed an area of 1 hectare To be consolidated to minimise wind whipping Flood paths to be maintained with diversion bunds created to divert flood waters around construction works. Vehicle movements to be limited to designated entries and exits points, haulage routes and parking areas. Stabilised access/egress points to be installed, including use of a wheel bath, to minimise the amount of material transported offsite. Street sweeper to be used where mud is tracked onto public roads Water from wash down facility to be collected for onsite re-use.				

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
18		PFAS/suspected PFAS impacted soil encountered and potential for stormwater ingress	13	Unexpected PFAS finds procedure (Section 10) is implemented. Isolation of work area No unauthorised movement of materials	Ongoing, daily check	Throughout the Duration of the Project	5	Site Supervisor Environmental Advisor
19		PFAS impacted sediment/stormwater is discharged offsite	13	To reduce PFAS impacted sediment, stormwater controls should be designed to limit infiltration of run-off into areas where PFAS impacted soils are located. Sediment ponds used to store stormwater to allow sediment to settle prior to discharge Stormwater tested prior to being discharged or used. Stormwater reused for dust suppression will not be sourced from known PFAS impacted areas.	Ongoing, daily check	Throughout the Duration of the Project	5	Site Supervisor Environmental Advisor
20		Erosion potential and fauna entrapment during trenching	12	Only trench what can be backfilled within the same day where possible to minimise risk of water inundation during wet weather. Cover open trenches to minimise potential for fauna entrapment.	Ongoing, daily check	Throughout the Duration of the Project	4	Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
21		Contamination of waterways due to incorrect disposal of pot hole waste	13	Minimum of two pothole basins to be excavated to manage pot hole truck waste. Pothole basins to be bunded to allow a minimum of 0.5m free board to prevent water from overflowing. Overland water to be diverted around pothole basins and not allowed to enter. Pot hole basins to be utilised one at a time. When one is full use the second basin, and allow the first to dry and the incorporate spoil into the relevant stockpile.	Ongoing	Throughout the Duration of the Project	6	Site Supervisor Environmental Advisor
22		Uncovering of unexpected heritage items or contamination	12	See unexpected find procedure for heritage, threatened fauna or flora, or contamination (including unexploded ordnance). Unexpected contamination will be managed in accordance with the Remedial Action Plan or Asbestos Management Plan as necessary.	Ongoing	Throughout the Duration of the Project	4	Site Supervisor
23		Contamination of waste stream	17	Nominate locations of spoil placement. Ensure materials within the stockpile area are segregated as per waste type, e.g. concrete, weed contaminated topsoil, clean topsoil, mulch etc.	Ongoing	Throughout the Duration of the Project	5	Site Supervisor Environmental Advisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				Excavated soil to be stockpiled, sampled and analysed for waste classification processes.				
Remediation (CoC 20, 21(e)(f)) (REMM 8, 10))								
24	Excavation, transport and treatment of disposal and backfilling of excavations	Release of odours or volatiles while excavating or stockpiling contaminated materials	13	Monitor volatiles and odour. Use a volatiles suppressant or covers See Section 2.2 of the CAQMP to view relevant standards guidelines used in monitoring odours and volatiles	Ongoing, Daily and during weekly environmental audit	Throughout the Duration of the Remediation Works	6	Site Supervisor Environmental Advisor
25		Spillage of Material on Roads or Transfer offsite	13	Vehicles leaving and entering site are to travel via shaker grids and if required wheels will be further cleaned. Excavation plant will be de contaminated at the completion of excavation in a designated decontamination area	Ongoing	Throughout the Duration of the Remediation Works	9	Site Supervisor Environmental Advisor
26		Offsite disposal to a facility not licenced to accept waste.	17	Ensure contaminated materials are tracked using EPA tracking system and disposed of at a facility licenced to accept waste.	Ongoing	Throughout the Duration of the Remediation Works	6	Site Supervisor Environmental Advisor
27		Dust Emissions (REMM 10A-10H)	12	Used dust suppression as required and ensure material is sufficiently wet to ensure no dust is generated while in transport. Conduct monitoring for dust	Ongoing, Daily and during weekly environmental audit	Throughout the Duration of the Remediation Works	7	Site Supervisor Environmental Advisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
28		Erosion of Treatment Stockpiles (REMM 10A-10H)	12	Ensure design limits wind and water erosion is minimised by way of dust suppression or cover and design Ensure any erosion is captured in sedimentation basins and treated if required Conduct monitoring for dust	Ongoing, Daily and during weekly environmental audit	Throughout the Duration of the Remediation Works	7	Site Supervisor Environmental Advisor
29		PFAS/suspected PFAS impacted soil encountered and potential for stormwater ingress	13	Unexpected PFAS finds procedure (Section 10) is implemented. Isolation of work area No unauthorised movement of materials	Ongoing, daily check	Throughout the Duration of the Project	5	Site Supervisor Environmental Advisor
30		PFAS impacted sediment/stormwater is discharged offsite	13	To reduce PFAS impacted sediment, stormwater controls should be designed to limit infiltration of run-off into areas where PFAS impacted soils are located. Sediment ponds used to store stormwater to allow sediment to settle prior to discharge Stormwater tested prior to being discharged or used. Stormwater reused for dust suppression will not be sourced	Ongoing, daily check	Throughout the Duration of the Project	5	Site Supervisor Environmental Advisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				from known PFAS impacted areas.				
Demolition (CoC D8, D20 & 21(e)(f))(REMMS18)								
31	Involved in the removal of structures and pavements	Noise	12	All machinery is to be appropriately silenced with mufflers. Ensure plant is regularly maintained. Conform to working hours	Ongoing, during plant prestart and during services	Throughout the Duration of Works	7	Site Supervisor Environmental Advisor
32		Vibration	9	Minimise hammering and vibration when possible	Ongoing	Throughout the Duration of Works	5	Site Supervisor Environmental Manager
33		Transport of Demolition Waste transferring waste Offsite	17	Ensure all vehicles use covers when transporting waste Ensure trucks travel over shaker grid before leaving site if trucks do not travel on only hardstand Ensure waste facility is licenced transfer station or landfill	Ongoing	Throughout the Duration of Works	9	Site Supervisor Environmental Advisor
34		Waste Generation	12	No waste to be disposed of onsite. Use waste management hierarchy principals and recycle and reuse whenever possible (REMM18B)	Ongoing	Throughout the Duration of Works	8	Project Manager Site Supervisor Environmental Advisor
35		Surface Water Discharge	17	Ensure erosion controls are in place and maintained during the works	Ongoing	Throughout the Duration of Works	5	Site Supervisor Environmental

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
								Advisor
General								
36	Waste management including litter, tracking of waste quantities and locations of disposal, soft strip of buildings	Incorrect disposal leading to contaminated waste streams / illegal dumping. (REMMS 18)	13	No waste to be disposed of onsite. Sewage waste to be disposed of by a licensed waste contractor offsite. Waste arising from soft strip of buildings is to be segregated wherever possible, e.g. timber, metal, light tubes, cabling etc. and sent to a waste facility able to recycle the material and provide recycling reporting. Specific recycling areas have been nominated	Ongoing, Daily and during weekly environmental audit	Throughout the Duration of Works	8	Site Supervisor Environmental Advisor
37	General use of plant and equipment and storage of hazardous materials	Pollution of ground / waterways due to failed hydraulic / fuel hoses on machinery/refuelling, spillages of hazardous materials. (CoC B10, D4)	12	Any refuelling to be undertaken either offsite or in areas located at least 50 metres from drainage lines or waterways with spill kits readily available. Refuelling not to be left unattended at any time. Plant and equipment to be well maintained and to be checked daily as part of morning pre-start including hydraulic hoses and connections. Generators to have secondary containment to be placed on	Ongoing	Throughout the Duration of Works	5	Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				hard stand with spill kits readily available Chemicals to be placed in a drip tray when being used on site and removed to a bunded chemical storage container at the end of each day. Spill kits to be readily available at each work zone. Pollution incidents to be managed in line with the Pollution Incident response flow chart.				
38		Noise causing annoyance to local residents. (CoC D9, D10)	16	Works are only to occur 7:00am to 6:00pm Monday to Friday, and 8:00am to 1:00pm Saturdays, unless otherwise approved by the ER through the OOH procedure. 24-hour generator for compound operation only to be used once approved by ER through the OOH procedure. Further noise assessment required and mitigations as outlined with the assessment to be implemented. Ensure plant / equipment is fitted with appropriate silencers/mufflers and is maintained in an efficient condition.	Ongoing	Throughout the Duration of Works	7	Site Supervisor Project Manager

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				All noise complaints to be reported to the site supervisor/environment advisor immediately, recorded and the issue resolved within 4 hours. Equipment that is not in use to be switched off. Reversing of vehicles and mobile equipment would be minimised so as to prevent nuisance caused by reversing alarms.				
39	Removal of hazardous materials from buildings	Asbestos sampling and removal	17	Refer to Asbestos Removal Control Plan. No asbestos works to be undertaken unless Asbestos Removal Control Plan has been approved and signed on to. Asbestos waste must be stored in a closed skip/bin with limited access.	Ongoing	Throughout the Duration of Asbestos Removal Works	8	Site Supervisor
40		Other hazardous materials	12	The removal and management of Polychlorinated Biphenyl capacitors and degassing of air conditioning units to be undertaken in accordance with the and Hazardous Material Plans	Ongoing	Throughout the Duration of Asbestos Removal Works	5	Site Supervisor
41	Repair of perimeter fencing – fence replacement or use of ATF panelling.	Incorrect storage of quick-set concrete leading to wastage	5	Ensure cement is covered overnight and prior to rain events so that the cement does not go off.	Ongoing	Throughout the Duration of Asbestos Removal Works	2	Site Supervisor

#	Sequence of Work Activities How will the work be done?	Potential Hazards What harm can occur?	Initial Risk	Safeguards/controls How can the risk be minimised?	Frequency	Timing	Residual Risk	Responsibility Who will ensure that controls are in place?
				Off cement and packaging to be placed in appropriate skips for disposal each day. Do no leave on site. Broken ATF feet to be removed from site and placed in correct skips.				
42	Use of compound lighting	Light spill affecting residential areas and fauna	12	Ensure lighting is directed downwards to the works being undertaken avoiding areas of vegetation and residential receivers.	Ongoing	Throughout the Duration of Asbestos Removal Works	5	Site Supervisor Environmental Advisor

APPENDIX F FILL IMPORTATION MANAGEMENT PROTOCOL

APPENDIX G EXTERNAL CONSULTATION

Table 21 - External Consultation Summary Table

Agency	Position Contacted	Action Date	Contact	Outcome or Notes
Environmental Protection Authority (EPA)	Environmental Officer	26/09/2016	George Orel (Environmental Officer)	CEMP hand delivered to EPA offices at 59-61 Goulburn St, Sydney NSW 2000
		27/09/2016		Environmental Officer assigned to the project was phoned no answer was received and message left
		27/09/2016		Environmental Officer returned phone and advised they would review plans
		6/10/2016		Environmental Officer assigned was phoned no answer was received and message was left
		7/10/2016		Environmental Officer responded via email stating there would be no review by the EPA and as such consultation was closed
Department of Primary Industries (Water)	Water Regulation Officer	27/09/2016	Jane Gross (Water Regulation Officer)	Water Regulation Officer assigned to the project was phoned no answer was received and message was left
		29/09/2106		Water Regulation Officer was emailed CEMP
		29/09/2016		Water Regulation Officer was called and advised they had a chance to review
		6/10/2016		Water Regulation Officer was called and advised they required additional time for review
		19/10/2016		Water Regulation Officer sent comments to Liberty Industrial as detailed below in Table 24
		21/11/2016		Liberty Industrial Emailed the Water Regulation officer with return comments as detailed below in Table 24 and as such consultation was closed
Department of Primary Industries (Fisheries)	Land Use Planning Coordinating Officer	27/09/2016	Wayne Jones (Land Use Planning Coordinating Officer)	Land Use Planning Coordinating Officer assigned to the project was emailed the CEMP
		27/09/2016		Land Use Planning Coordinating Officer was phoned no answer was received and message was left
		29/09/2016		Land Use Planning Coordinating Officer was phoned no answer was received and message was left

Agency	Position Contacted	Action Date	Contact	Outcome or Notes
		12/10/2016		Land Use Planning Coordinating Officer was emailed and email returned with error
Department of Primary Industries (Fisheries)	Fisheries Conservation Manager	27/09/2016	Carla Ganassin (Fisheries Conservation Manager)	Fisheries Conservation Manager was phoned no answer was received and message was left
		27/09/2016		Fisheries Conservation Manager was emailed CEMP
		29/09/2016		Fisheries Conservation Manager was phoned no answer was received and message was left
		5/10/2016		Fisheries Conservation Manager was phoned no answer was received and message was left
Liverpool Council	Director Planning and Growth	23/09/2016	Tony Averay (Director Planning and Growth) & Ash Chang (Planning Officer)	PA to the director of Planning and Growth was phoned and a time was arranged to deliver CEMP
		26/09/2016		CEMP hand delivered to Council offices at 33 Moore Street, Liverpool NSW 2170
		27/09/2016		Phoned the Planning Officer assigned to the Project and was advised a response would be given in a week.
		29/09/2016		Followed up on the phone call and organised a meeting on the 30/09/2016.
		30/09/2016		Held meeting with @ 3pm gave him overview of scope of works. Requested invitation to heritage committee meeting on site and CEMP Sub-Plans. Sub-Plans & invitation sent on the 5/10/2016. Council declined to attended site meeting 5/10/2106 via email.
Office of Environment and Heritage (OEH)	Conservation Planning Officer	26/09/2016	Richard Bonner (Conservation Planning Officer)	CEMP hand delivered to OEH Offices at 59-61 Goulburn St, Sydney NSW
		27/09/2016		Conservation Planning Officer was phoned no answer was received and message was left
		29/09/2016		Conservation Planning Officer was phoned no answer was received and message was left
		12/10/2016		Liberty Industrial sent follow up email, no response received
		17/11/2016		Conservation Planning Officer was phoned no answer was received and message was left

Table 22 - DPI Water Comments and Developer Responses

Section	DPI (Water) Comment	Developer Responses	Relevant Section
Table of Contents	The Table of Contents indicates the CEMP includes a Construction Flora and Fauna Management Sub-Plan (CFFMP) in Appendix L (page 5). The CFFMP is not attached to the draft CEMP. DPI Water requests it is provided with a copy of the CFFMP to review, particularly as the CEMP indicates the CFFMP will address REMMs which relate to the revegetation of the riparian area (see Table 12 - REMM Conditions of Approval in Appendix A2 of the draft CEMP page 75).	Following this comment the CFFMP was sent to DPI Water as documented in the consultation register.	NA
3.5 Demolition of Existing Infrastructure and Buildings	Section 3.5 indicates the remediation works involve the removal and disposal of underground storage tanks (USTs) and remediation of contaminated soils (page 17). The CEMP should include details on: The location and number of storage tanks proposed to be removed, The approximate depth of the underground storage tanks, The depth of the contaminated soils to be remediated The depth to groundwater at the site and clarify if the remediation works will impact groundwater.	Figure 6 – Approximate location of contamination and remediation areas have been added. This figure shows the location and number of storage tanks to be removed. The following statement has been included to address the comment. The depth of the remediation excavations vary from 0.2-3m below ground surface. The groundwater at the site varies from 3-13m below ground surface, with the shallowest depths closest to the Georges River. One excavation exists in this area however the depth is likely to be no greater than 2m. Most of the site exhibits groundwater at depths of greater than 7m, where the majority of remediation areas are located and hence it is unlikely that groundwater will be encountered during excavations. Figure 6 also shows the riparian zone along the Georges River and that our works will not impact on the riparian zone.	Section 3.5
REMM Conditions of Approval	The CEMP refers to REMMs that relate to the Early Works (see Appendix A2 – REMM Conditions of Approval, pages 72-84). It is suggested the Glossary and Abbreviations (page 7) identifies what REMMs is an abbreviation.	The glossary and Abbreviations table has been updated to include REMMs. Table number has also been amended.	Glossary and Abbreviations Table

	In relation to the REMMs, the text refers to Table 11 below (see page 72) but the table itself is numbered as Table 12. The Table number needs to be amended.		
Appendix A4 - Table 22- Project Risk Analysis	Point No. 16 in Table 15 includes a safeguard control to not use mulch within 20 m of waterways or drainage lines (page 99) but Point No 17 includes a control not to place mulch within 50 m of waterways (page 100). The CEMP should either: (i) explain why the two controls are inconsistent, or (ii) Table 15 should be amended so that these controls are consistent.	Point number 16 has been amended to the more conservative 50m. It now states Do not use mulch within 50m of waterways or drainage lines. Remove unused mulch to designated stockpile locations.	Appendix A4 - Table 22- Project Risk Analysis

APPENDIX H FORMS

JOB HAZARD ANALYSIS

JOB HAZARD ANALYSIS (JHA)					
Project		Company			
JHA Name		JHA Number		Date	

Supervisor Review and Approval (to be completed daily prior to commencement of work and when amendments are made):

JHA Rev No.	Supervisor Name	Signed	Date	JHA Rev No.	Supervisor Name	Signed	Date
0				7			
1				8			
2				9			

Sub-Permits

Working at Height	☐	Hot Work	☐	Hazardous Work	☐		☐
Crane Work Box	☐	Excavation	☐	Confined Space	☐		☐

Plant							
Compressor	☐		☐		☐		☐
Excavator	☐		☐		☐		☐
Forklift	☐		☐		☐		☐
Hand tools	☐		☐		☐		☐
Oxy Cutting Equipment	☐		☐		☐		☐
EWP	☐		☐		☐		☐
Welder	☐		☐		☐		☐
Crane Work Box	☐		☐		☐		☐

Materials					
Product Name	SDS Available	Product Name	SDS Available	Product Name	SDS Available
	☐		☐		☐
	☐		☐		☐
	☐		☐		☐
	☐		☐		☐

Relevant legislation, Codes of Practice, and Standards relating to the work			
Work Health & Safety Act	☐	Cranes Code of Practice (Model Draft)	☐
Work Health & Safety Regulation	☐	Scaffold and Scaffolding Work Code of Practice (Model Draft)	☐
Demolition Work Code of Practice	☐	Hazardous Manual Tasks Code of Practice (Model Code)	☐
AS 2601 – The Demolition of Structures	☐	How to Safely Remove Asbestos Code of Practice	☐
Managing the Risk of Falls at Workplaces Code of Practice (Model Code)	☐		☐
AS 4361.2 Guide To Lead Paint Management	☐		☐

Qualifications / Competencies / Courses required to perform the work							
SB – Scaffolding Basic	☐	RI – Rigging Intermediate	☐	CV – Vehicle Loading Crane	☐	Bonded Asbestos Removal	☐
SI – Intermediate Scaffolding	☐	RA – Rigging Advanced	☐	WP – Boom type elevated platform	☐		☐
SA – Advanced Scaffolding	☐	LF - Forklift	☐	VOC - Excavator	☐		☐
DG – Dogging	☐	CT – Tower Crane	☐	Slewing Crane	☐		☐
RB – Basic Rigging	☐	CN – Non-Slewing Mobile Crane	☐	Friable Asbestos Removal	☐		☐

PPE Requirements							
Hard Hat	☑	Tyvek Suits	☐		☐		☐
Safety Glasses	☑	Respirator	☐		☐		☐
High Visibility Clothing	☑	Cutting Jacket	☐		☐		☐
Long Sleeve Shirts	☑	Face Shield	☐		☐		☐
Long Pants	☑	Full Face Respirator	☐		☐		☐
Safety Boots (lace up)	☑	Cutting Gloves	☐		☐		☐
Gloves	☑		☐		☐		☐
Risk Assessment Matrix							

CONSEQUENCE TABLE				
Consequence	Health & Safety	Environment	Community / Media / Government	Loss / Damage
LOW	First aid treatment	Limited damage to area or low significance	Public concern restricted to local complaints	$0-$5K
MINOR	Medical Treatment	Minor short-term damage to environment / heritage	Minor, adverse local public or media attention and complaints	$15K-$150K
MODERATE	Classified Injury (LTI or restricted work case)	Moderate effects on environment / heritage	Attention from media and / or heightened concern from community	$150K-$1.5M
MAJOR	Fatality or severe permanent disability	Significant environmental / heritage damage	Significant adverse national media/public attention	$1.5M-$15M
CRITICAL	Multiple fatalities / health effects to > 50 persons	Severe damage to environment / heritage with long-term effects	Serious public or media outcry	$15M-$150M

LIKELIHOOD TABLE		
Likelihood	Description	Frequency at Location
ALMOST CERTAIN	Expected to happen	Occurs once a week
LIKELY	May easily happen	Occurs once a month
POSSIBLE	May happen	Occurs once every year
UNLIKELY	May happen sometime	Occurrence once every 10 years
RARE	May happen in extreme circumstances	Occurs once every 100 years

Likelihood	Consequence				
	1 - Low	2 - Minor	3 - Moderate	4 - Major	5 - Critical
A - Almost certain	High (11)	High (16)	Extreme (20)	Extreme (23)	Extreme (25)
B - Likely	Moderate (7)	High (12)	High (17)	Extreme (21)	Extreme (24)
C - Possible	Low (4)	Moderate (8)	High (13)	Extreme (18)	Extreme (22)
D - Unlikely	Low (2)	Low (5)	Moderate (9)	High (14)	Extreme (19)
E - Rare	Low (1)	Low (3)	Moderate (6)	High (10)	High (15)

Tolerable	ALARP	ALARP	INTOLERABLE

JOB HAZARD ANALYSIS

L = Likelihood **C** = Consequence **RR** = Risk Rank

Job Step No.	Description of Job Step	Hazards	Pre Control Risk Rank			Controls	Post Control Risk Rank		
			L	C	RR		L	C	RR
1.									
2.									

Personnel Sign On and Acknowledgement

By signing below you acknowledge that you have been consulted and inducted into this JHA and given instruction and training on how to undertake the work.

Name	Signature	Date	Company

WORK PERMIT

WORK PERMIT					
Work Permit Name				Date	
Project					
Permit Valid From		To			

Work Pack Contents		
Work Method Statement (WMS) – Only 1 x WMS per Work Permit		
No.	Name	Rev No
Job Hazard Analysis (JHA) – Only 1 x JHA per Work Permit		
Name		Rev No
Safety Data Sheets (SDS) – list all materials being used		

A copy of the SDS for Hazardous Substances and Dangerous Goods MUST be in Work Pack. Others to be available.

OTHER (e.g. Engineering drawings, Toolbox meetings, etc.)

Permits: **Tick box and attach Permits to the Work Pack as they are issued**					
Excavation		Confined Space		Hazardous Work	
Excavation required	☐ Yes ☐ No	Confined space Entry required	☐Yes ☐ No	Hazardous Work Required	☐ Yes ☐ No
Crane Work Box		Working at Heights		Hot Work	
Crane Work Box required	☐ Yes ☐ No	WAH required	☐Yes ☐ No	Hot Work required	☐ Yes ☐ No

Issue of Work Permit (Supervisor)					
Permit Issuer:	I confirm that the Work Pack contains the above documentation				
Name:		Signature:		Date:	

Acceptance of Work Permit (Work Group Representative)					
Group Rep:	I confirm that the Work Pack contains the above documentation				
Name:		Signature:		Date:	
Company:		Contact No			

Work Permit Transfer: **As the new Group Rep, I confirm the Work Pack contains the stated documentation**					
Name:		Signature:		Date:	
Company:		Contact No			
Name:		Signature:		Date:	
Company:		Contact No			

Supervisor Daily Check: **Should the work being undertaken not meet the requirements of this permit, then ALL work must stop until the issues are resolved.**

This Work Permit must be signed off daily, If there is no work on a given day, it must be recorded as "no work".

No	Supervisor Name	Date	Time	Is the work being undertaken pursuant to this permit		Company Undertaking the Work
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	
-				☐ Yes	☐ No	

			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	
			☐ Yes	☐ No	

WEEKLY ENVIRONMENTAL INSPECTION

Project: _____

Inspection Carried Out by: _____ Signed: _____

Date: _____ Area/Location: _____

Weather Conditions (Tick appropriate boxes)**:**

Fine ☐ Light rain ☐ Heavy rain ☐ Light wind ☐ Strong wind ☐

ITEM	Y / N	COMMENTS
General Site		
Is the site in a generally tidy condition?		
Is all equipment, materials, etc contained within work area boundary?		
Are there any obvious signs of demolition/ remediation related disturbance outside of the demolition/ remediation area?		
Is the EMP readily accessible?		
Is an environmental incident response plan displayed in a prominent position?		
Is there an accessible complaints register?		
Is there documentation of any training undertaken since the last inspection?		
Is there minimal dirt on adjacent public roads?		
Have all required traffic control measures been implemented in accordance with the EMP (eg: warning signs, temporary road closures etc)?		
Is all demolition/ remediation plant parked on site?		
Are any private vehicles of demolition/ remediation personnel obstructing the passage of local traffic?		
Have local residence been notified 5 days prior to the commencement of works, for works outside of the normal working hours?		
Have local residents been notified 5 days prior to demolition/ remediation of activities that are likely to cause dust, offensive noise or access?		
Are complaints being reported to the Principals Representative?		

ITEM	Y / N	COMMENTS
Is the Complaints Register complete and have actions detailed been implemented?		
Is the access to any private properties being obstructed?		
Are pedestrian routes adjacent to site being obstructed (are appropriate alternative routes in place)?		
Has Environmental training been conducted over the last 3 months?		
Air Emissions		
Is dust suppression equipment readily accessible?		
Are there any obvious signs of dust deposition outside of demolition/ remediation area(s)?		
Is spoil being prevented from being tracked onto public roads?		
Are the haul roads being kept damp (if required)?		
Is the air quality monitoring equipment (if installed) operating correctly?		
Is there adequate procedures implemented for dust control?		
Is there stabilisation of stockpiles or erection of dust screens?		
Do any vehicles or machinery have visible exhaust for more than 10 seconds?		
Water Management		
Have required erosion control measure been correctly installed and are they functional? Check that there are/is; ○ no gaps in silt fences/barriers ○ no material lying across filter material or build up of silt no obvious signs of significant seepage through fences.		
Are there any obvious signs of overflow from sediment detention basins?		
Are there obvious signs of uncontrolled drainage leaving the site?		

ITEM	Y / N	COMMENTS
Are any materials, temporary structures/works in drainage lines?		
Where required, are drainage outlets provided with energy dissipaters to minimise erosion?		
Does water quality in down slope areas appear to be unaffected by demolition/ remediation works?		
Are diversion banks and drains located appropriately?		
Are there any apparent illegal discharges to sewers (cleaning of paint brushes, plaster, concrete)?		
Is the washdown of demolition/ remediation plant/vehicles restricted to a designated area (eg: truck wash out area)?		
Does the sediment basin require discharge? (5 days from last rain event?		
Waste Management		
Is there appropriate documentation of any waste material disposed of offsite?		
Are waste receptacles accessible and clearly marked with regard to waste type?		
Is all recyclable material separated as per the waste management plan (are records available)?		
Are records of the type, amounts, date, transport, and disposal site of waste kept in a Waste Register?		
Do trucks removing material from the site have their loads covered?		
Hazardous Materials and Storage		
Are all hazardous materials (eg: fuels, chemicals etc) stored in an impervious bund which can contain 110% of the volume of the largest container stored in that bund?		
Are all hazardous materials stored in a covered area more than 20m away from waterways and drainage inlets?		
Is the spill kit readily accessible?		
Is the on-site refuelling of demolition/ remediation plant restricted to a designated area		

ITEM	Y / N	COMMENTS
more than 20m away from waterways and stormwater inlets?		
Are there any obvious signs of fuel spills, oil leakage, etc from demolition/ remediation plant) check both plant and ground?		
Are the relevant Safety Data sheets (SDS) available on site?		
Are containers labelled and stored correctly when not in use (i.e. in chemical storage areas or portable bunds)?		
Flora and Fauna Management		
Are there measures in place to minimise clearing eg: protective fencing, webbing, marked tape?		
Are all required vegetation protection measures in place and functional? TPZ fencing in place at locations #1, #2 and #3 along Moorebank Avenue?		
Is protection or delineation in place of Habitat Bearing Trees (HBTs)?		
Are staff trained to identify protected vegetation?		
Is there any historic evidence of soil and groundwater contamination?		
Is there evidence of noxious weed invasion?		
Has there been any soil and groundwater contamination surveys?		
Is there evidence of native fauna being encountered?		
Have any threatened Species been observed? (Grey Headed Flying Fox, Bent Wing Bat)?		
Nest boxes inspected and in good condition?		
Noise Control		
Is there documentary evidence that all required noise suppression measures have been installed and operating in accordance with manufacturer's instruction and/or relevant environmental protection licence conditions?		
Is all noise monitoring equipment (if installed) operating correctly?		

ITEM	Y / N	COMMENTS
Are all Plant/machinery switched off when not in use?		
Have the residents that are likely to be affected by offensive noise and/or vibration been notified?		
Have residents been notified of works to be undertaken outside of normal working hours?		
Have the siting of work areas, vehicle and plant parking areas, material stockpiles and equipment storage been arranged to minimise noise?		
Are there appropriate noise and vibration controls for activities adjacent to residents and other sensitive receivers?		
Are there any controls imposed on the Project by regulatory authorities?		
Resource Consumption		
Does the Project monitor water consumption?		
Does the Project monitor energy consumption?		
Are there any objectives and targets directed at resource consumption?		
Are there any recycling/reuse/redesign initiatives for products, materials and processes?		
Processing Areas		
Do stockpiles appear adequately maintained and managed (measures in place to prevent dust and soil run off)?		
Are there separate stockpiles for different material eg: ferrous/ non ferrous/ hand cut etc?		
Are any stockpiles located within the tree drip line (3m from tree base)?		
Are there dust control measures in place for the stockpile?		
Demolition/ Remediation Areas		
Are areas where demolition/ remediation activities have ceased being stabilised and rehabilitated?		

ITEM	Y / N	COMMENTS
Are any demolition/ remediation materials stored inside vegetation protection zones?		
Are there any obvious signs of demolition/ remediation activity within protected vegetation areas?		
Is contaminated land fenced off?		
Are disturbed areas stabilised and revegetated?		
Are all required protection measures in place and functional?		
Heritage Management		
Are demolition/ remediation materials stored inside heritage protection zones?		
Are there any obvious signs of demolition/ remediation activity within protected areas?		

ACTION ITEM NO.	CORRECTIVE ACTION DETAILS	ACTION REQ'D BY	ACTION CLOSE-OUT DATE
1.			
2.			
3.			

MOBILE PLANT PRE START CHECK SHEET

NO.

HIRED ☐ **Week Ending: / /**

ASSET NUMBER: _____ ASSET TYPE: _____ ASSET LOCATION: _____

WEEK ENDING HOURS READING: _____ WEEK ENDING KM'S: _____

ATTACHMENT: _____ ATTACHMENT ASSET NO. LI _____

CHECKLIST (INCLUDING LITRES ADDED)	Mon		Tues		Wed		Thurs		Fri		Sat		Sun	
	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED	✓	LTRS ADDED
ENGINE OIL														
TRANSMISSION OIL														
HYDRAULIC OIL														
COOLANT														
BRAKE FLUID														
AIR CLEANERS / PRE CLEANER														
GREASED														
WALK AROUND INSPECTION														
MILEAGE / HOURS														

SAFETY CHECKLIST	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗
SERVICE BRAKES / PARK BRAKES WORKING CORRECTLY							
SEAT / SEATBELT - CONDITION / ADJUSTMENT							
LIGHTS / FLASHING LIGHT							
HORN / FIRE EXTINGUISHER (IF APPLICABLE)							
STEERING - FUNCTIONING CORRECTLY							
TYRES - DAMAGE / WEAR							
VISIBILITY - WINDOWS / WIPERS MIRRORS CLEAN							
MACHINERY CLEAN - IN & AROUND MOVING PARTS, IN CABIN, ETC							

MECHANICAL CHECKLIST	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗	✓ or ✗
TRACKS / IDLERS, WEAR, CRACKS / SPROCKETS							
GROUSERS, WEAR / ADJUSTMENT							
TRANSMISSION FUNCTIONING CORRECTLY							
ELECTRICAL / GAUGES							
LOOSE OR MISSING BOLTS / PINS / GUARDS							
HYDRAULICS / RAMS / HOSES - LEAKS / WEAR							
OIL LEAKS - ENGINE / TRANSMISSION / DIFF / FINAL DRIVE							
RADIATOR - VISIBLE LEAKS / WATER LOSS / IS CORE CLEAN							
OPERATOR'S INITIAL:							

PLANT FAULT / DEFECT REPORT

(PLEASE REPORT ANY FAULT DURING SAFETY CHECK OR MECHANICAL OPERATION DIRECTLY TO MECHANICS / SUPERVISOR)

.....

.....

.....

OPERATOR'S NAME: ..... OPERATOR'S SIGNATURE: .....

SUPERVISOR'S NAME: ..... SUPERVISOR'S SIGNATURE: .....

SAFE TO OPERATE ☐

MECHANIC'S REPORT

.....

.....

MECHANIC'S NAME: ..... MECHANIC'S SIGNATURE: .....

IF A MAJOR FAULT IS DISCOVERED DURING THE DAILY INSPECTION OR AT ANY OTHER TIME WHICH EFFECTS THE SAFE OPERATION OR THE POTENTIAL FOR SERIOUS MECHANICAL BREAKDOWN THEN THE FOLLOWING SHOULD BE DONE:

1. THE MACHINE MUST BE PARKED IN A SAFE LOCATION AWAY FROM OTHER OPERATING PLANT
2. MAJOR FAULTS MUST BE REPORTED IMMEDIATELY TO YOUR SUPERVISOR AND PLANT NOT USED UNTIL AUTHORISED
3. ALL THE ABOVE INFORMATION MUST BE FILLED OUT

No employee is expected to put themselves, the machine or others at risk by the operation of machinery that is not in a safe mechanical condition. Responsible reporting of faults will not put your employment at risk. Non reporting of faults or not completing plant check sheets may cause disciplinary action.

FORM 400 (REV 06 16-03-16) **LEGEND: (WHITE - 'ADMINISTRATION COPY', YELLOW - 'REMAINS IN BOOK')**

APPENDIX I CONSTRUCTION TRAFFIC AND ACCESS MANAGEMENT SUB PLAN

APPENDIX J CONSTRUCTION NOISE AND VIBRATION MANAGEMENT SUB PLAN

APPENDIX K CONSTRUCTION HERITAGE MANAGEMENT SUB PLAN

APPENDIX L CONSTRUCTION FLORA AND FAUNA MANAGEMENT SUB PLAN

APPENDIX M CONSTRUCTION AIR QUALITY MANAGEMENT SUB PLAN

APPENDIX N CONSTRUCTION SOIL AND WATER MANAGEMENT SUB PLAN