Australian Government

BUILDING OUR FUTURE

NSW GOVERNMENT

M1 Pacific Motorway extension to Raymond Terrace

Environmental impact statement – Chapter 19: Waste

Transport for NSW | July 2021

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19. Waste

This chapter describes the potential waste impacts that may be generated by the construction and operation of the project and presents the approach to the management of these impacts.

The desired performance outcome for the project relating to waste, as outlined in the SEARs, is to:

- Ensure that all wastes generated during the construction and operation of the project are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.

Table 19-1 outlines the SEARs that relate to waste and identifies where they are addressed in this EIS. The full assessment of waste impacts is provided in the Waste Working Paper (**Appendix S**).

Table 19-1 SEARs (waste)

Secretary's requirement	Where addressed
15. Waste	
1. The Proponent must assess predicted waste generated from the project during construction and operation including:	
(a) classification of the waste in accordance with the current guidelines;	**Section 19.1** outlines the relevant waste legislation, policy and guidelines. **Table 19-3** provides preliminary classifications of expected wastes.
(b) estimates / details of the quantity of each classification of waste to be generated during the construction of the project, including bulk earthworks and spoil balance;	**Section 19.4.2** provides estimates of the quantity of waste to be generated during construction.
(c) handling of waste including measures to facilitate segregation and prevent cross contamination;	**Section 19.5** outlines proposed environmental management measures to facilitate segregation and prevent cross contamination.
(d) management of waste including estimated location and volume of stockpiles;	**Section 19.4.2** provides estimates of the volume and location of stockpiles.
(e) waste minimisation (particularly of unsuitable material) and reuse;	**Section 19.5** provides an overview of waste minimisation measures.
(f) lawful disposal or recycling locations for each type of waste; and	**Table 19-2** identifies waste and recycling facilities near the project.
(g) contingencies for the above, including managing unexpected waste volumes.	**Section 19.5** describes the proposed contingencies and other environmental management measures for the project, including managing unexpected waste volumes.
2. The Proponent must assess potential environmental impacts from the excavation, handling, storage on site, and transport and disposal of the waste particularly with relation to sediment/leachate control, noise and dust, and traffic and transport.	**Section 19.4.1** and **Section 19.4.3** assesses the waste that is predicted to be generated during construction and operation of the project. **Section 11.4** assesses the water quality impacts of the project from sediment and leachate. **Section 8.4** and **Section 8.5** assess the noise impacts of the project. **Section 18.4** assesses the dust impacts of the project. **Section 7.4** and **Section 7.5** assess the traffic and transport impacts of the project.

19.1 Policy and planning setting

The waste assessment was prepared in accordance with the following relevant legislation, policy and guidelines:

- Legislation:
  - *Protection of the Environment Operations Act 1997*
  - Protection of the Environment Operations (Waste) Regulation 2014
  - *Waste Avoidance and Resource Recovery Act 2001*
  - *Environmentally Hazardous Chemicals Act 1985*
- Plans and policy
  - National Waste Policy 2018 (Australian Government 2018b)
  - National Waste Policy Action Plan 2019 (Australian Government 2019)
  - NSW Circular Economy Policy (NSW Environment Protection Authority 2019b)
  - NSW Government Resource Efficiency Policy (OEH 2019b)
- Guidelines:
  - Waste Classification Guidelines (NSW Environment Protection Authority 2014a)
  - Technical Guide: Management of Road Construction and Maintenance Wastes (Roads and Maritime Services 2016f)
  - NSW Acid Sulfate Soils Manual (NSW Environment Protection Authority 2014b)
  - NSW Sustainable Design Guidelines Version 3.0 (Transport for NSW 2013)
  - Environmental Sustainability Strategy 2019-2023 (Roads and Maritime Services 2019)
  - Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004).

Further detail on the above legislation, policies and guidelines, and how they apply to the project, is provided in the Waste Working Paper (**Appendix S**).

19.2 Assessment methodology

The methodology for this assessment included:

- Reviewing the likely sources of construction materials for the project
- Quantifying expected waste volumes generated during construction and operation of the project
- Reviewing expected waste classifications and streams
- Reviewing data sources and relevant reports
- Assessing the opportunities for avoidance, reduction, reuse, and recycling of waste during construction
- Assessing potential environmental impacts associated with waste management on the project
- Identifying environmental management measures to minimise potential waste impacts associated with the project.

19.3 Existing environment

The project is predominantly located in greenfield areas, generally next to existing road infrastructure in the lower portion of the Hunter River catchment on a low-lying, gently undulating topographic environment which includes floodplain areas.

Existing land uses in and around the project include residential, rural residential, transport, agricultural, commercial and industrial (refer to **Chapter 14** (land use and property) for further information). As described in **Chapter 16** (soils and contamination), site investigations carried out have identified that there is potential for Acid Sulfate Soil (ASS), contaminated soils and asbestos to be present within the construction footprint.

ASS risk maps from the Atlas of Australian Acid Sulfate Soils (CSIRO 2020) indicate that there is a high probability of ASS being present within the Hunter River sediments and associated low lying floodplains and swamp areas within the construction footprint. The maps indicate that there is a low probability of potential ASS in northern parts of the construction footprint over the Tomago Sandbeds. The western portion of the construction footprint is mapped as having no known occurrence of ASS.

Historical and current potentially contaminating activities within the construction footprint include agricultural and rural land use, a former mineral sand processing site, areas of fill material and industrial land uses. Five high, six medium and several low areas of potential contamination risk have been identified within and next to the construction footprint. These areas of potential contamination include the Hunter River and banks where sediment would be disturbed, Tarro, Tomago and the construction footprint at the western side of the project in Heatherbrae, Raymond Terrace and Windeyers Creek (refer to **Chapter 16** (soils and contamination)).

Further discussion of existing ASS, contaminated soils and asbestos risks and associated locations are provided in **Chapter 16** (soils and contamination).

Multiple waste and recycling facilities are located near the project for recycling and disposal of construction waste. The closest facilities to the project are listed in **Table 19-2**.

Table 19-2 Nearest waste management facilities

Facility	Address	Processing capabilities
Mount Vincent Road Waste Management Centre	109 Mount Vincent Road, East Maitland NSW 2323	• General solid waste including recyclables • Asbestos waste
Summerhill Waste Management Centre	141 Minmi Road, Wallsend NSW 2287	• General solid waste including recyclables • Some special waste including asbestos waste
SUEZ Hunter	122 Woodstock Street, Mayfield North NSW 2304 Australia (not open to public)	• General solid waste • Special waste • Hazardous waste • Liquid waste
SUEZ Raymond Terrace	330 Newline Road, Raymond Terrace NSW 2324 Australia (not open to public)	• General solid waste • Special waste • Hazardous waste • Liquid waste

19.4 Assessment of potential impacts

19.4.1 Resource use

The main construction materials and resources to be used for the project, based on the concept design, would include, but not be limited to:

- Earthworks material: About 1,080,000 cubic metres of imported fill would be required, primarily north of the Hunter River
- Pavement: About 355,000 cubic metres of pavement materials would be imported across the entire project including about 140,000 cubic metres of concrete, about 60,000 cubic metres of asphalt, and 155,000 cubic metres of select material
- Bridge construction:
  - Concrete: About 70,000 cubic metres of concrete would be imported for bridge structures, not including pre-cast elements
  - Steel: About 13,500 tonnes of reinforcing steel and 12,000 tonnes of steel piles would be required for bridge structures, not including pre-cast elements
  - Pre-cast elements: Around 1,030 pre-cast girders and 185 pre-cast box segments consisting of reinforced concrete would be imported for bridge structures.
- Water: About 380 megalitres of water would be required to support construction.

The project would also require fuel and electricity. The quantity of fuel and electricity to be used would be estimated before construction by the contractor.

19.4.2 Construction waste

Waste generation

Use of materials during construction of the project would generate waste, which would contribute to increased greenhouse gas emissions and incur landfill levy costs.

Waste resulting from project activities would primarily arise from site establishment, excavating, clearing, stripping, demolition of existing structures, earthwork, and construction of roads, retaining walls, bridges and drains. Pre-cast elements would minimise waste impacts by avoiding over-ordering of materials.

Table 19-3 outlines potential waste streams that would arise from construction activities, including volumes and likely classification in accordance with the Waste Classification Guidelines (NSW Environment Protection Authority 2014a). The construction waste streams are then detailed in the sections that follow.

Table 19-3 Indicative construction waste streams and volumes

Activity	Potential waste streams produced	Expected classification	Potential waste quantity
Early work (including site establishment activities, site office establishment, utilities, and other facilities) Note that other activities may also be carried out as early work including demolition work	Surplus construction material including fencing, geofabric, concrete, steel, timber and sand bags	• General solid waste (non-putrescible)	Minimal

Activity	Potential waste streams produced	Expected classification	Potential waste quantity
Earthwork and drainage work (including topsoil stripping, cut and fill preparation, and vegetation clearance) Note these activities would not necessarily be carried out concurrently	Excavated contaminated materials	• Hazardous waste • Restricted solid waste • Special waste	• Hazardous, restricted and special waste quantities are estimated to be minimal
	Excavated non-contaminated materials	• General solid waste (non-putrescible) • Virgin excavated natural material (VENM) • Excavated natural material (ENM) • Potential ASS	• There would be no waste from the earthwork activities if the excavated fill from south of the river is suitable for reuse. The project is estimated to generate about 80,000m^3 of topsoil, which would be reused • Quantities of general solid waste (non-putrescible) are estimated to be minimal • The project is estimated to excavate 90,000m^3 of potential ASS, with about 50,000m^3 estimated to be actual ASS after testing. The majority of ASS is expected to be treated and re-used on site.
	Mulch (green waste, cleared vegetation)	• General solid waste (putrescible)	• The project is estimated to generate approximately 75,000m^3 of mulch, with about half expected to be re-used on site for landscape planting and rehabilitation of the site. • Mulch may be used during construction or applied in thicker layers to reduce the quantity of excess mulch.
	Contaminated water (e.g. generated by a spill)	• Liquid waste	• Minimal
Demolition of existing redundant infrastructure and buildings and site clearance	Demolition materials including concrete, bricks, road base, tiles, timber, metals, plasterboard, carpets, electrical and plumbing fittings and furnishing. May also include tyres, asbestos and lead paint, abandoned vehicles and illegally dumped demolition and construction debris	• General solid waste (non-putrescible) • Special waste • Restricted solid waste • Hazardous waste	• Three dwellings would be demolished during construction • A hazardous building materials audit would be carried out before the demolition of any structure and/or building

Activity	Potential waste streams produced	Expected classification	Potential waste quantity
Construction of pavements and bridges, retaining structures, including finishing work (e.g. line marking, installation of roadside furniture, landscaping)	General construction waste including timber formwork, scrap metal, steel, concrete, plasterboards, and packaging material	• General solid waste (non-putrescible)	• Waste amounts are likely to be minimal due to appropriate ordering of construction materials
	Surplus construction material including fencing, sediment, gravel/crushed rock, asphalt, concrete, steel, aggregate, formwork, landscaping material and sand bags	• General solid waste (non-putrescible)	• Minimal. Surplus construction material would be reused onsite or reused at an alternate Transport project where possible
Temporary work including the construction of work platforms, hardstand areas, and sediment basins	General construction waste including timber formwork, scrap metal, steel, concrete, plasterboards, and packaging material	• General solid waste (non-putrescible)	• Minimal
	Sediment and sludge within sediment basins	• General solid waste (non-putrescible)	• Minimal. Any sediment/sludge is expected to be treated and reused onsite
Activities at site offices	General waste from site office including putrescibles, paper, cardboard, e-waste plastics, metal, glass, site litter, cigarette butts, printer cartridges, e-waste, and sewage waste	• General solid waste (non-putrescible)	• Volumes of waste produced would be dependent on the number of workers onsite at any one time
Operation of plant and equipment	Waste from operation and maintenance of construction vehicles and machinery including adhesives, lubricants, waste fuels, batteries, hoses and tyres, wastewater associated with washdown water	• Hazardous waste • Special waste • Liquid waste	• Minimal
	Clean up waste in the event of an accidental spill of fuel or chemicals	• Hazardous waste • Liquid waste	• Minimal • Any waste from spills would be dependent on the size and nature of the spill.

For the purposes of providing a conservative assessment, it has been assumed that waste such as VENM and ENM (including potential ASS), mulch, topsoil, soil and demolition waste (including asbestos) would be temporarily stockpiled until the waste could be reused on the project, reused on other projects, or disposed of at a licensed facility. Stockpiles would be located at all ancillary facilities except for AS9 and stockpiling would also occur at other locations within the construction footprint as required.

Estimated stockpile volumes are included in **Table 19-4**. The volume of material would be spread over smaller stockpiles throughout the construction footprint.

Table 19-4 Estimated stockpile volumes

Material	Volume to be stockpiled (m^3)
Potential ASS	90,000
Excavated topsoil	80,000
Excavated fill	860,000 Not all excavated general fill would require stockpiling. If stockpiling is required the total volume in stockpile would be significantly less than the total quantity, because production of general fill from cuttings and placement in embankments would take place over time.
Mulch	75,000
Demolition materials	Three dwellings would be demolished during construction. A hazardous building materials audit would be carried out before the demolition of any structure and/or building.

Excavated earthworks fill

Potential impacts from excavated fill material when it is stockpiled on site include:

- Risk of contaminated or sediment-laden surface water run-off from stockpiles impacting the surrounding environment
- Dust generation if stockpile is not properly dampened or at an inappropriate height
- If excess excavated fill cannot be reused on site or beneficially reused offsite, then it would require disposal at a licensed waste facility
- Impacts associated with dust generation and noise impacts if substantial amounts of excess spoil require transportation.

The project has been developed with a strategy of maintaining an earthwork balance to the south of the Hunter River. To minimise waste, the excavated fill taken from south of the Hunter River may be used to offset the amount of imported fill needed north of the river where appropriate. This would reduce the amount of imported fill required. The cut/fill balance of the project may also change following detailed design.

Excavated fill material sourced from cutting locations, particularly at Black Hill, is anticipated to be suitable for general fill. Imported fill would be sourced from quarries, local borrow pits and/or other sources, with potential fill sources including local mine backfill, former brick pits, interbedded sedimentary and volcanic rocks at Eagleton, coal ash, sand quarries, and other projects. If there is imported fill that is available that would otherwise be disposed of, this would be prioritised for use within the project in accordance with the waste hierarchy. Excavated fill that is not classified as being suitable for general fill requirements would be treated and reclassified, prior to reuse or disposal as described below.

Topsoil

Potential impacts from stockpiling topsoil on site include:

- Dust generation if stockpile is not properly dampened or at an inappropriate height
- If excess topsoil cannot be reused on site or beneficially reused offsite then it would require disposal in landfill
- Impacts associated with dust generation and noise impacts if substantial amounts of excess topsoil require transportation.

All topsoil would be stripped and temporarily stockpiled and respread across the project where needed. About 70,000 cubic metres is required for topsoil spreading for the project in line with Transport Specification R178, as well as for open drainage channels. As a result, there would be a surplus of about 10,000 cubic metres of topsoil from the project's construction. This surplus could be used to apply a thicker uniform layer of topsoil across the project. As a result, it is anticipated that topsoil would neither need to be imported or exported.

As the topsoil would be stripped in the initial earthwork activities and not placed until after completion of pavement work, topsoil would be stockpiled. Topsoil would be stockpiled south of the Hunter River at AS1, AS2 and AS3 and north of the Hunter River at AS10 and AS21.

Mulch waste

The total amount of mulch produced by the project is estimated to be about 75,000 cubic metres. If stockpiling mulch is not feasible due to construction timelines, the project could engage in community giveaways and with other projects in the area to reuse the mulch.

Mulch produced on site would be used in landscaping and soil and erosion control measures for the project where possible. Tannin rich leachate could occur as a result of raw mulch being stored on site. Mulch stockpiles would require appropriate management to prevent tannins from impacting the water quality of surrounding water resources.

Demolition waste

Demolition waste may arise from the following activities:

- Demolition of buildings including at Black Hill/Hexham (rural properties) and Heatherbrae (residential and commercial buildings)
- Existing drainage infrastructure may need to be removed or upgraded at Purgatory Creek for construction of access tracks
- Relocation of existing utilities at Black Hill, Tomago interchange, Heatherbrae, and Raymond Terrace interchange
- Demolition of sections of existing road infrastructure, including sections of Lenaghans Drive, Aurizon Access road, Masonite Road and the Pacific Highway
- The potential removal of sections of the existing noise wall at Black Hill.

If improperly managed, demolition waste and leachates may enter receiving environments resulting in soil, water quality and air quality impacts. Demolition of structures may expose site personnel to asbestos or other hazardous materials. If handled incorrectly, asbestos or other hazardous materials may impact human health. Human health impacts may be amplified if waste is incorrectly classified, stockpiled, or managed. Management of demolition waste, leachates, asbestos and other hazardous materials will be carried out in line with the environmental management measures outlined in **Table 19-6**.

Wastewater

Wastewater may be classified as liquid waste and/or hazardous waste according to the Waste Classification Guidelines (NSW Environment Protection Authority 2014a) and may be generated by:

- Groundwater intrusion in excavations
- Tannin affected water being removed from site
- Turbid water captured in excavations and sediment basins
- Sewage from site compounds
- Contaminated groundwater inflows from cuttings and excavations (trenches, footings, piling)
- Water runoff from construction activities, including acidic runoff, vehicle washdown and concrete batching
- Spills leading to contamination of surface water or encountering already contaminated groundwater.

The impacts of contaminated water on the environment is discussed in **Chapter 11** (surface water and groundwater quality).

Site office waste

Site office waste would be generated from office activities and may include general solid waste (putrescible and non-putrescible). Site office waste would be separated onsite into non-recyclable general solid waste (putrescible) and recyclable general solid waste (non-putrescible) to prevent recyclables from being sent to landfill. The contractor would be responsible for the control of waste generation and management during construction including either transporting waste to an offsite facility or engaging a waste contractor to do so.

Regional waste facilities

The waste hierarchy would guide waste management for waste generated as a result of construction of the project, with any waste that cannot be avoided or reused being either recycled or sent to landfill. Sending project waste to landfill would have the following impacts:

- Increase project costs due to landfill levies
- Increase greenhouse gas emissions
- Increase processing times at regional waste facilities due to greater waste volumes.

The use of the waste hierarchy to manage waste would reduce the likelihood of unexpected waste occurring during construction. As a result, the project would limit landfill waste where practicable.

Contamination and ASS

Construction activities including excavation and general ground disturbance in high-risk areas have the potential to expose and mobilise ASS, contaminated materials, and asbestos. Appropriate management, storage and disposal is the key waste-related impact associated with exposing ASS, contaminated materials, and asbestos. Waste must be classified and, if appropriate or required by the Waste Classification Guidelines, treated and reclassified, prior to reuse or disposal. Should this not occur appropriately, cross-contamination of waste may occur, and environmental pollution and human health impacts may arise.

Further information on environmental and health impacts associated with exposing ASS, contaminated materials and asbestos are discussed in **Chapter 16** (soils and contamination), **Chapter 18** (air quality) and **Chapter 22** (safety and risk).

Other impacts

During construction, waste generation may also have the following impacts:

- Odour: Waste generation may result in odour due to waste decomposition. Odours can affect human populations near to the construction site or waste processing facilities
- Air quality impacts and emissions from waste generation: These are expected to be minimal. Dust impacts from construction are assessed in **Chapter 18** (air quality), while emissions from construction are assessed in **Chapter 21** (climate change risk)
- Traffic impacts from transportation of waste offsite: Waste generated by the project that cannot be reused onsite would need to be taken offsite for processing. Traffic impacts from construction vehicle movements have been assessed in **Chapter 7** (traffic and transport)
- Noise impacts from transportation and disposal of waste: Noise impacts relating to waste are expected to be minimal compared to general noise impacts from project construction. Noise impacts are assessed in **Chapter 8** (noise and vibration).

19.4.3 Operational waste

Resource use

Ongoing resource use during operation would be minimal. Resources that may be used during operation would include; water for landscaping, electricity for road and traffic lights, asphalt and concrete for road surface maintenance, and fuel for maintenance vehicles. Resource supply impacts during operation are unlikely.

Waste generation

Operational waste is anticipated to be minimal and would arise from minor repair and maintenance work. Waste resulting from major repair, maintenance, or upgrade work would be assessed separately, outside of this approval. **Table 19-5** describes the expected waste arising from operation of the project. All operational waste volumes are expected to be minimal.

Table 19-5 Indicative operational waste streams and volumes

Activity	Waste	Possible classification
Minor maintenance and repair work	Excess maintenance material including timber, concrete, steel, sediment, asphalt, sand Vegetation, mulch from landscape maintenance	• General solid waste (non-putrescible) • General solid waste (putrescible)
Waste from vehicles and machinery	Fuels, lubricants, chemicals, tyres, batteries, metals	• Liquid waste • Hazardous waste • Special waste
Litter from vehicles	General litter such as food scraps, cigarette butts, food wrappers etc.	• General solid waste (non-putrescible) • General solid waste (putrescible)
Clean up waste resulting from a spill or accident	Fuels, lubricants, chemicals and soaked rags and bunds	• Liquid waste • Hazardous waste • Special waste
Sediment from basins, culverts and drains	Sediment	• General solid waste (non-putrescible)

Operational waste impacts are expected to be minimal due to the guidance of appropriate waste management framework and low volumes of waste. However, mismanagement of operational waste could potentially result in the following :

- Increased volumes of waste to landfill due to incorrect separation, management, and classification of waste
- Environmental impacts from incorrect sorting, classification, or disposal of waste.

Environmental impacts may also arise from spills of liquid and hazardous waste such as fuels and lubricants during operation of the project.

19.5 Environmental management measures

The environmental management measures that will be implemented to minimise the waste impacts of the project, along with the responsibility and timing for those measures, are presented in **Table 19-6**. Details on the treatment of ASS during construction of the project is outlined in **Section 16.5**.

Table 19-6 Environmental management measures (waste)

Impact	Reference	Management measure	Responsibility	Timing
Avoid, minimise and sustainably manage waste	WM01	A Waste Management Plan (WMP) will be prepared and implemented to manage and minimise the generation of waste and encourage reuse of materials. It will include, but not be limited to: • Identification of the waste types and volumes that are likely to be generated by the project • Adherence to the waste minimisation hierarchy principles of avoid/ reduce/ reuse/ recycle/ dispose • Waste management procedures to lawfully manage the handling and disposal of waste • Identification of reporting requirements and procedures for tracking of waste types and quantities • A resource management strategy detailing the process to identify reuse options for surplus materials • Site-specific waste management plans for concrete and asphalt batching plants • Spoil management procedures outlining reuse and disposal Identification of areas for management of materials.	Contractor	Detailed design/ prior to construction/ construction
Management of spoil	WM02	Spoil management procedures will be outlined in the WMP. Spoil will be beneficially reused as part of the project before alternative spoil disposal options are considered. Any excess spoil will be managed using the following order of priorities: • Review alignment and profile refinements during detailed design • Assess opportunities to reuse excess spoil in works within the construction footprint or in adjacent land • Beneficial reuse within the construction footprint for rehabilitation of ancillary facilities • Transfer to other nearby Transport projects for immediate use, use on future projects, or routine maintenance • Transfer to a Transport approved site for reuse on other projects • Disposal at an approved materials recycling or licensed waste disposal facility.	Contractor	Construction

Impact	Reference	Management measure	Responsibility	Timing
Other relevant management measures				
Soil and groundwater contamination	SC01	A Contaminated Land Management Plan (CLMP) and procedures prepared in accordance with TfNSW's Guideline for the Management of Contamination (Roads and Maritime Services 2013c) will be developed and will include: • Control measures to manage identified areas of potential contamination medium and high risk (AOPCRs), where the risk is confirmed within the construction footprint • Procedures for managing unexpected contamination (including buried waste, illegal dumping and asbestos) • Requirements for the disposal of contaminated waste in accordance with the *Protection of the Environment Operations Act 1997* and the Protection of the Environment Operations (Waste) Regulation 2014.	Contractor	Prior to construction/ construction
General	WQ01	A Construction Soils and Water Management Plan (CSWMP) would be developed as a sub plan of the CEMP and will outline measures to manage soil and water quality impacts associated with the construction work, including contaminated land. The CSWMP would include but not be limited to: • Measures to minimise/manage erosion and sediment transport both within the construction footprint and offsite including requirements for the preparation of erosion and sediment control plans (ESCP) for all progressive stages of construction and the implementation of erosion and sediment control measures • Erosion and sediment control measures, which will be implemented and maintained in accordance with Managing Urban Stormwater – Soils and Construction, Volume 1 and Volume 2D (DECC 2008) • Measures to manage stockpiles including locations, separation of waste types, sediment controls and stabilisation in accordance with the Stockpile Site Management Guideline (Roads and Maritime Services 2015e) • Procedures for dewatering (including waterways, wetlands and excavations and temporary sediment basins) including relevant discharge criteria • Concrete waste management procedures • Measures to manage accidental spills including the requirement to maintain materials such as spill kits, an emergency spill response procedure and regular visual water quality checks when working near waterways • Measures to manage tannin leachate and potential saline soils • Controls for sensitive receiving environments which may include but not be limited to identification of 'no go' zones for construction plant and equipment (where applicable).	Contractor	Prior to construction/ construction/ operation