APPENDIX G
ENVIRONMENTAL MANAGEMENT PLAN

Woolworths Customer Fulfilment Centre,
Marrickville

CENTRAL CIVIL

Details	Title	Name	Signature	Date
Prepared by	Site Engineer	Subhash Ahir		11/10/2022
Reviewed by	Project Manager	Greg Banks		11/10/2022
Approved by	Demolition Manager	Sarkis Elias		11/10/2022

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CENTRAL CIVIL (NSW) PTY LTD
Unit 3B, Building 4, 256B New Line Road, Dural NSW 2158
ABN: 61 167 710 545 | W: www.centralcivilnsw.com.au | E: info@centralcivilnsw.com.au

EMERGENCY TELEPHONE NUMBERS

CONTACT	PERSON / AGENCY	TELEPHONE
Police	-	000
Fire	-	000
Ambulance	-	000
State Emergency Services	-	132 500
Hospital – Royal Prince Alfred Camperdown	-	(02) 9515 6111
Environmental Protection Agency	-	131 555
Transport Management Service	-	131 700
SafeWork NSW	-	131 050
Central Civil (NSW) Personnel:		
Project Manager	Ryan Bonakey	0426 454 096
Site Supervisor	Charlie Elias	0450 170 630
OHS&R Manager	Bob Brady	0419 494 041
OHS&R Representative	Robbie Sarkis	0424 840 891

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1 – Introduction

SECTION 1

1.1 Background

This Environmental Management Plan (EMP) has been prepared by Central Civil (NSW) Pty Ltd for the demolition of 74 Edinburgh Road, Marrickville.

The demolition and asbestos works are required as a component of the activities associated with the site.

1.2 Site Description

The Site has an area of approximately 28,090sqm and has frontages to both Edinburgh Road (north) and Sydney Steel Road (east). The boundaries of the Site are illustrated below in Figure The key elements within and surrounding the Site include:

- The Site is located within the industrial area of Marrickville and currently accommodates several large freestanding industrial buildings and associated car parking and loading areas.
- Vehicular access to the Site is via an existing entry and exit driveway at the Edinburgh Road frontage. Access is also available from Sydney Steel Road.
- The Site contains minimal vegetation which is fragmented by buildings and areas of hardstand surfaces. Vegetation is limited to scattered trees and shrubs within the Site and planted within the nature strip.
- The Site is located within 1km of Sydenham Railway Station, which is currently being upgraded as part of the Sydney Metro Chatswood to Bankstown metro line; and
- The Site is well positioned in terms of access to arterial and main roads, public transport modes of bus and rail, Sydney Airport, and the retail centre of Marrickville.

The Works will comprise of, authority approvals, demolition, and site clearance to achieve Practical Completion under the Contract, including rectification of defects during the Defect Liability Period (DLP).

The proposed development includes the demolition and the removal of:

- Industrial Buildings.
- Raised Footpaths and Slabs.
- Signage.
- Retaining walls and garden beds.
- Eastern Staff Site Facilities Block; and
- Brick office Building.

Works consist of demolishing single, double storey buildings and Industrial Buildings down to existing ground slab level. Plinths and slab above ground will be removed to eliminate any trip hazards. All pits and voids generated through the demolition process will be filled with clean fill won from site to make the building footprint safe.

Buildings to be demolished:

- Northeast Warehouse and all associated furniture, plant and equipment.
- Gatehouse.
- Plant Building.
- Southern Warehouse.
- Office Building.
- All pipes, tanks, cables, cable trays support, instruments, valves, switchboards and all other items that are located in the areas designated to be demolished.

- Nominated Trees.

The site is to be demolished in stages. The initial stage is to remove all the nominated trees on the site. This is to allow unimpeded movement of earthmoving equipment on the site and to allow for the delivery and construction of a heavy-duty scaffold and hoarding structure to Edinburgh Road building frontage (Northeastern Warehouse) and along Sydney Steel Road building frontage (Southern Warehouse).

The phased demolition will be gradual following the tree removal process with hazmat material removal taking place consistent with the Prensa Destructive Hazardous Materials Assessment report ref number 99323S dated November 2021. Once a clearance certificate is issued, demolition of buildings will take place in the following order:

1. Office Building - soft strip out of internal walls, ceilings and loose furniture.
2. Single Level Covered Gantries
3. Plant Building
4. Northeastern Warehouse
5. Substation
6. Gate House
7. Southern Warehouse
8. Eastern Staff Rooms

1.3 Environmental Management Plan

This plan has been developed to outline the environmental controls to be implemented during site works. Specifically, the plan details the measures proposed to address and manage the following:

- statutory requirements
- environmental sensitivities
- soil, water and dust
- noise
- traffic
- waste
- contingency plans; and
- emergency procedures.

In addition, the plan also details the environmental management system to be implemented as a basis for assessing the effectiveness (or otherwise) of the pollution control measures to be implemented.

1.4 Objectives

The objectives of the EMP for the demolition works of the site is to:

- ensure that the works are carried out in accordance with appropriate environmental statutory requirements and comply with the Review of Environmental Factors (REF) requirements and mitigation measures in Table 6.1 of the REF
- ensure that the works are carried out in accordance with this EMP
- ensure that the works are carried out in such a way as to minimise potential environmental degradation
- ensure that all personnel engaged in the works comply with the terms and conditions of this EMP
- ensure that no change is made to the EMP without the written permission of the client
- respond to changes in environmental conditions through review of the monitoring and control programs in consultation with the client and
- ensure that corrective actions are performed in a timely manner.

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2 – Project Overview

SECTION 2

2.1 General

The proposed work activities:

- will consist of asbestos removal, brick, concrete and steel demolition and steel processing
- involve the crushing (on site) of concrete and brick, as well as disposal (off site) of surplus timber and demolition refuse
- will consist of the disposal off-site of demolition waste materials
- involve the disposal of hazardous materials and
- the containment and processing of water for dust suppression.

The works will generate a number of classes of materials. These will include:

- hazardous waste
- concrete
- brick
- steel
- timber and
- general waste

The demolition works involve a number of discrete activities which are listed as follows:

- site establishment
- establishment of environmental and safety controls
- staged demolition of building and structures
- stockpiling of demolition materials and crushing on site of concrete and brick
- removal of stockpiled demolition material and
- protection of existing structures.

2.2 Description of Works

Site Establishment

Site establishment would include the connection of services, establishment of site offices, decontamination unit, storage container, sanitation and ablution facilities.

Environmental and Safety Controls

Environmental and safety controls would be installed prior to demolition activities being undertaken. These would include but not be limited to:

- Security measures (fencing, establishment of site access)
- Erosion control measures (silt socks, hay bales, drain fabric)
- Health and safety measures (personal protective equipment supplies, first aid supplies, signage, barricading) and
- Equipment management (noise abatement measures, warning systems).

Asbestos Removal and Demolition of Building and Structures

All methods of demolition, removal and locations for disposal will be approved by the Authorities having jurisdiction and shall ensure the safety of workers, supervisory staff and the public and the protection of structures and facilities intended to remain.

Demolition will be undertaken in accordance with AS2601-2001 “The demolition of structures”. External services will be disconnected permanently, with liaison with the appropriate authorities. There will be no use of explosives or burning of materials on site as part of the demolition activities.

It is envisaged that excavators fitted with hydraulic hammers, shears, pulverisers and/or grapples will be used. The excavators will be used to shear steel structures, break up concrete plinths, demolish structures and to size the rubble using hydraulic hammers and/or pulveriser attachment for recycling.

Stockpiling of Demolition Materials

Demolition materials will be segregated (steel, timber, bricks, concrete, miscellaneous) and stockpiled for either recycling and/or disposal on-site. Stockpiling will be undertaken to facilitate recycling, minimise double handling and in a manner which is protective of the environment.

Crushing of Demolition Materials

A pulveriser and/or hydraulic hammers may be used to allow recycling operations (reducing large sections of concrete) to occur on site. An excavator will be associated with this operation for loading and handling the resulting product on site.

Removal of Stockpiled Demolition Material

Demolition materials removed from the site will be disposed off at approved EPA licenced landfill sites. Demolished brickwork and concrete will be recycled on site and used as fill to eliminate potential trip hazards on site.

Timbers may be recycled or disposed of in accordance with the requirements of the EPA. Timber recyclers will be made aware of the potential composition (if any) of paint remnants on the timbers by the contractor and provide confirmation that the timbers and stripped paints will be handled appropriately.

Timbers from which encrusted materials cannot be removed or which are faced by bituminous or other potentially contaminated substances, shall be disposed of at approved EPA landfill site.

Vegetation and Tree Removal

All grass and shrubs are to be retained in areas that are free of demolition/remediation works except in cases where certain shrubs, trees etc. immediately adjacent to buildings and/or structures may be removed for access of demolition equipment. Central Civil (NSW) will remove all other nominated trees on site for disposal as mulch off site.

Scope of Work

Central Civil (NSW) will be responsible for the works outlined below including all dismantling, demolition, disposal and site crushing works. The Works shall be completed in accordance with relevant Australian Standards, the requirements of Australian Regulatory Authorities, other relevant Standards and all sections of the Specification and drawings.

At the completion of the work, the site shall be returned, as far as possible, free of demolition waste material. The work will include the following items:

a) Obtaining all regulatory and authority approvals required.

b) Project, quality, safety and environmental management of all aspects of the work including provision of all documentation as required.

c) Procurement and supply of all items, plant and equipment required to complete the Works including collection, co-ordination, packaging, loading and unloading, transport to site, storage and handling.

d) Provision of all facilities required by Central Civil (NSW) to complete the works, eg offices, sheds, storage facilities, toilets, telephone, power, etc, and their removal upon completion.

e) Installation of temporary fences and gates, as required to comply with the requirements of the Occupational Health and Safety Regulations, and their removal upon completion. Central Civil (NSW) will erect temporary fencing around the Site (where required) to fulfil their obligations under legislation until such time as it is necessary for it to be removed to allow work to progress.

f) Installation and maintenance of erosion and sediment controls.

g) All works necessary for the removal of plant, materials and equipment from site. The extent of work shall include:

i) dismantling, packaging, loading and unloading, transport from site, disposal, storage and handling.

ii) Surveying and setting out of the works.

iii) Dismantling and disposal of all structures, buildings, plant, equipment, above ground plinths / slabs and site services including fire, earthing, water, power, communications, lighting and all equipment and panels located within the buildings.

The site has remnants of broken asbestos sheeting and shall be removed and disposed of by Aztech Services, a SafeWork approved licensed contractor. An asbestos report will be made available on site for the removal of asbestos materials.

iv) Dismantling and disposal of all electrical plant, equipment and all associated apparatus including, kiosks, boxes and auxiliaries.

v) Dismantling, removal and disposal of all cables, conduits and conductors. Cables shall be completely removed.

vi) Dismantling and disposal of all structures.

xii) Demolition and disposal of all raised slabs including plinths.

2.3 Work Program and Hours of Work

The site will be available for work between 7:00am to 6:00pm Monday through Friday and 8:00am to 1:00pm on Saturdays with no work on Sundays or public holidays. The expected duration of the work will be 2 months.

Work activities which may be undertaken outside of demolition hours include works inaudible to nearby residential properties, required deliveries requested by police or other authorities for safety reasons, emergency work to avoid loss of life and/or property and other work as approved by the EPA.

2.4 Responsibilities

The Chain of Environmental Management Responsibility is outlined in Figure 2.1. Whilst carrying out the work, Central Civil (NSW) shall notify the client of any environmental occurrence or 'near miss' incident.

In the event of a potential environmental incident or site emergency being identified, the Site Supervisor shall be immediately notified and will take charge and give directions. The Environmental Management Representative shall also be notified.

The responsibilities of key personnel relative to the implementation of the EMP are described below.

Project Manager & Demolition Manager

Responsibilities of the Project Manager include:

- To manage the demolition program
- To manage the asbestos removal program
- To undertake the contract project works
- To ensure the EMP is incorporated into site management procedures and
- To delegate environmental management responsibilities to appropriate personnel.

The Project Manager has authority to take the following actions:

- To suspend site work if health and safety of personnel and/or environment is endangered
- Report incidents to the client
- To suspend an individual from activities for disregarding the EMP.

Environmental Management Representative

Responsibilities of the Environmental Management Representative include:

- To co-ordinate the development, implementation and any revisions of the EMP to ensure the safety and protection of personnel, plant, equipment and the environment
- To liaise with Central Civil (NSW) site personnel, authorities and public as necessary on demolition and asbestos removal and environmental matters associated with the project
- To facilitate an induction and training program in relation to the EMP
- To confirm that all approvals, permits, licences are in place for the works to be undertaken
- Issue clearances for work where required, and
- To co-ordinate with personnel on health and safety and other matters in relation to site operations.

The Environmental Management Representative has authority to take the following actions:

- To incorporate and distribute revisions to the EMP as necessary with the approved consent from the client
- To temporarily suspend site work, if health and safety of personnel and/or environment is endangered pending further consideration from the client, and
- To temporarily suspend an individual from activities for disregarding the EMP.

Environmental Monitoring

Responsibilities of the Environmental Monitoring Personnel include:

- To undertake environmental monitoring of the contract project works
- To liaise with the Project Manager and the Environmental Management Representative in relation to environmental monitoring
- To report environmental monitoring results

The Environmental Monitoring Personnel have authority to take the following actions:

- To report to the Environmental Management Representative on environmental issues associated with the demolition activities.

Site Supervisor (Environmental & Health & Safety)

Responsibilities of the Site Supervisor include:

- To ensure that activities are undertaken in a manner consistent with the EMP
- To discuss matters of incident response management with the Environmental Management Representative as required
- To ensure compliance with the EMP by site personnel
- To train personnel in relation to the EMP
- To approve personnel for work on the site with regard to competency for work tasks
- To approve personnel for work on the site with regard to health and safety training
- To document environmental and health and safety incidents, corrective action and control measures undertaken

The Site Supervisor may take the following actions if necessary:

- To temporarily suspend work activities if the environment is significantly at risk or the health and safety of personnel is endangered
- To temporarily suspend an individual from activities for disregarding the EMP
- To direct personnel to change work practices if they are deemed to be hazardous to the environment and/or health and safety of personnel, and
- To remove personnel from the site if their actions or condition endangers the environment and/or their co-workers health and safety.

OH&S Representative

Responsibilities of the OHS&R Representative include:

- To liaise with Site Supervisor in relation to the requirements of the EMP
- To ensure that work activities are undertaken in a manner consistent with the EMP, and
- To implement environmental management measures outlined in the EMP.

The OHS&R Representative may take the following actions if necessary:

- To report work activities if the environment and/or health and safety of site personnel is significantly at risk.

Incident Management

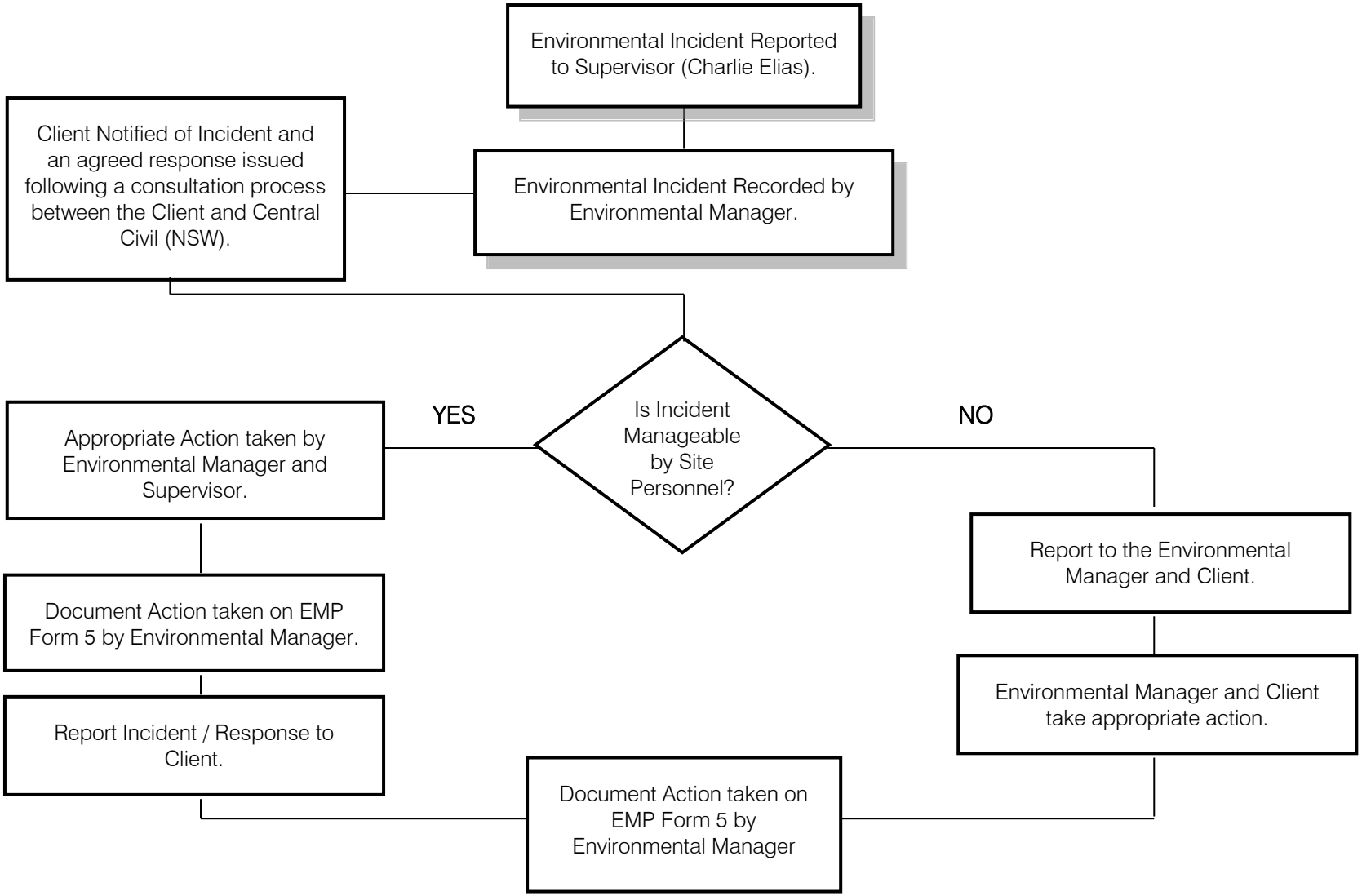
Whilst carrying out the work, Central Civil (NSW) shall notify the client of any environmental occurrence or 'near miss' incident.

Central Civil (NSW) shall supply the following information to the client:

1. Location, time and duration of the incident
2. Site details: address and site description
3. Incident details:
    - A description of the incident and what happened.
    - If a spill occurred an estimation of the quantity spilt.
    - Actions taken to deal with the incident.
    - Names of persons who may have witnessed the incident.
4. Provide details of other property affected by the incident
5. Provide details of adjacent land users.

As soon as possible after the incident or accident, Central Civil (NSW) shall conduct an appropriate investigation and provide copies of the completed Incident Report and Investigation Report to the client.

Figure 2.1- Chain of Environmental Incident Responsibility



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3 – Statutes and Regulations

SECTION 3

Summaries of relevant statutes and regulations are provided in Appendix B, with relevance to asbestos removal, the demolition of structures, remediation as well as administration responsibilities and approval, licencing and permit requirements.

The following Regulations are addressed:

- Clean Air Act 1961 and Regulation 2022
- Clean Waters Act 1970 and Regulation 1972
- Contaminated Land Management Act 1997
- Environmentally Hazardous Chemicals Act 1985
- Environmental Offences and Penalties Act 1989
- Environmental Planning and Assessment Act 1979 and Regulation 2021
- Local Government Act 2020 and Local Government Regulation 2021
- Noise Control Act 1988 and Regulation 2008
- Occupational Health and Safety Act 2011
- Occupational Health and Safety (Asbestos Removal Work) Regulation 2017
- Occupational Health and Safety (Certificates of Competency) Regulation 2017
- Occupational Health and Safety (Demolition Licensing) Regulation 2017
- Occupational Health and Safety (Hazardous Substances) Regulation 2017
- Pollution Control Act 1999 and Regulation 1998
- Protection of the Environment Operations Act 1997
- Roads Act 1993
- Soil Conservation Act 1938 and
- Waste Avoidance and Resource Recovery Act 2001 and Regulation 2008

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4 – Environmental Management Controls

SECTION 4

A number of environmental management measures will be implemented to ensure that minimal environmental impact occurs during remediation of the on-site structures. The procedures described in this section are to be applied to all items within the scope of work.

The EMP details the measures proposed to manage the following:

- environmental sensitivities (archaeology and heritage, asbestos removal, access)
- soils
- water
- dust
- noise
- traffic
- waste
- contingency, and
- emergencies.

These environmental management controls are outlined in the following sections.

4.1 Environmental Sensitivities

4.1.1 Objectives

To consider the management of project specific environmental sensitivities.

4.1.2 Archaeology

All reasonable efforts will be made to avoid impacts to Aboriginal cultural heritage values at all stages of site works. If impacts are unavoidable, mitigation measures are to be implemented with the client who may consult with Artefact Heritage and make reference to the Aboriginal Cultural Heritage Research Design and Excavation Methodology document.

Should any future works associated with the site uncover anything which may be interpreted as Aboriginal in origin, work in the vicinity of the find will cease immediately. Temporary fencing will be erected around the site and the client may consult with Artefact Heritage.

These procedures will form part of the site induction.

4.1.3 Asbestos Management

Asbestos removal will form part of the demolition activities. Asbestos will be managed in accordance with statutory requirements. The operation would be done by hand removal methods and would be continuously monitored for asbestos fibre. Asbestos material shall be collected only by personnel who are suitably trained in safe work methods and appropriate use of personal protective equipment.

It is a requirement under the Occupational Health and Safety (Asbestos Removal Work) Regulation (2017) that:

- persons who remove, repair or disturb friable asbestos materials must hold a current asbestos removal licence; and
- persons who remove, repair or disturb areas of bonded asbestos must be registered.

Controlled wetting of asbestos waste shall be employed where practicable to reduce asbestos dust emissions. As a minimum, training of personnel who may potentially come into contact with asbestos shall include:

- Health and safety information relating to asbestos handling and/or exposure
- Identification of asbestos materials
- Safe work practices
- Selection and usage of protective clothing and equipment, including appropriate respiratory protection
- General hygiene requirements including personal decontamination, and
- Management procedures – employer and employee responsibilities.

4.1.3.1 Unexpected Finds Procedure (Asbestos)

A long-term EMP will be required to manage any remaining contamination at the site. The EMP would manage the future use of the land and potential intrusive work past the topsoil and/or other encapsulating overlying layers at a later stage.

In situations where unexpected finds of asbestos are suspected or identified, including all situations identified and reported on in the Prensa Hazardous Materials Report beyond the exiting known extent:

- Cease work immediately and retire from the area and advise the Project Manager/Safety Officer.
- Cordon off or otherwise isolate the area (with exclusion fencing if necessary).
- Lightly contaminated surface areas to be emu picked and validated following removal work.
- Areas with more severe contamination, should be chased by scraping the affected ground surface until no visible signs of AC fragments, followed by validation assessment to clear area of further contamination. Should asbestos be identified in the validation process, then the results will be compared for determination of strategy for further remediation.
- Notify an appropriately qualified consultant of suspect material for assessment to confirm the presence (or absence) of asbestos.
- Determine “clean up” or other remedial action if necessary.
- Document the quantity and the location of impacted soils and define scope of required remedial activities.
- Engage and asbestos licensed contractor to carry out work.
- Obtain clearance certificates for re-occupancy if required.
- Apply the Unexpected Finds Protocol (Figure 3.1) to assist with the above.

4.1.4 PCB Management

Although no PCB material is expected to be discovered, personnel involved with the demolition works will wear personal protective equipment/clothing required for the handling of PCBs and PCB contaminated equipment in light fittings should it be discovered. These include:

- chemically impervious disposable overalls (Tyvek type)
- mid-arm length nitrile rubber gloves
- rubber boots, and
- safety goggles or face shield.

4.1.5 Access

Access will be maintained to the site during site activities.

Roads

The site Traffic Management Plan will be approved by the relevant authority prior to works commencing. Specific access and traffic management requirements will be identified and adhered to by all site personnel along with site sub-contractors.

4.1.6 Concrete and Soil Contamination

Visual (staining) and/or Olfactory (odour) observations indicate no potential contamination at the site from historical use. Potential health risks to workers involved with the demolition and removal of potentially contaminated concrete are low.

4.1.7 Treated Pole Butts

Not used.

4.1.8 Handling of Large Quantities of Oil

Not used.

4.2 General Site Management

4.2.1 Objectives

To establish personal responsibilities and assist with the implementation of the EMP.

4.2.2 Site Control Measures

A site induction for all personnel shall outline:

- personnel responsibilities
- safe work methods
- the function of the EMP and its implementation
- health and safety procedures
- emergency procedures, and
- Aboriginal archaeology induction.

Central Civil (NSW) will be required to prepare a method statement and site protocols for the management of soils, water, dust, noise, vibration, traffic, waste, health and safety and emergencies.

4.3 Soils Management

4.3.1 Objectives

To control erosion and potential sediment transport from the site and to minimise the extent of erosion by heavy machinery.

4.3.2 Soil Control Measures

Soil erosion during the site activities will be controlled by:

- erection of silt fences or hay bales at strategic locations (around stockpiles etc.) to prevent the migration of fines
- water cart or other activities for dust suppression as needed
- minimising the surface area disturbed by site activities at any one time
- regular inspection and maintenance of erosion control structures
- protecting and retaining of vegetation where possible in order to avoid erosion which may result from their removal
- restricting vehicles to designated access roads and paths where possible
- using established construction exits, to minimise transport of sediment from demolition areas onto public roads, and
- removing soil adhering to the wheels and undercarriage of trucks prior to departure from the site.

4.3.3 Recycled Stockpile Material

Stockpiled material during the site activities will be controlled by:

- erection of silt fences or hay bales at strategic locations (around stockpiles etc.) to prevent the migration of fines
- water cart or other activities for dust suppression as needed
- regular inspection and maintenance of erosion control structures, and

4.4 Water Management

4.4.1 Objectives

To control erosion and sediment transport from the site and thereby minimise the potential for contamination of surface water by sediment.

To protect the existing stormwater system from sediment inflow.

4.4.2 Water Control Measures

The safeguards which will be used to prevent sediment entering surface waters are similar to those listed in Section 4.3.2. Additional safeguards are listed as follows:

- existing ground level stormwater drains, pits, conduits and openings will remain in service during the site works and will be protected by filter medium, sandbags and/or filter fences
- Fixing oil leaks on earthmoving equipment and servicing it regularly to prevent leaking oil from dripping onto hard paved areas
- Any spills such as oil or radiator leaks should be cleaned up by using absorbent materials.

This will minimise the amount of residual oil and other materials being washed into the stormwater system

4.5 Dust Emissions Management

4.5.1 Objectives

To minimise dust emissions from the site which could adversely affect the air quality or the amenity of the local area.

4.5.2 Dust Control Measures

Dust emissions will be controlled by:

- minimising vegetation removal
- minimising the surface area disturbed by the site activities to the current demolition and stockpiling locations
- confining vehicle movements to paved roads or available hard stand areas
- restricting the speed of vehicle movements
- water supply for water suppression activities
- watering of active work areas (including stockpiles) by watercart and/or sprinklers to suppress dust in dry conditions when necessary. The water will be applied across ground surfaces whenever the surface dries out and may generate visible levels of dust, either by the operation of equipment over the surface or by wind. The water spray equipment will be on-site and available for use from initial mobilisation to a time when the works have reached practical completion
- run-off water shall be contained and allowed to settle
- covering truck loads of materials as necessary, and
- should dust become a problem, corrective action shall be undertaken which may include alteration of operations, restriction of dust generating activities to low wind speed conditions or the augmentation of dust suppression equipment.

4.6 Noise and Vibration Management

4.6.1 Objectives

To ensure best practice techniques are used to minimise unnecessary noise and vibration and ensure that regulatory limits for noise emissions are being strictly adhered to.

Reference: Central Civil (NSW) demolition site 'Noise and Vibration Management Plan'

4.6.2 Noise and Vibration Control Measures

The following control measures will be used to minimise the impact of site noise on residents:

- All communication with community shall be handled via the Central Civil (NSW) Project Manager
- Residents may be consulted by the Central Civil (NSW) Project Manager in relation to the work program, potential impacts and measures taken to minimise the impacts
- Central Civil (NSW) hours of work shall be limited to between 7:00am and 6:00pm from Monday to Friday and 8:00am and 1:00pm on Saturdays with no work taking place on Sundays or public holidays
- Site stockpiles and landform structures will be used as much as practicable as shielding for noise generating activities such as crushing and concrete demolition
- Central Civil (NSW) shall sequence the site works in such a manner as to take into consideration the requirement to minimise noise
- Central Civil (NSW) will select equipment on the basis of its noise performance and will comply with regulatory standards for noise generation
- Central Civil (NSW) will operate equipment in a proper, efficient and correct manner which includes proper maintenance
- Central Civil (NSW) will be required to optimise the arrangement of equipment and activities on the site to minimise noise impacts before commencing demolition, and
- acceleration levels of vibrations generated on the site shall be within the Noise and Vibration Management Plan guidelines.

4.7 Traffic Management

4.7.1 Objectives

To ensure works are undertaken with regard to the safety and welfare of the general public, and, in the case of site access roads and traffic flow, to alleviate the impact of additional traffic volumes.

Reference: Central Civil (NSW) demolition site 'Traffic Management Plan'

4.7.2 Traffic Control Measures

Impacts of volumes of traffic generated by the demolition activities will be alleviated by the following safeguards:

- utilisation of a transport route when travelling to and from the site
- if necessary, stockpile materials on site temporarily to regulate and control the truck movements over the demolition period
- selection of roads which are to be used for the transport of off-site demolition materials on the basis that they have adequate capacity to accommodate the increased traffic volume
- retention of heavy equipment on site where practicable
- positioning of appropriate traffic signs at either end of the site road exit point to alert traffic of site vehicular movement
- vehicles leaving the site laden with materials will be loaded in a manner that will prevent the discharge or dropping of any of the materials onto public roads, and
- wheels, tracks and body of trucks and demolition plant leaving the site shall be free of mud or similar material

4.8 Waste Management

4.8.1 Objectives

To ensure that wastes generated on-site are disposed of in accordance with local council regulations and EPA requirements.

Reference: Central Civil (NSW) demolition site 'Waste Management Plan'

4.8.2 Waste Management Measures

The following methods will be used to manage wastes generated during demolition activities:

- waste materials generated during site activities include domestic waste such as lunch wrappers and drink containers. These wastes will be collected and disposed of to an appropriate landfill or recycling facility
- destination of solid waste materials shall be logged and information detailed will include date, truck number, type of debris/material, quantity and destination. Waste dockets (or other appropriate documentation) depicting acceptance of the above loads will be maintained
- destination of liquid waste materials shall be logged and information detailed will include date, truck number, type of debris/material, quantity and destination. Waste dockets (or other appropriate documentation) depicting acceptance of the above loads will be maintained, and
- human wastes will be disposed of in accordance with Local Council Regulations and EPA requirements.

4.9 Contingency Management

4.9.1. Objectives

To ensure that corrective action procedures have been outlined for any conditions and associated problems which may be experienced during demolition activities.

4.9.2 Contingency Planning

Conditions that may be encountered when conducting excavation works are often uncertain. Table 4.1 summarises conditions that can reasonably be expected, the resulting problems they may cause and how these problems may be resolved.

Table 4.1

Contingency Planning – Potential Problems and Corrective Actions

ANTICIPATED PROBLEM	CORRECTIVE ACTION
Excessive Rain	If possible, cease work until run-off is more manageable. Alternative, avoid using heavy machinery in areas where rain has caused the ground surface to be more easily erodible. Maintain access roads, cover high-traffic areas with geotextile/gravel. Ensure sediment and run-off control structures are functioning correctly.
Excessive Dust	Use water sprays or cease dust-generating activities until better dust control can be achieved.
Asbestos Encountered	Report immediately to workplace supervisor. Handle and dispose in accordance with requirements by licenced contractor. Controlled wetting and/or covering may be employed to reduce asbestos dust emission by suitably trained personnel.
Equipment Failures	Maintain spare equipment or parts or keep rental options available.
Release of fuel/oil from equipment	Remove source, use absorbent booms to remove oil, make any repairs as required.
Excessive Noise	Identify source and review noise attenuation equipment, erect temporary acoustic barriers if necessary.
Work Program Extended	Identify the nature of outstanding works and reschedule in parallel to meet work completion date or maintain extended work program and advertise nature of extended work program.
Contaminated Soil	These materials will be segregated and/or stockpiled and the site environmental consultant will be engaged to assess the contamination before being reused on site or disposed of off site.

No contingency plan will substitute for sound environmental practice during site activities. Accordingly, it is the responsibility of the Site Supervisor to monitor the site activities at all times and manage all potentially significant activities in a pro-active manner. Records of all actions relating to environmental protection measures, contingency events and impacts will be entered into the daily site logbook by the Site Supervisor.

Specific incidents and corrective action taken (where required) shall be registered on the Site Incident Registration Form (NCR and CAR forms).

4.10 Emergency

A list of emergency contact numbers is provided below and at the beginning of this EMP

Table 4.2

Emergency Telephone Numbers

CONTACT	PERSON / AGENCY	TELEPHONE
Police	-	000
Fire	-	000

Ambulance	-	000
State Emergency Services	-	132 500
Hospital – Royal Prince Alfred Camperdown	-	(02) 9515 6111
Environmental Protection Agency	-	131 555
Transport Management Service	-	131 700
SafeWork NSW	-	131 050
Central Civil (NSW) Personnel:		
Project Manager	Ryan Bonakey	0426 454 096
Site Supervisor	Charlie Elias	0450 170 630
OHS&R Manager	Bob Brady	0419 494 041
OHS&R Representative	Robbie Sarkis	0424 840 891

4.10.1 Objectives

To outline emergency procedures and relevant contact details.

4.10.2 Emergency Procedures

Emergency response procedures are outlined in Figure 4.1 and are detailed as follows.

Alarm

Site emergency warning systems include:

- Two-way radios
- mobile telephone
- verbal communication, and
- vehicle horns.

General Emergency Procedures

The following general emergency procedures will be implemented in the case of an emergency. The person who observes the emergency shall activate the response.

- the Site Supervisor will be immediately notified and will take charge
- upon hearing an alarm non-emergency communication will cease
- individuals who are not assigned specific response duties shall assemble at a designated safety area/muster point
- upon arrival at the safety area/muster point, a complete head count will be given to the Site Supervisor, and individuals will stay there until further instructions are given, and
- Report emergency to client.

All emergency response incidents shall be registered (NCR and CAR forms) within 48 hours of the reported incident for medical treatment and site emergency cases and the Environmental Management Representative will be notified.

Notification of Authorities/Adjacent Landholders

Emergency Services

Emergency Services are to be contacted in the event of an emergency occurring.
Emergency services will be notified of:

- Location (suburb, street, nearest intersecting street)
- Type of Emergency
- Casualties
- Required Assistance
- Hazards
- Telephone Contact Number
- Name

05

5 – Environmental Management System

SECTION 5

5.1 Due Diligence

The concept of due diligence will be adopted whereby personnel who notice an environmental problem and do not report it or act immediately will be held accountable for the consequences.

Sub-contractors shall be duly diligent by incorporating this EMP into their site management procedures.

5.2 Auditing

The purpose of audits is to verify that environmental activities and practices comply with the Environmental Management System requirements. Implementation and response plans will be subject to audit by the Environmental Management Representative every month.

5.3 Monitoring

Monthly site inspections will be carried out by the Environmental Management Representative in order to ensure that environmental management and mitigation measures achieve the purpose for which they were intended.

The site inspections will be conducted using the Site Inspection Checklist (EMP Form 1) on a weekly basis. The Site Inspection Checklist lists the items which are required to be observed during the site inspection. Completed Site Inspection Checklists are to be retained with the Environmental Management Representative and copied to the Project Manager and Site Supervisor. An environmental monitoring program will be undertaken by Environmental Monitoring Personnel.

Unsatisfactory conditions identified by the environmental monitoring program or noted during site inspections are to be rectified as soon as practicable and the action taken recorded. Any unsatisfactory condition/breach observed during the site inspection is to be reported to the Site Supervisor and the Project Manager.

The Site Supervisor shall complete a weekly risk assessment of the work site and associated activities.

5.4 Corrective Action

Where a non-compliance is discovered during a site inspection, it shall be documented on the Site Inspection Checklist and standard non-conformance and corrective action procedures shall be implemented.

5.5 Revision and Review

The EMP will be formally reviewed by each EMP copy holder prior to commencing works. The Environmental Management Representative is responsible for ensuring that revisions to the EMP are undertaken. Other EMP copy holders may request or suggest a revision to the EMP Requests for EMP revision should be made on Page 2 of the document and submitted to the Environmental Management Representative.

Revisions should also be initiated in response to:

- Changes in staffing structure
- Changes in statutory requirements
- Changes in the demolition methods, and
- Any other issue which may affect the accuracy or adequacy of the information contained within the EMP.

The Environmental Management Representative is responsible for ensuring that all holders of the EMP are in possession of a complete and up-to-date version of the EMP. Revisions of the EMP must be logged on Page 2 of the document.

It is the responsibility of each EMP copy holder to ensure that all superseded pages are removed from the document and replaced with the most recent pages.

5.6 Complaint Handling

Complaint Management procedures are outlined in Figure 5.1 and are detailed as follows:

Complaints received by the client, statutory authorities, residents or businesses will be recorded

on a Complaints Register. The purpose of the Complaints Register is to:

- ensure that any complaints/concerns received regarding the demolition works are documented, and
- ensure appropriate responses to the complaints are initiated (this may include changing management practices or using alternate demolition techniques).

Central Civil (NSW) shall treat all complaints courteously and shall immediately refer all media enquiries to the client.

In the event of Central Civil (NSW) receiving complaints either verbally or in writing, complaints of an environmental nature, the client shall be notified immediately of such complaint, together with the details of the complaint, and contact names and addresses of the complainants.

Complaints must be reported to the Site Supervisor within 48 hours of receipt. The Site Supervisor will log the complaint on the Complaints Register (EMP Form 4).

The person reporting the complaint should where possible, provide the Site Supervisor with the following information:

- **date** and **time** of the complaint
- **name** of the person making the complaint
- **telephone number** and **address** of the person making the complaint
- r**eason** for the complaint, and
- **actions** taken in response to the complaint.

Upon being informed of a complaint, the Site Supervisor must assess:

- whether any further response actions are required
- whether changes to site management procedures or demolition techniques are required, and
- whether the Environmental Management Representative should be notified.

Complaints and responses will be reported to the Environmental Management Representative and Delta Electricity Project Manager who will take appropriate action and document this.

5.7 Training

Personnel participating in the demolition activities will have received the appropriate training and possess the required skillset to fulfil their role in a competent manner. The Project Manager will ensure that the Site Supervisor maintains training and testing records for each employee.

5.8 Distribution

The Environmental Management Representative of the project is responsible for distribution of the EMP to relevant personnel. Copies of the EMP are issued to the personnel listed on Page 2 of this document.

5.9 Consultation and Liaison

Prior to and during the works, consultation and liaison with authorities and landholders affected by the works will be maintained by Delta Electricity.

Advertisement of Activities

Prior to the commencement of demolition, Central Civil (NSW) will advise adjoining neighbours of the demolition period, location, hours of operation and contact telephone number.

The notice will also be uploaded to a dedicated website informing the local community of demolition-related activities likely to affect community amenity which may include but is not limited to traffic disruptions and controls and access disruption.

Landholders

Central Civil (NSW) will make a letter drop to adjoining landholders outlining the works and approximate schedule. Central Civil (NSW) contact number for enquiries will be provided.

Contact for Enquiries

Enquiry contact should be made having regard to the Chain of Environmental Management Responsibility (Figure 2.1) and the list of emergency telephone numbers (Table 4.2).

FIGURE 4.1

EMERGENCY PROCEDURES

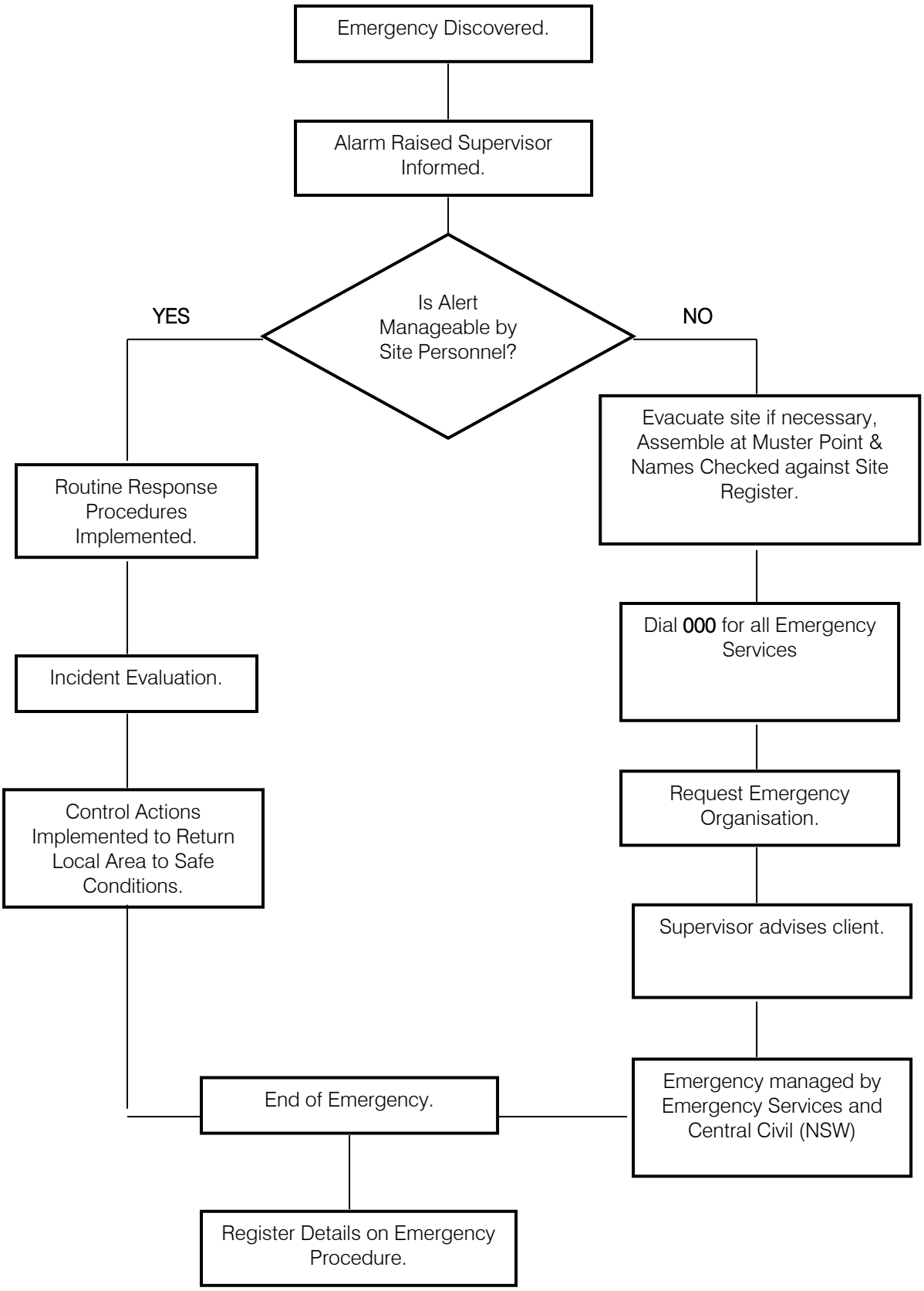


FIGURE 2.1

CHAIN OF ENVIRONMENTAL INCIDENT RESPONSIBILITY

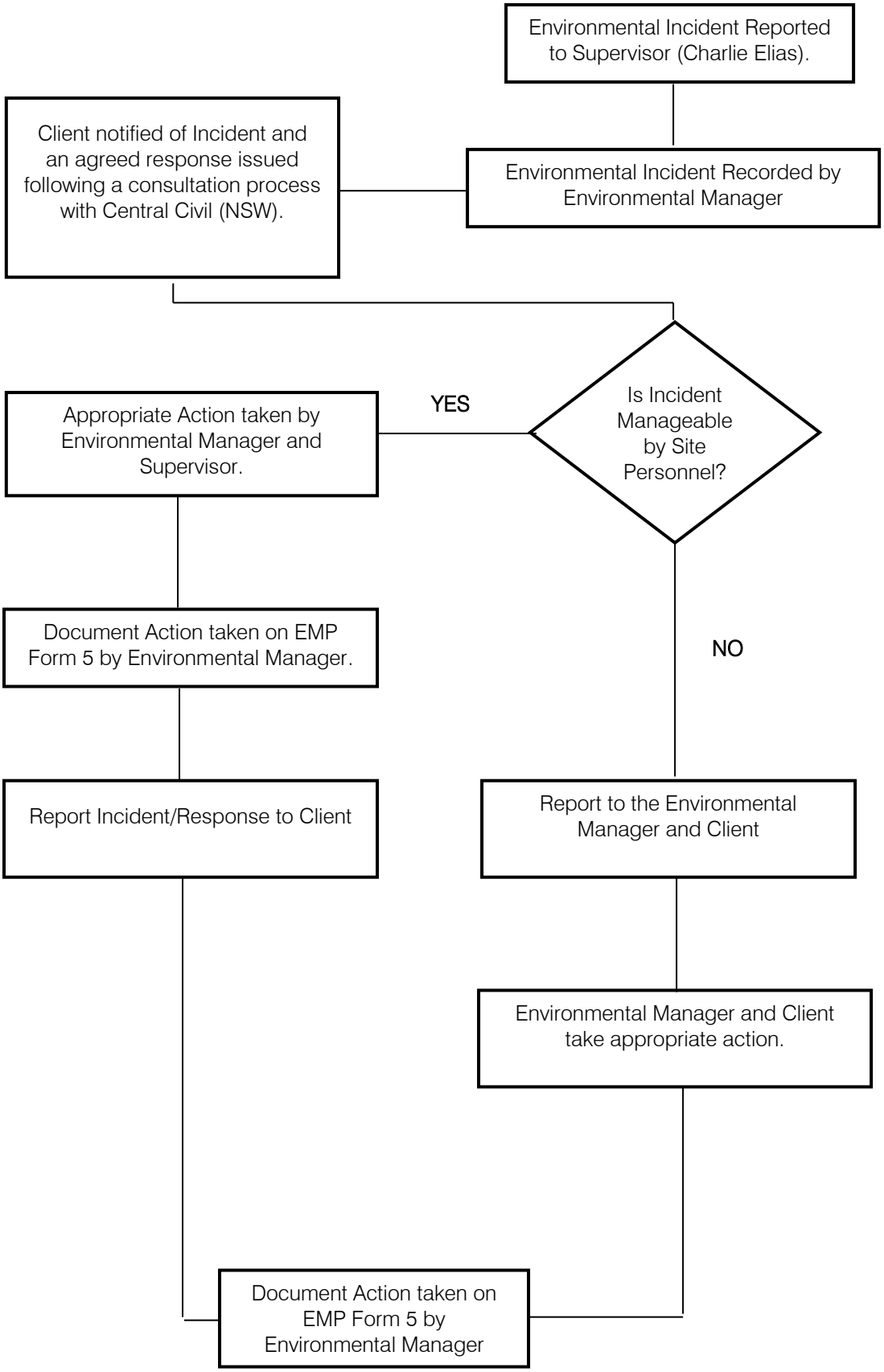
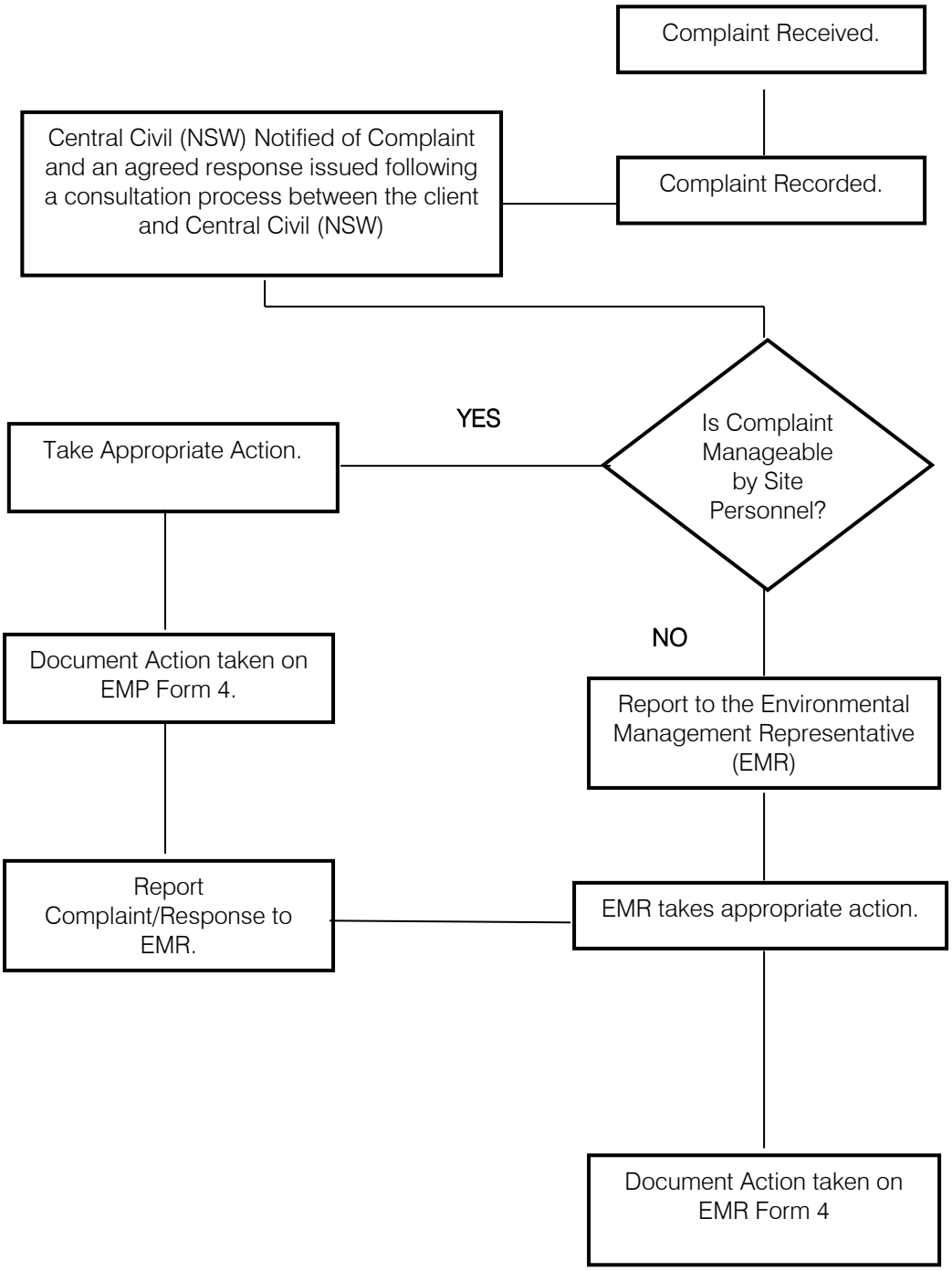


FIGURE 5.1
COMPLAINT MANAGEMENT

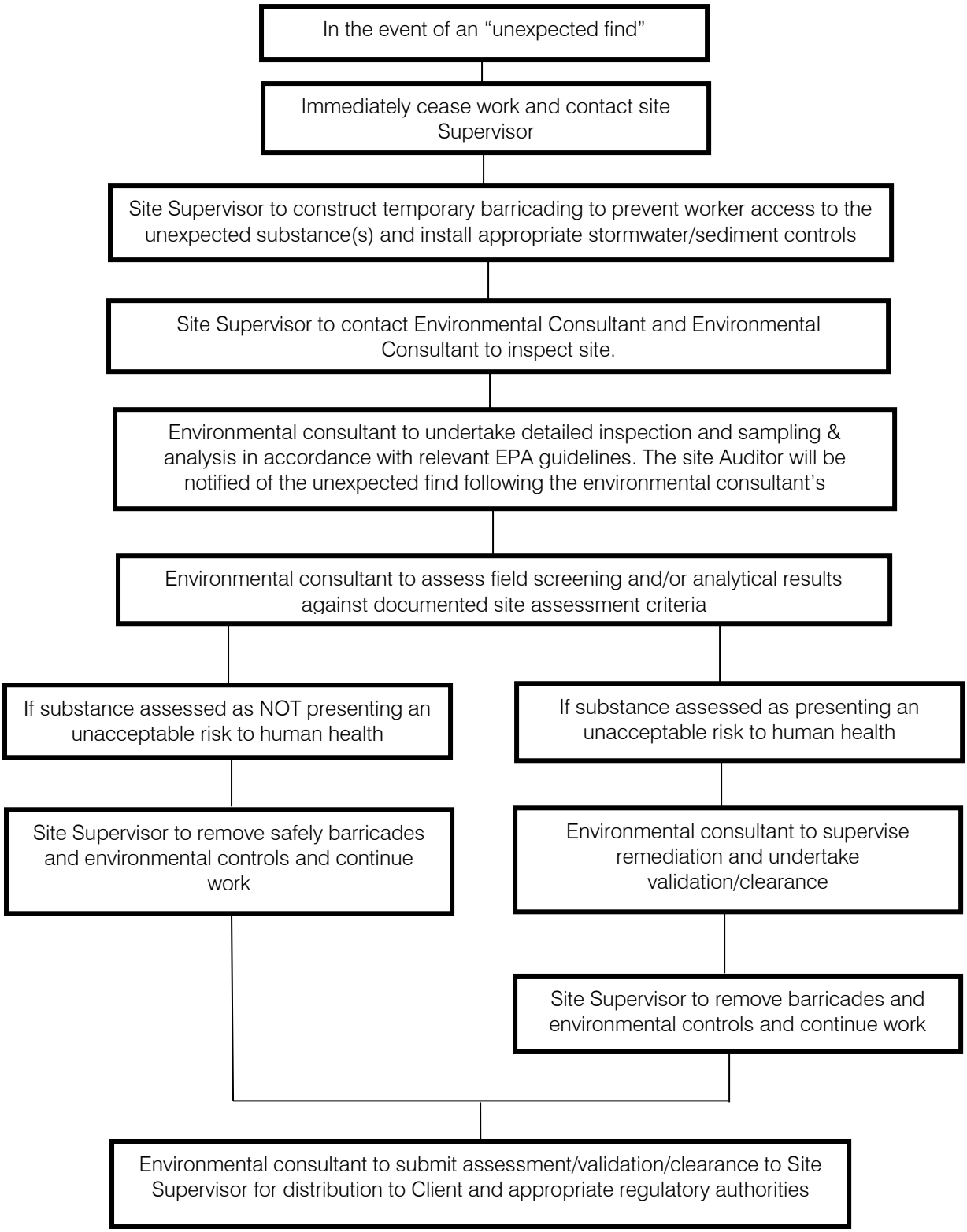


NOTE: Complaint information to be recorded.

- DATE and TIME
- NAME OF COMPLAINANT
- TELEPHONE NUMBER OF COMPLAINANT
- REASON FOR COMPLAINT
- RESPONSE ACTION TAKEN

FIGURE 3.1

UNEXPECTED FINDS PROTOCOL



FORMS

EMP FORM 5
NOTIFICATION OF ENVIRONMENTAL INCIDENT

Incident details	Form 5 - Notification of Environmental Incident				
Site Address					
Incident number					
Date and time of incident And / or when first became aware of it					
Name of person notifying					
Position / title					
Contact person					
Contact details	Mobile		Email		
Incident location Attach map etc as appropriate					
Description of incident Attach photographs etc					
Nature of actual / potential impact Volume of material (ltrs, m3), area impacted (m2), flora and fauna affected, erosion, duration of incident, etc, as relevant		Volume		m^3	
				ltrs	
		Area (m2)			
		Duration (hrs)			
Immediate action taken ie, spill contained / stopped / location of disposal					

Environmental details	
Emergency and remedial action taken	
Current situation Potential / ongoing / ceased etc. Include current location of contaminated material	
Details of any samples taken When / where / type / number / time for availability of results etc. Include plans of sampling locations where possible	
Future actions (if any) including timeframe	

Operator internal reporting					
Has the incident been reported internally? If so, to whom					Yes / No
Name					
Position					
Operator reference number Where applicable / available					
Has the Central Civil (NSW) been notified earlier?					Yes / No
Who was notified					
How (phone / email / fax)					
When (date and time)					
By whom					
Signed		Date		Time	
Name		Position			

EMP FORM 4

COMPLAINTS REGISTER

COMPLAINT No.	DATE	NAME OF COMPLAINANT	TELEPHONE No.	NATURE OF COMPLAINT	RESPONSE ACTION TAKEN	RECORDED BY

EMP FORM 6
ENVIRONMENTAL INSPECTION CHECKLIST

Inspected by:			
Inspection date:		Time:	
Location:			
Rain in the last 24hrs (mm)?		Weather conditions (Tick one of the following icons):	 ☐ ☐ ☐ ☐ ☐

For Action Risk Rating scale, refer to end of this document

Environmental Protection Measure	Compliance?		Description of Action (if required)	Risk Rating				Completion Signoff
	Yes	No		1	2	3	4	
General								
The site is generally in a tidy condition	☐	☐		☐	☐	☐	☐	
All materials and equipment are contained within the project boundary	☐	☐		☐	☐	☐	☐	
All works are undertaken within the project boundary	☐	☐		☐	☐	☐	☐	
Designated haulage routes and access points are being used	☐	☐		☐	☐	☐	☐	
Is there minimal dirt on adjacent public roads?	☐	☐		☐	☐	☐	☐	

Are any private vehicles of demolition/ remediation personnel obstructing the	☐	☐		☐	☐	☐	☐	
Have all required traffic control measures been implemented in accordance with the TMP (eg: warning signs, temporary road closures etc)?	☐	☐		☐	☐	☐	☐	
Is all demolition/ remediation plant parked on site?	☐	☐		☐	☐	☐	☐	
Are there any obvious signs of demolition/ remediation related disturbance outside of the demolition/ remediation area?	☐	☐		☐	☐	☐	☐	
Is the DWP readily accessible?	☐	☐		☐	☐	☐	☐	
Is an environmental incident response plan displayed in a prominent position?	☐	☐		☐	☐	☐	☐	
Is there accessible complaints register?	☐	☐		☐	☐	☐	☐	
Have 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 Client's Representative?	☐	☐		☐	☐	☐	☐	
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?	☐	☐		☐	☐	☐	☐	
Soil and 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 built up of silt • no obvious signs of significant seepage through	☐	☐		☐	☐	☐	☐	
Are there any obvious signs of overflow from sediment detention basins?	☐	☐		☐	☐	☐	☐	
Are there obvious signs of uncontrolled drainage leaving the site?	☐	☐		☐	☐	☐	☐	
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?	☐	☐		☐	☐	☐	☐	
Noise and Vibration 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?	☐	☐		☐	☐	☐	☐	
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 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? Are they being met?	☐	☐		☐	☐	☐	☐	
Is all vibration monitoring equipment (if installed) operating correctly?	☐	☐		☐	☐	☐	☐	
Air Quality / Dust Management								
No visible dust leaving the Project boundary?	☐	☐		☐	☐	☐	☐	
Dust suppression, i.e. water cart, is being used to minimise dust emissions?	☐	☐		☐	☐	☐	☐	
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?	☐	☐		☐	☐	☐	☐	
Processing Area								
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/ nonferrous / 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?	☐	☐		☐	☐	☐	☐	
Heritage Management								
Exclusion fencing around heritage protected areas is intact	☐	☐		☐	☐	☐	☐	
Heritage protected areas are adequately signposted	☐	☐		☐	☐	☐	☐	
Waste Management and Storage of Hazardous Materials								
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?	☐	☐		☐	☐	☐	☐	
Contaminated soil/asbestos storage areas are fenced off and signposted	☐	☐		☐	☐	☐	☐	
Fuel/chemicals stored in bunded areas	☐	☐		☐	☐	☐	☐	
No oil leaks or spills visible on site	☐	☐		☐	☐	☐	☐	
Refueling in designated areas	☐	☐		☐	☐	☐	☐	
Spill kits available in designated areas	☐	☐		☐	☐	☐	☐	
Are the relevant Safety Data sheets (SDS) available on site?	☐	☐		☐	☐	☐	☐	

Risk Rating	Risk Level	Priority*	Examples
1	Extreme	Immediately - must be closed out on the day of inspection	• Any actual or potential non-compliance with any EA conditions • Adverse weather conditions are predicted that may result in above if controls are not adequate
2	High	Within 24hrs	• Critical ERSED controls are damaged and need to be reinstated before a rain event
3	Medium	Within 3 Working Days	• Dewatering of sediment basins required
4	Low	Within 5 Working Days	• Stockpiles need to be stabilised