KANE

# ENVIRONMENTAL MANAGEMENT PLAN

**Children's Hospital Westmead**
**Multi-storey Carpark**

~~21/12/2023~~28/03/2024

# CHANGE HISTORY

| FREQUENCY OF REVIEW | | | |
|---|---|---|---|
| ☐ Monthly | ☑ Quarterly | ☐ Annually | ☐ Event: …….. |

| CONTENT AUTHOR | Christopher Chau |
|---|---|

| ISSUE | CHANGE TYPE | AMENDMENT SUMMARY | AUTHOR | DATE |
|---|---|---|---|---|
| 01 | For Approval | First Issue | MO | 27/04/2022 |
| 02 | For CC | Attachments 8 & 9 Updated to CC Issue | SB | 26/05/2022 |
| 03 | For Construction | Project Team & CSWMSP Updated | SB | 5/08/2022 |
| 04 | For Construction | Project Team Updated | SB | 22/12/2022 |
| 05 | Q1 2023 Update | Review and update for Q1 2023 | CC | 31/03/2023 |
| 06 | Q2 2023 Update | Review and update for Q2 2023 | CC | 29/05/2023 |
| 07 | Q2 2023 Update | Amended appendix | MO | 02/06/2023 |
| 08 | Kane Internal Audit 11/07/23 | Amended Risk Assessment Concrete | CC | 12/07/23 |
| 09 | Q3 2023 Update | Staff changes & Q3 2023 Review | CC | 22/09/2023 |
| 10 | Q4 2023 Update | Staff changes & Q4 2023 Review | CC | 21/12/2023 |
| 11 | Q1 2024 Update | Q1 2024 Review | CC | 28/03/2024 |

## SCHEDULE 3 (Clause Ref 3.5)

## Environmental Management Plan

| | |
|---|---|
| Who shall implement | Project Manager to prepare for implementation on site |
| When to implement | Each Project |
| How to use/implement | The Project Manager shall prepare and authorise for use the Project Environmental Management Plan EMP. In preparing the EMP, the Project Manager must:<br>• insert names of Kane staff into the chart<br>• detail consultation process<br>• prepare environmental risk assessment and checklist<br>• prepare incident response flowchart |

# SELF VERIFICATION CHECKLIST

| SSDA REQUIREMENT | DOCUMENT REFERENCE |
|---|---|
| Prior to the commencement of construction, the Applicant must submit a Construction Environmental Management Plan (CEMP) to the Certifier and provide a copy to the Planning Secretary for information. The CEMP must include, but not be limited to, the following:<br>(a) Details of: | |
| (i) hours of work; | Section 5.1 |
| (ii) 24-hour contact details of site manager; | Attachment 4 |
| (iii) management of dust and odour to protect the amenity of the neighbourhood; | Section 5.3 / Attachment 2 |
| (iv) stormwater control and discharge; | Attachment 3 / Attachment 10 |
| (v) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site; | Attachment 3 / Attachment 10 |
| (vi) groundwater management plan including measures to prevent groundwater contamination; | Section 5.12 |
| (vii) external lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting; | Section 5.11 |
| (viii) community consultation and complaints handling; | Attachment 4 |
| (b) an unexpected finds protocol for contamination and associated communications procedure to ensure that potentially contaminated material is appropriately managed; | Attachment 8 |
| (c) an unexpected finds protocol for Aboriginal and non-Aboriginal heritage and associated communications procedure; | Attachment 9 |
| (d) waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site. | Kane NOT removing any material from site |
| (e) Construction Traffic and Pedestrian Management Sub-Plan (see condition B12); | Refer CTPM Sub-Plan |
| (f) Construction Noise and Vibration Management Sub-Plan (see condition B13); | Refer CNVM Sub-Plan |
| (g) Construction Waste Management Sub-Plan (see condition B14); and | Refer CWM Sub-Plan |
| (h) Construction Soil and Water Management Sub-Plan (see condition B15). | Attachment 10 |

# CONTENTS

# 1 INTRODUCTION

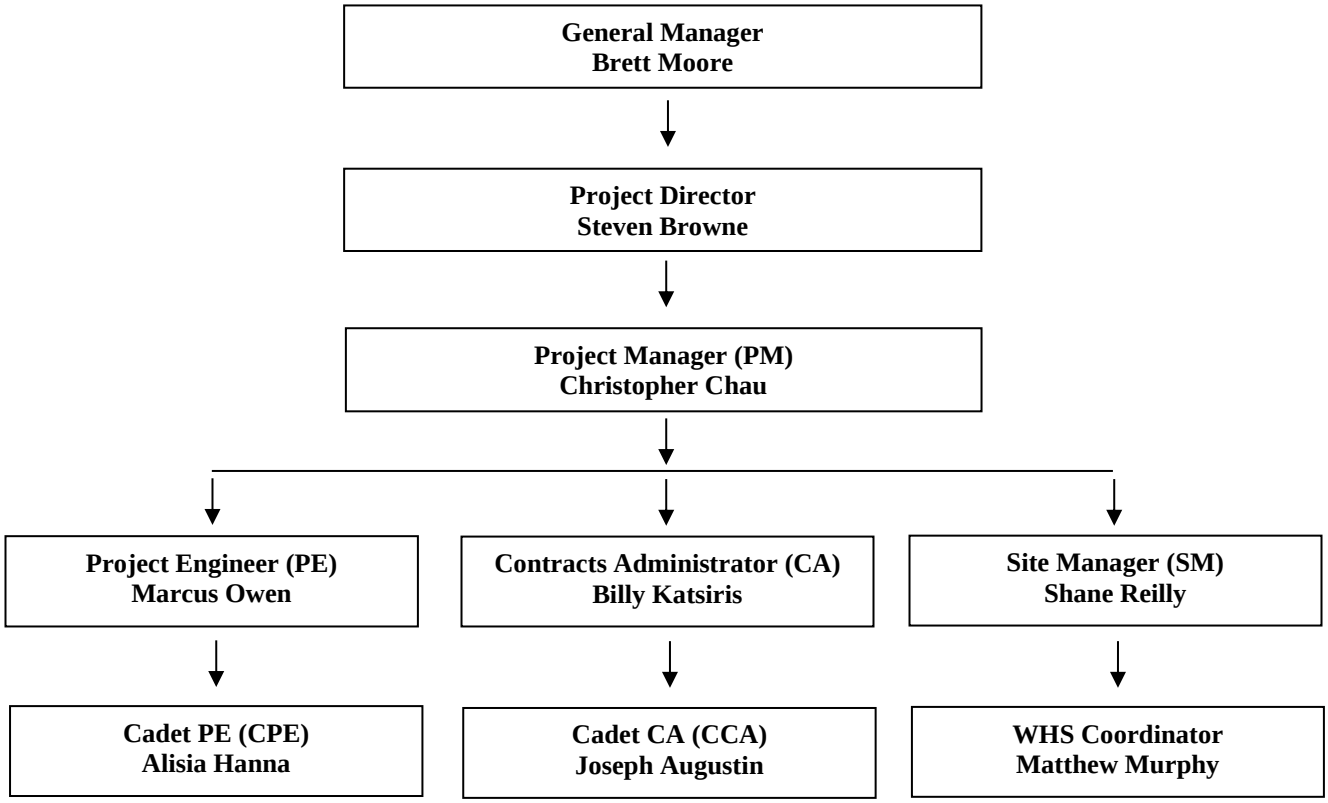
The Kane Constructions Environmental Management System is third party certified to ISO 14001 and developed for functionality and use at construction site level. The system is designed so that when implemented, will assist in achieving the objectives of the Kane Environmental Management Policy.

The Environmental Management Plan facilitates a systematic approach to site environmental management by applying the processes, checklists and forms of the Kane EMS to achieve compliance with relevant Environmental Legislation. When implemented on site, the checklists and forms of the Kane EMS become a record of project environmental management. We audit internally for compliance with the Kane EMS and randomly select sites for third party surveillance auditing for compliance with ISO 14001.

The Environmental Management Plan is developed to identify workplace environmental hazards, assess risks and implement control measures associated with activities, products and services over which Kane have control or influence.

The Kane project team is identified in the chart below. The project staff responsible for environmental management is assessed for competence, understanding and acceptance of the environmental responsibilities. Confirmation of this is provided – *refer Attachment 7*

## 1.1 Project Team Chart



# 2 CONSULTATION AND COMMUNICATION

## 2.1 Site Induction

Before commencing work, all visitors must report to the site office for a site specific induction where employees and service providers are presented information contained in the Environmental Induction Booklet *(refer Attachment 3)*. Consultation and communication processes established are communicated at the site induction. All workers are encouraged to express their views on environmental issues direct to the Site Manager.

## 2.2 Currency and Awareness of Environmental Information

Kane Constructions seek Environmental advice, assistance and keep updated with changes to Environmental legislation, regulations and guidelines through the following (not limited to);

- Environmental Protection Authority Victoria
- Office of Environment and Heritage NSW
- Department of Environment and Resource Management QLD
- Department of the Environment, Climate Change, Energy and Water ACT
- Standards Australia Update emails etc.

During toolbox talks, the Site Manager shall communicate relevant alerts, newsletters, bulletins, results of audits, corrective actions etc. consistent with current activities on site. These shall be recorded using the OHSMS Schedule W-Record of Meeting proforma.

# 3 TRAINING AND COMPETENCY

## 3.1 Kane Staff

Kane Constructions ensures ongoing Environmental Management and Awareness training for all employees based on skill gaps. This targets the needs of individual people and relates appropriately to their roles and responsibilities. Certificates of competency are maintained in staff personnel files and available to validate competency upon request.

## 3.2 Non Kane Staff

The employer is responsible for providing their employees with the relevant training and supervision so they have the necessary competency and skills to undertake their responsibilities.

# 4 HAZARD IDENTIFICATION AND RISK CONTROL

## 4.1 Risk Assessment

An Environmental Risk Assessment and Checklist is prepared by the Project Manager to identify environmental aspects associated with the activities to be undertaken *(refer Attachment 2)*. The risk of those aspects occurring and causing environmental impact is rated, and control measures identified to reduce the risk.

The Site Manager is responsible for ensuring the control measures determined in the Environmental Risk Assessment and Checklist are implemented and remain effective. The aspects that have significant impact and assessed to be of higher risk must be given the highest order of priority.

# 5 ENVIRONMENTAL ASPECTS

## 5.1 Work Hours

Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

(a) between 7am and 6pm, Mondays to Fridays inclusive; and

(b) between 8am and 1pm, Saturdays (and between 1pm and 5pm if works do not exceed the existing background noise level plus 5dB).

No work may be carried out on Sundays or public holidays.

## 5.2 Noise

The Site Manager will ensure noise and vibration levels meet acceptable standards and statutory requirements. Potential noise sources include but not limited to; plant, machinery, radios and construction methods.

The impact from noise on the surrounding areas shall be restricted to early construction activities undertaken until the building fabric is established further reducing noise impact on adjoining properties. A summary of the activities and equipment are detailed below:

| Activity | Predicted Level dB(A)$L_{10(15\text{-minute})}$ | Noise Management Level |
|---|---|---|
| Excavator with Bucket (up to 20 tonnes) | 47 to 54 | **NSW EPA *Interim Construction Noise Guideline*** **Residential Areas** Noise Affected Level: 53 dB(A)$L_{eq(15min)}$ (for condition C4 approved hours) 48 dB(A)$L_{eq(15min)}$ (for condition C5 approved hours) Highly Noise Affected Level: 75dB(A)$L_{eq(15min)}$ (Assessed at property boundary) |
| Concrete Saw | 47 to 54 | |
| Bobcat | 47 to 54 | |
| Heavy Trailers (idling) | 42 to 49 | |
| Piling Plant | 48 to 55 | |
| Concrete Pump | 52 to 59 | |
| Concrete Vibrators | 47 to 54 | |
| Hand Tools (Used Externally) | 45 to 52 | |
| Work Zone (Forklifts, Trucks, etc.) | 45 to 49 | |
| Crane (electric) | 43 to 49 | |

As detailed within this report “on site” noise assessments of specific equipment shall be undertaken throughout the course of the project to ensure that safe noise levels for both on site workers and adjoining residence and businesses are maintained.

Refer to the Construction Noise Vibration Management Plan prepared by Acoustic Logic.

## 5.3 Dust and Odour

The main site activities that have potential to generate dust & odour are; disturbance of ground conditions including the interim capping layer, vehicle movements, vehicle emissions, dry powdery soils, stockpiled soils, and ponding water. The Project Manager will identify sources and apply appropriate controls while the Site Manager will ensure the controls are managed effectively. It is up to the Project Managers discretion to identify dust causing activities and appropriate controls to be implemented. Such controls could include; wheel shakers, wheel wash, manual cleaning, tarpaulins to cover haulage trucks, daily monitoring of weather conditions (wind), daily hose down of problem areas, dust protection sprinklers, dust suppression machines and chemical applications as required.

## 5.4 Waste

The accumulation of waste resulting from demolition works, construction works, packaging, office tasks and amenities will be managed accordingly by Kane and/or engaged subcontractors. The Site manager shall ensure facilities are provided to adequately dispose of all types of waste. All site waste management will be in accordance with the Kane Constructions Waste Management Plan.

## 5.5 Chemicals

Various chemicals stored on site include but not limited to fuels, oil, paint and adhesives may have an impact on the environment if not handled appropriately. The Site manager will ensure minimum quantities of chemicals are stored correctly on site and empty packaging is disposed of in accordance with state laws and regulations.

## 5.6 Land Contamination / Soil Contamination

Various activities may contribute to the contamination of land and soil including wash water, brick cutting and plaster. Effective controls shall be implemented to ensure contamination to soil is minimised.

## 5.7 Erosion and Sediment

Rain and/or water used on site over recently disturbed or bare areas of soils have potential to carry sediment off site and cause erosion impacting native vegetation and water courses. The Site Manager shall minimise the disturbance of vegetation to reduce the likelihood of sediment loss and erosion. All erosion and sediment controls will be completed in compliance with the Erosion and Sediment Control Plans (SSDA Condition B16).

## 5.8 Flora / Fauna

Plant/machinery and various forms of construction work can impact negatively on surrounding flora and native vegetation. Protection of existing native vegetation from the impacts of construction work shall be implemented by the Site Manager.

When native fauna is encountered, it must not be disturbed. Notify the Site Manager if you see any fauna which is in the way of conducting work. Disturbing, injuring or killing native fauna without a permit may lead to prosecution.

## 5.9 Mud on Road

Vehicle movements after heavy rain events increase the risk of transferring mud and dirt onto public roads. The Site Manager shall put controls in place to ensure the risk of mud on roads is minimised. These controls may include; shaker grids, wheel wash downs, tarpaulins on haulage trucks and road cleaning as required.

## 5.10 Heritage Sites

Various forms of construction work including demolition can have an impact of the cultural heritage of an existing building or site. The heritage significance of the building shall be determined by the Project Manager and the Site Manager shall ensure agreed protection methods are implemented on site. Refer to Children's Hospital at Westmead Stage 2 Redevelopment Heritage Impact Assessment for MSCP rev C prepared by Jacobs for heritage significance and the Kane Constructions Unexpected Finds protocol for aboriginal and non-aboriginal heritage items (Attachment 9).

## 5.11 Air Pollution

Poor plant maintenance and exhaust emissions will impact the quality of the air. The Site Manager shall ensure that incoming plant is assessed and confirmed to be maintained in accordance with manufacturer's recommendations. Other sources of air contaminants shall be contained and managed appropriately.

## 5.12 Obtrusive Lighting

All external site lighting will be selected, positioned and controlled in a manner that there will be no obtrusive impacts on surrounding buildings in accordance with AS4282-2019. Project Manager and site management will monitor the above and ensure compliance.

## 5.13 Groundwater Management

It is expected that two groundwater systems exist within the project area including a shallow groundwater system located in the alluvial, fill and shallow weathered sandstone and shale units. The second regional groundwater unit is expected to exist within the deeper confined Hawkesbury Sandstone.

Groundwater seepage was encountered during the geotechnical investigations. It was measured within the wells below the base of any such excavations and is not expected to be an issue for these sites. However, some perched water may be encountered trapped within the fill, but if that is the case it should drain quickly and be able to be controlled using gravity drainage.

As such, it is not expected that specific controls for groundwater would be required as excavations associated with the MSCP site are expected to be too shallow to intercept the groundwater table. Therefore, Water Access Licences will not be required.

During piling, groundwater seepage may occur into the bored piers. To mitigate any issues resulting from this the piles are to be drilled, inspected, and poured with minimal delay. Where seepage does occur it should be pumped from the pier holes prior to pouring of concrete and all concrete poured using tremie techniques, which should be used anyway given the expected depth of the piles.

Groundwater contamination can occur when three main components exist: a potential source of contamination; an aquifer as the receptor; and a pathway for transfer between the two.

One of the primary pathways for groundwater contamination is infiltration of contaminants from the land surface, through the unsaturated zone, and to the unconfined aquifer below. Shallow unconfined aquifers (including karstic, conduit and fractured rock aquifers) are particularly vulnerable to contamination, especially where the associated land use includes hazardous activities with uncontrolled contamination sources. The porosity and permeability of the unsaturated zone contributes significantly to the travel time of contaminants between the source and the groundwater. A highly porous or permeable unsaturated zone, such as karst limestone, can result in the relatively quick transfer of contaminants from the surface to groundwater. However, 'reaction' of contaminants with the soil and rock of the unsaturated zone can slow or even stop contamination reaching groundwater. The unsaturated zone can be an important consideration in groundwater quality management.

Human-induced contamination is most often referred to as either point source or diffuse source. Point sources refer to localised contamination, often centred on one or more identifiable locations.

Many industrial chemicals are in use in Australia. Leaks, spills and other releases of these chemicals pose a risk to groundwater quality.

Changing groundwater levels have the potential to cause water quality changes as a result of processes such as seawater intrusion and mobilisation of acidity and metals in sulfidic soil or rock. In some cases, these can have detrimental impacts. Such changes in groundwater levels and consequent changes in groundwater quality may result from anthropogenic processes such as groundwater pumping and climate change as well as from natural climate variability. Falling groundwater levels have resulted in the drying of some wetlands. This can oxidise acid sulphate soils, which creates acidic conditions that mobilise metals and sometimes release arsenic. Falling groundwater levels due to pumping can also result in seawater intrusion into a fresh aquifer or leakage of higher- salinity groundwater into a fresher aquifer. On the other hand, rising groundwater levels or changes in groundwater flow directions can cause flow of contaminated or poor-quality groundwater into streams and wetlands. They can also bring salts in the groundwater to the surface and cause dryland and stream salinity. To mitigate this risk, groundwater is to be separated during dewatering to ensure the water is not contaminated through construction works or by accident.

# 6 SYSTEM IMPLEMENTATION AND RESPONSIBILITIES

Site staff have responsibility for implementation of the following site specific Environmental Management system procedures and related Kane Business Management System procedures. Responsibilities listed below must be read in conjunction with the Kane EMS responsibilities (refer Clause 3.1). The priority, order and timeframes in which the items below are implemented may differ as determined by the Project Manager to suit the project construction programme and the findings of the environmental risk assessment.

| Project Specific Systems | Corporate Responsibility | Individual Responsibility |
|---|---|---|
| 1. Include Environmental Management as a fixed agenda item of meetings | Kane | Kane PM, CM, CA |
| 2. Develop the Environmental Management Plan EMP and all attachments | Kane | PM |
| 3. Deliver Site Induction (including policy, controls, incident response) | Kane | SM / WHS Coordinator |
| 4. Implement the environmental controls identified in the EMP | Kane and Subcontractors | SM, Subcontractor Supervisor, WHS Coordinator |
| 5. Implement Incident Response procedure (where incidents occur) | Kane and Subcontractors | SM, Subcontractor Supervisor, WHS Coordinator |
| 6. Raise Non-conformance reports and initiate corrective and preventative action | Kane and Subcontractors | SM, Subcontractor Supervisor, WHS Coordinator |
| 7. Communicate alerts, incidents etc via Toolbox Meetings | Kane and Subcontractors | SM, Subcontractor Supervisor |
| 8. Update site noticeboard with material waste data sheets | Kane | SM, WHS Coordinator |
| 9. Monitor and evaluate environmental controls (document weekly) | Kane and Subcontractors | SM, Subcontractor Supervisor, WHS Coordinator |
| 10. Measure and evaluate the effectiveness of the EMP | Kane | PM, WHS Coordinator |

# 7 INCIDENT NOTIFICATION, INVESTIGATION AND RESPONSE

## 7.1 Incident notification

All site employees are responsible for notifying the Site Manager if they witness a pollution incident including leak, spill or escape of a substance or pollution incident causing or threatening public or property harm. In the event of an incident, the clean-up process shall be managed under the direct supervision of the Site Manager. The Site Manager is responsible for reporting notifiable incidents to the relevant environmental authority, Kane Senior Management and the Client Emergency Contacts in accordance with Attachment 4 Incident Response Flowchart.

## 7.2 Investigation and action taken

Procedural and/or legislative Non-conformances are identified, investigated, corrected and prevented by raising an Improvement Notice (refer Attachment 5). When raised, Kane Site Management documents the non-conformance and recommendation on how to correct the non-conformance. The Improvement Notice recipient is required to document the action taken to rescind the notice. Kane Site Management determines if the rectification is complete and adequate to prevent recurrence.

If the incident is of a large magnitude and poses high risk, the Site Manager shall contact and allow emergency services to manage the clean-up process. Such incidents shall be investigated using Kane OHSMS Schedule M/2 - Incident Investigation to determine how the incident occurred, how to prevent recurrence and how procedures may require revision to improve preparedness and response. The findings of an investigation are reviewed by the Construction Director, Systems Manager, Systems Coordinator, and Construction Supervisor NSW/QLD with a view to disseminating the lessons learnt to all projects.

# 8 AUDITING AND FREQUENCY

## 8.1 Internal

Quarterly Audit Report (refer Attachment 7) is used by the Project Manager to audit effective implementation of the Kane EMS. Points are awarded for effective implementation and points taken where noncompliance is observed. The audit facilitates recognising good practice environmental management and requires

actions be documented where improvement is necessary. Each site is audited quarterly (minimum) close to the end of each reporting period on a day determined by the Project Manager. The audit report is issued to the Systems Manager for VIC projects or Construction Supervisor for NSW/QLD projects to review against company objectives/targets and identify trends that may appear (positive and negative). The audits are scheduled at the end of the following months (or otherwise scheduled to avoid holiday and extremely busy periods i.e. lead up to Christmas)

- March (Jan – Mar)
- June (Apr – Jun)
- September (Jul – Sept)
- December (Oct – Dec)

Random EMS audits are undertaken by the Systems Manager/Coordinator (VIC) and Construction Supervisor (NSW/QLD). Reports are prepared and distributed to all staff on the project for actioning and for information to the Directors in each state.

## 8.2 External

Kane Constructions certification to ISO 14001 – Environmental Management requires third party surveillance audits be undertaken. Projects are selected randomly. Each audit confirms if the company certification should remain. Corrective action must be promptly closed where identified.

It is not uncommon for head contracts to require external audits of projects. The auditor is commonly required to have Lead Auditor competency. Audit frequency and reporting requirements differ based on project complexity and risks.

# 9 ATTACHMENTS

| Attachment | Document Title | Document Number | Revision |
|---|---|---|---|
| 1 | Schedule of Acts, Regulations, Standards and Codes of Practice | EMS-SYS-SCH3-ATT1 | A2 |
| 2 | Risk Assessment and Checklist | EMS-SYS-SCH3-ATT2 | A2 |
| 3 | Environmental Induction | EMS-SYS-SCH3-ATT3 | A2 |
| 4 | Incident Response Flowchart | EMS-SYS-SCH3-ATT4 | A2 |
| 5 | Improvement Notice | EMS-SYS-SCH3-ATT5 | A2 |
| 6 | Quarterly Audit Report | EMS-SYS-SCH3-ATT6 | A2 |
| 7 | Confirmation of Responsibilities | EMS-SYS-SCH3-ATT7 | A2 |

The below table identifies the documents associated with this EMP, however are integrated with and presented in the Kane Occupational Health and Safety Management System.

| Document Title | Document Description | Document Number | Kane OHS / BMS Reference |
|---|---|---|---|
| Skills Register | Register of training /competency | OHS-SYS-SCHD | OHS Schedule D |
| Post Tender Interview | Contract document detailing environmental management obligations of all subcontractors engaged | NA | Section 8.26 |

| | | | |
|---|---|---|---|
| Incident Investigation | Form completed for the purposes of investigating incidents | OHS-SYS-SCHM2 | OHS Schedule M2 |
| Site Induction Record | Form completed by all inductees detailing personal and employment details | OHS-SYS-SCHP | OHS Schedule P |
| Record of Consultation | Form used to record consultation / communication | OHS-SYS-SCHW | OHS Schedule W |

# ATTACHMENT 1

## Schedule of Acts, Regulations, Standards and Codes of Practice

| | |
|---|---|
| Who shall implement | Construction Director/Secretary- Maintain currency of documentation All Project Staff- Ensure availability of publications |
| When to implement | Bi Annually- Maintain Currency<br>As required - Provide documentation |
| How to use/implement | The list of publications is available to confirming legal obligations / best practice controls<br>/ guidance material for works on site. All Commonwealth legislation applies across |

| Publication | Source |
|---|---|
| Acts<br>Environment Protection<br>Protection of the Environment Administration Act 1991<br>National Environment Protection Council (NSW) Act 1995 | NSW Legislation and Parliamentary Document Website http://www.legislation.nsw.gov.au/<br>Search<br>Using<br>title OR |
| Protection of the Environment Operations Act 1997<br>Smoke Free Environment Act 2000 | Commonwealth Legislation Website<br>http://www.comlaw.gov.au/Home<br>Search using title |
| Contaminated Land Management Act 1997 | |
| Planning and Environmental Impact Assessment | |
| Waste Avoidance and Resource Recovery Act 2001 | |
| Environmental Reform (Consequential Provisions) Act 1999 | |
| Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) | |
| Heritage and Other Land Protection | |
| Legislation | |
| National Parks and Wildlife Act 1974 | |
| Other Acts with Potential to Affect Construction Activities | |
| Health Administration Act 1982 | |
| Dangerous Goods (Road and Rail Transport) Regulation 2014 | |
| Water Act 2007 (Commonwealth) | |

| | |
|---|---|
| Regulations<br><br>Protection of the Environment Operations (Clean Air) Regulation 2010<br><br>Protection of the Environment Operations (General) Regulation 2009<br><br>Protection of the Environment Operations (Noise Control) Regulation 2017<br><br>Protection of the Environment Operations (Waste) Regulation 2014<br><br>Contaminated Land Management Regulation 2013<br><br>Smoke-Free Environment Regulations 2016 | NSW Legislation and Parliamentary Document Website http://www.legislation.nsw.gov.au/ Search using title |
| Office of Environment and Heritage Publications and Guidelines<br>Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW<br><br>Managing Urban Stormwater<br>Harvesting and Re-Use<br>Soil and Construction<br><br>Environmental Management on the Urban Fringe<br><br>6.1 Economic incentives for environmental management<br><br>6.2 Property management plan<br><br>6.3 Environmental assessment<br><br>Storing and Handling Liquids: Environmental Protection - Participants Manual Interim Construction Noise Guideline<br><br>Review of alternatives to 'beeper alarms' for construction equipment<br><br>Assessing Vibration: A Technical Guideline<br><br>Land Contamination: What are my Responsibilities? (Website only) | NSW Government – Office of Environment and Heritage Website<br>http://www.environment.nsw.gov.au/ Search using title<br><br>http://www.environment.nsw.gov.au/clm/index.htm<br><br>https://www.epa.nsw.gov.au/ |
| Other Standards and Guidelines<br><br>ISO<br><br>ASNZS ISO 14001:2015 - Environmental Management Systems<br><br>Environmental Management System Guides<br>– Risk Based Licencing Biodiversity<br>Biodiversity Conservation Act 2016<br><br>The National Strategy for the Conservation of Australia's Biological Diversity | http://www.environment.gov.au<br><br>https://legislation.nsw.gov.au/view/html/inforce/current/ac%20t-2016-063 |

| | |
|---|---|
| Australian Government Department of Defence<br><br>Defence Environmental Strategic Plan 2016- 2036 | Department of Defence Infrastructure Management Website<br><br>https://defence.gov.au/EstateManagement/governance/p%20olicy/environment/Policy/EnvironmentStrategy2016.PDF |

# ATTACHMENT 2

## Risk Assessment and Checklist

## ATTACHMENT 2 – INTERIM ENVIRONMENTAL RISK ASSESSMENT and CHECKLIST (Cl 3.5.1)

**Job No.** 2504 | **Job Title: Children's Hospital Westmead Stage 2 – Multi-story Car Park**

**Prepared By :** Chris Chau | **Position : Project Manager**

**Sign : CCHAU** **Date Approved:** 28/03/2024~~21/12/2023~~

**Date of Review:** 28/03/2024~~21/12/2023~~ | **Risk Review undertaken by (list names / company);**

- **Chris Chau**

**Review Number 10**

**ASSESS RISK RATING IN ACCORDANCE WITH THE BELOW RISK CLASSIFICATION TABLE**
**Determine the RATING for each aspect (including any site specific) after consideration of the standard risk controls. After implementation of the standard risk controls, is there:**

| | | |
|---|---|---|
| • Potential for pollution resulting in long term damage<br>• Potential for pollution that cannot be mitigated immediately<br>• A specific contract requirement<br>• A specific permit requirement<br>• A specific authority requirement | **H - HIGH** | **Additional risk controls required. Frequency of monitoring to be based on level of risk** |
| • Minimal potential for public or other complaint<br>• Minimal potential for pollution (mitigated with minor damage) | **M - MEDIUM** | **Monitor weekly to ensure controls are effective (may require increased monitoring based on inspections)** |
| • No potential for public or other complaints<br>• No potential for a legal breach<br>• No specific contract requirement<br>• No specific permit requirement<br>• No specific authority requirement | **L - LOW** | **No additional risk controls. Monitor weekly** |

| No | ASPECTS | SOURCE | STANDARD RISK CONTROLS | Residual Risk Rating (H, M, L) | Additional Risk Controls Required (where risk rating is H) | No. of Compliant Controls Observed | No. of Non-Compliant Controls | Minor Actions Required [Improvement Notice (Attachment 5) to be raised where significant Non-compliance is observed] | Initial and Date when action Completed |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Noise | Plant / Machinery<br>Construction Methods<br>Radios | • Plant /machinery maintained in accordance with manufacturer recommendations<br>• Silencers placed on large compressors / generators<br>• Comply with council work hours<br>• Limit volume of radios<br>• Utilise prefabricated materials | L | | 5 | 0 | 0 | CC |
| 2 | Dust & Odour | Ground disturbance<br>Vehicle Movement<br>Dry powdery soils | • Protect surrounding buildings ventilation systems with louvre filters<br>• Protect areas of vegetation and minimise clearing / disturbance<br>• Cover exposed ground with mulch or other suitable material<br>• Restrict vehicle movements<br>• Dampen surfaces with fence mounted sprinklers, water cart (seek approval where water restrictions apply)<br>• Landscape and re-vegetate as soon as possible<br>• Seed, or cover and maintain soil stockpiles<br>• Special, high quality hoarding which meets infection control standards installed for operational healthcare facilities<br>• Plant / machinery maintained in accordance with manufacturer recommendations<br>• Plant / machinery exhaust emissions monitored for smoke (should not observe continuous smoke for longer than 10 seconds) | L | | 9 | 01 | ~~Pumping zone and temporary driveway to be washed down as dust being generated from heavy trucks~~<br><br>~~Levels to be swept with sweeper to ensure minimal dust is on site whilst defects are being closed out.~~ | CC |
| 3 | Waste | Demolition<br>Construction Works<br>Packaging<br>Office Amenities | • Utilise separate recycle bins for paper, steel etc (space permitting on site)<br>• Use bin contractors who sort and recycle construction waste<br>• Utilise existing client facilities for domestic recyclables (paper, cans etc)<br>• ~~Recycle demolished materials wherever possible~~<br>• Place lids on domestic waste bins for odour and vermin control | L | | 4 | 0 | Recycling Bin has been organised and being used for disposal and separation of varying materials | CC |
| 4 | Chemicals | Fuel<br>Oil<br>Paint<br>Adhesives | • No bulk storage of fuel / oil on site (fuel tankers to visit site as required)<br>• Paints, adhesives stored on site at minimum quantities in vented containers/rooms<br>• All storage of chemicals shall comply with the Material Safety Data Sheet<br>• Major servicing of plant e.g. where large quantities of oil requires changing shall be undertaken off site | L | | 4 | 0 | | CC |
| 5 | Contamination (from slurry / wash water) & Soil Contamination | Paint<br>Plaster<br>Concrete | • Documented evidence of contaminated soil removed from site is accepted by landfill facility<br>• Utilise wash out trays or bags whilst washing concrete trucks<br>• Controlled area to be constructed for washing out kibble<br>  ○ Once finished pumping concrete, pump down and dispose of concrete into bin. The washout tray is placed under the hopper and the trapdoor is opened to release concrete from the hopper.<br>  ○ Stop the pump, lift the grate and use a high pressure hose to clean the hopper. Any additional water/waste is washed into the tray/washout bag underneath. Pump Operator/Linesman will dispose of any plastic or rubbish in the area in appropriate bins.<br>  ○ Request mobile plant operator to remove tray/washout bag once filled.<br>  ○ Pack up all tools and equipment. Line pump can leave at this point.<br>  ○ Mobile boom must be lowered and seated in the cradle, outriggers secured and locked into place.<br>  ▪ Mobile boom can leave the project. | L | | 1 | 0 | | CC |
| 6 | Erosion and Sediment | Disturbed / cleared soils<br>Rain events | • Protect and maintain natural vegetation and minimise clearing / disturbance<br>• Connect downpipes to stormwater drainage as soon as possible or pipe roof water onto grassed areas<br>• Install sediment fences close to the site boundary and drains where surface water may carry sediment off site<br>• Place gravel sausages across pit openings | L | | 4 | 0 | | CC |
| 7 | Mud on Road | Muddy site<br>Vehicle Movements<br>Significant Rain Event | • Crushed rock placed in areas of vehicle movement<br>• Restrict vehicle movements on un-vegetated/exposed ground<br>• Cover exposed trafficked ground with mulch or other suitable material<br>• Protect areas of vegetation and minimise clearing / disturbance<br>• Remove water from site by connecting downpipes to stormwater drainage<br>• Install rumble strips at site exit to promote cleaning mud off vehicle tyres | L | | 5 | 0 | | CC |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 9 | Air Pollution | Plant / Machinery | • Plant / machinery maintained in accordance with manufacturer recommendations<br>• Plant / machinery exhaust emissions monitored for smoke (should not observe continuous smoke for longer than 10 seconds) | L | | 2 | 0 | | CC |
| **Total Compliant and Non-compliant Observed** | | | • **This Week** | | | 34 | 1 | | |

**ATTACHMENT 3 (Clause 3.5.2)**

**Environmental Induction Booklet for the Children's Hospital Westmead Multi Storey Car Park**

| | |
|---|---|
| **Environment Policy** | All personnel (Kane Constructions and Subcontractors) must be committed to achieving the objectives of Kane's Environment Policy. The policy is posted on the noticeboard or induction room for all inductees to read |

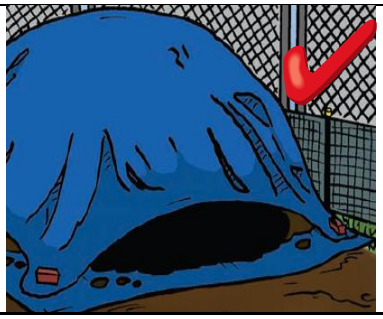
| | |
|---|---|
| **Incident Response** | All site employees are responsible for notifying the Site Manager if they witness a pollution incident including leak, spill escape of a substance or pollution incident causing or threatening public or property harm |

| | |
|---|---|
| **Waste Data Sheets** | The Site Noticeboard is updated as required with Material Waste Data Sheets (good practice environmental control information) for all to read |

| | |
|---|---|
| **NOISE** | **Source**<br>• Plant / Machinery<br>• Construction Methods<br>• Radios<br>• Unnecessary |
|  | **Risk Controls**<br>• Plant /machinery maintained in accordance with manufacturer recommendations<br>• Silencers placed on large compressors / generators<br>• Comply with council work hours<br>• Limit volume of radios<br>• Utilise prefabricated materials |

| | |
|---|---|
| **DUST & ODOUR** | **Source**<br>• Ground disturbance<br>• Vehicle Movement<br>• Dry powdery soils<br>• Cutting<br>• Stagnant water<br>• Infection Control |
|  | **Risk Controls**<br>• Protect areas of vegetation and minimise clearing / disturbance<br>• Cover exposed ground with mulch or other suitable material<br>• Restrict vehicle movements<br>• Dampen surfaces (seek approval where water restrictions apply)<br>• Landscape and re-vegetate as soon as possible<br>• Seed or cover soil stockpiles<br>• Monitor stormwater catchments and eliminate ponding zones |

- Special, high quality hoarding which meets infection control standards installed for operational healthcare facilities



## WASTE

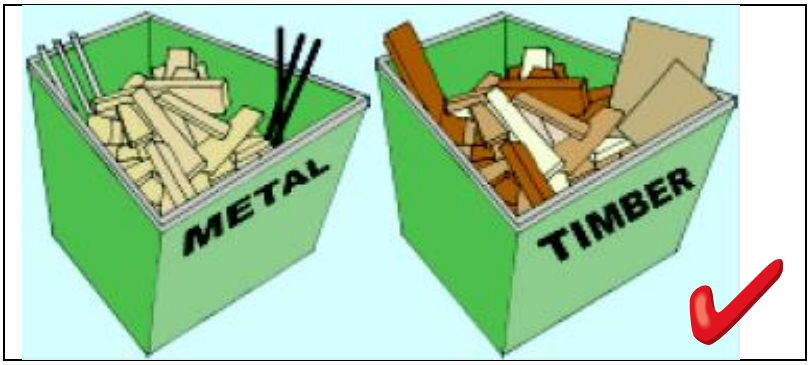
**Source**

- Demolition
- Construction Works
- Packaging
- Office
- Amenities


**Risk Controls**

- Utilise separate recycle bins for paper, steel etc (space permitting on site)
- Use bin contractors who sort and recycle construction waste
- Utilise existing client facilities for domestic recyclables (paper, cans etc)
- Recycle demolished materials wherever possible
- Place lids on domestic waste bins for odour and vermin control

RECYCLE



## CHEMICALS

**Source**

- Fuel
- Oil
- Paint
- Adhesives

**Risk Controls**

- No bulk storage of fuel / oil on site (fuel tankers to visit site as required)
- Paints, adhesives stored on site at minimum quantities in vented containers/rooms
- All storage of chemicals shall comply with the Material Safety Data Sheet
- Major servicing of plant e.g. where large quantities of oil requires changing shall be undertaken off site

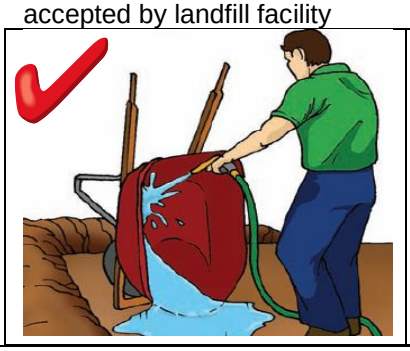
## CONTAMINATION (FROM SLURRY/ WASHWATER)

**Source**

- Paint
- Plaster
- Concrete
- Brick / Tile / Paver cutting

**Risk Controls**

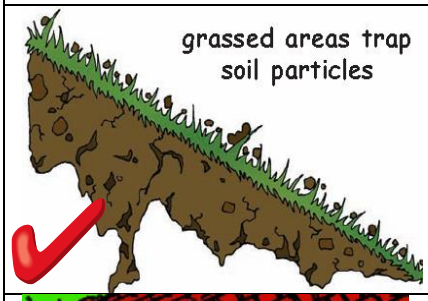
- Use paint wash trough. Settled solids should be removed by an appropriate waste disposal company
- Designate a washing up and brick cutting area away from stormwater drains. Build an earth bund to contain wash water from concrete, plaster, brick cutting
- Designate a washing up and brick cutting area away from stormwater drains. Build an earth bund to contain wash water from concrete, plaster, brick cutting
- Documented evidence of contaminated soil removed from site is accepted by landfill facility



## EROSION AND SEDIMENT

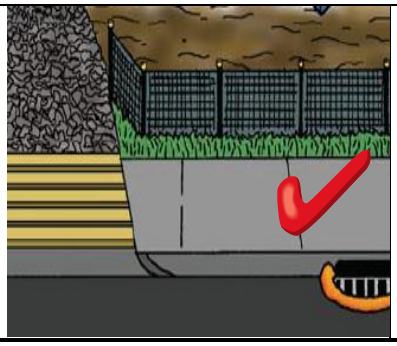
**Source**

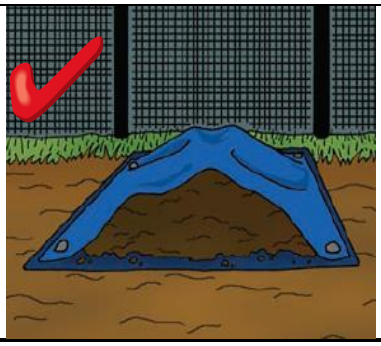
- Disturbed / cleared soils
- Rain events




**Risk Controls**

- Protect and maintain natural vegetation and minimise clearing / disturbance
- Connect downpipes to stormwater drainage as soon as possible or pipe roof water onto grassed areas
- Install sediment fences close to the site boundary and drains where surface water may carry sediment off site
- Place gravel sausages across pit openings



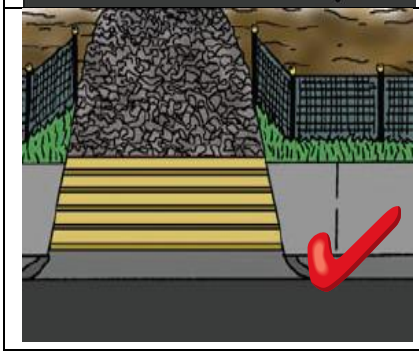
## MUD ON ROAD

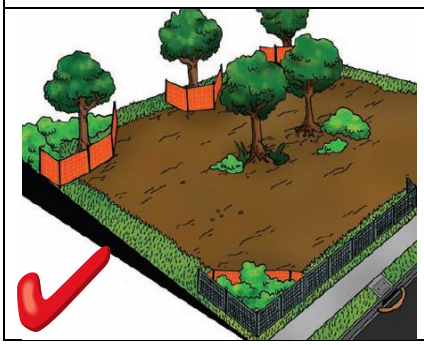
**Source**

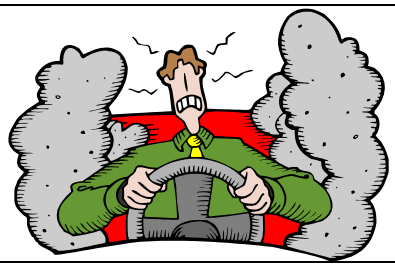
- Muddy site
- Vehicle Movements
- Significant Rain Event

**Risk Controls**

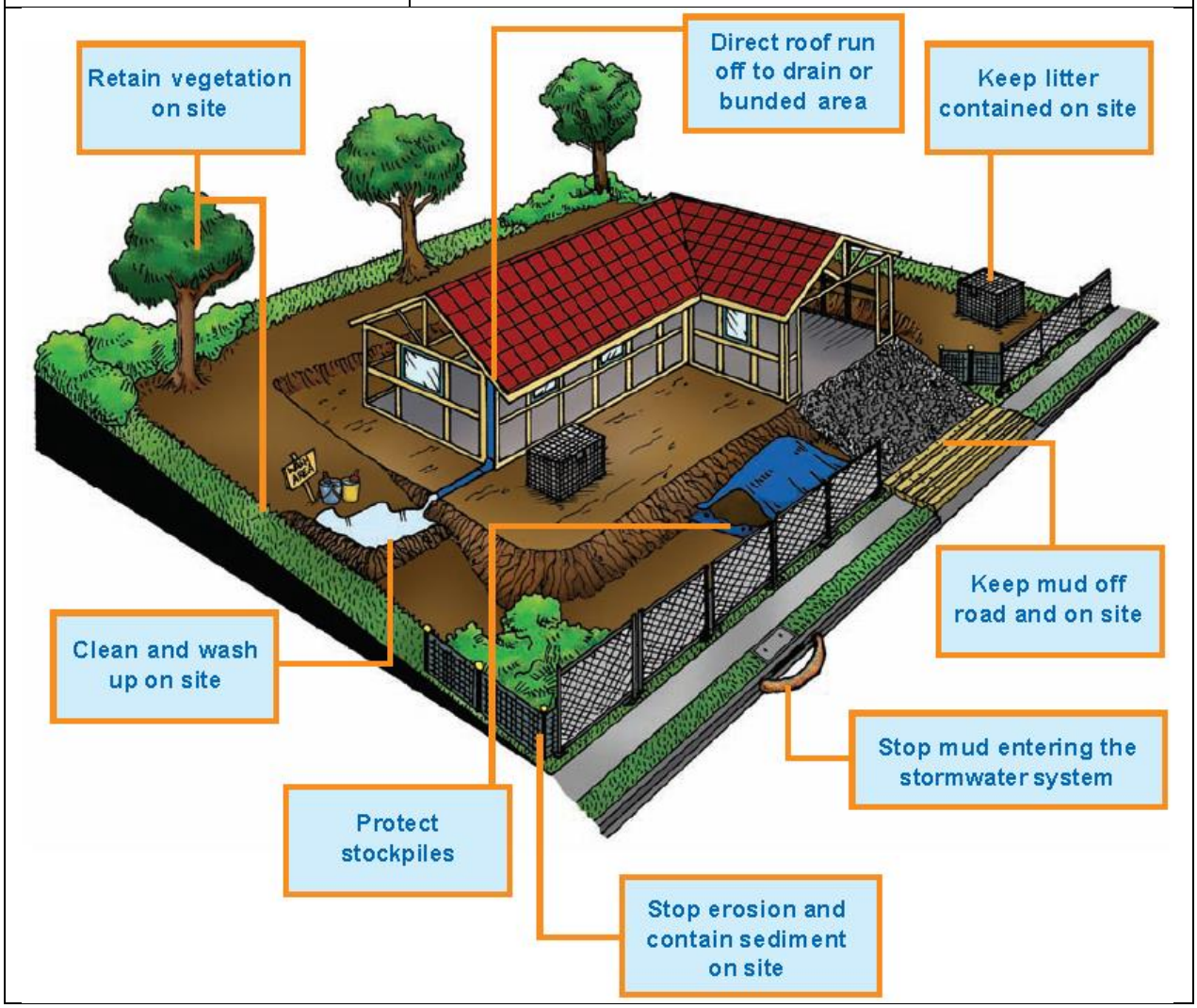
- Crushed rock placed in areas of vehicle movement
- Restrict vehicle movements on un-vegetated/exposed ground
- Cover exposed trafficked ground with mulch or other suitable material
- Protect areas of vegetation and minimise clearing / disturbance
- Remove water from site by connecting downpipes to stormwater drainage
- Install rumble strips at site exit to promote cleaning mud off vehicle tires



| FLORA / FAUNA | Source |
|---|---|
| | • Plant / Machinery<br>• Construction Works |
|  | **Risk Controls**<br>• Trees, shrubs etc is protected by flagging, roped off i.e."No Go Zone"<br>• Vehicles parked outside of tree root zone to avoid damage<br>• No entry to fenced off areas, no pets on sites, stick to access roads, and notify Site Manager of any fauna |

| AIR POLLUTION | Source |
|---|---|
| | • Plant / Machinery |
|  | **Risk Controls**<br>• Plant / machinery maintained in accordance with manufacturer recommendations<br>• Plant / machinery exhaust emissions monitored for smoke (should not observe continuous smoke for longer than 10 seconds) |

| SUMMARY | Risk Controls |
|---|---|



# ATTACHMENT 4

## Incident Response Flowchart

## ATTACHMENT 4 (Clause 3.5.3)

## Incident Response NSW

**New South Wales**

Organisations operating under the New South Wales Department of Planning and Environment (DPE) issued environmental licences are required to notify pollution incidents by calling the DPE Pollution Watch Line.

Pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

- Protection of the Environment Operations Act 1997 (links are to the NSW legislation website):
    - Section 116: It is an offence to willfully or negligently cause any substance to leak, spill in a manner that harms or is likely to harm the environment.
    - Section 120: It is illegal to pollute or cause or permit pollution of waters.
    - Section 124-126 Businesses must maintain and operate equipment and deal with materials in a proper and efficient manner to prevent air pollution at all times.
    - Section 139 and 140: It is an offence to allow noise from your premises to be generated as a result of the failure to maintain or operate machinery.
    - Section 142: It is an offence to pollute land
    - section 147: Meaning of material harm to the environment
    - section 148: Pollution incidents causing or threatening material harm to the environment
    - section 149: Manner and form of notification
    - section 150: Relevant information to be given
    - section 151: Incidents not required to be reported
    - section 152: Offence for breaching duty to notify pollution incidents
    - section 153: Incriminating information

The DPE relies on everyone in the community to report pollution. The community is encouraged to call the DPE Pollution Watch Line when the following is noticed:

- Smoke or odours from an industry or business
- Spills or slicks in waterways
- Illegal dumping of wastes
- Noise from a factory or industrial complex
- Littering
- Smokey Vehicles

### CONTACT ENVIRONMENT LINE

**Metropolitan – 131 555 (24 hours)**

All site employees are responsible for notifying the Site Manager if they witness a pollution incident including leak, spill escape of a substance or pollution incident causing or threatening public or property harm. When notified, the Site Manager shall implement the attached Incident Response Flowchart.

**ATTACHMENT 4 (Clause 3.5.3)**

**Incident Response**

# In the event of an ENVIRONMENTAL INCIDENT

**(all types of incidents) notify the Site Manager**

NOTIFY THE SITE MANAGER IMMEDIATELY

(24-Hour contact)

Name - Shane Reilly

Mobile - 0423 737 227

Is the pollution incident (including leak, spill escape of a substance &/or other pollution incident) causing or threatening public health, property or environment harm?

**YES**

**CALL 000** (FIRE BRIGADE)

NOTIFY NSW ENVIRONMENT LINE on 131 555 (24hrs)

Kane site team to notify Kane Senior Management

**NO**

Emergency Services & DPE Notification is **NOT required.**

Clean-up to be managed under the direct supervision of the Site Manager

Kane to report incident via WhatsApps message on established project channel as per Incident Management Framework

# 3. Incident Management Framework

| Category 1 – Critical Incident<br>**Trigger**:<br>Incident involving fatality or<br>severe injury or<br>major impact to critical hospital operations or<br>incident resulting in potential severe corporate reputational damage. | Category 2 – Significant Incident<br>**Trigger**:<br>Incident involving major detrimental impact to project, including damage to civil structures, extreme weather impacts, and threats to life or property or major environmental impact, or<br>significant impact to critical hospital operations or any LTI, significant near-miss or external environmental breach. | Category 3 – Minor Incident<br>**Trigger**:<br>Incident involving Medical Treatment Injury (MTI), potential for LTI, or<br>on-site environmental impact, or<br>minor near miss or non-conformance likely to lead to LTI | Category 4 – Notifiable Incident<br>**Trigger:**<br>Minor incident and/or safety breach on worksite<br>For example: first aid treatment or non-conformance on site not likely to lead to an LTI |
|---|---|---|---|
| **Step 1 – Immediate**<br>**Contractor sends WhatsApp message on established project channel:**<br>Project Manager<br>HI Regional Director / Senior Project Directors/Project Directors/Construction Managers<br>**Contractor informs**<br>Regulators and Emergency Services if required | **Step 1 – Immediate**<br>**Contractor sends WhatsApp message on established project channel:**<br>Project Manager<br>HI Regional Director / Senior Project Directors/Project Directors/Construction Managers<br>**Contractor informs**<br>Regulators and Emergency Services if required | **Step 1 – Within 1 hour**<br>**Contractor sends WhatsApp message on established project channel:**<br>Project Manager<br>HI Regional Director / Senior Project Director/Project Directors/Construction Managers<br>**Contractor informs**<br>Regulators | **Step 1 – Within 4 hours**<br>**Contractor sends WhatsApp message on established project channel:**<br>Project Manager<br>HI Project Directors/Senior Project Directors/Regional Director /Construction Managers |
| **Step 2 – Immediate**<br>**Regional Director informs:**<br>HI Chief Executive<br>Executive Director Western Region/Executive Director Northern Region/Executive Director Rural & Regional<br>HI Communications Business Partner and Director Communications and Engagement | **Step 2 – Immediate**<br>**Regional Director informs:**<br>HI Chief Executive<br>Executive Director Western Region/Executive Director Northern Region/Executive Director Rural & Regional<br>HI Communications Business Partner and Director Communications and Engagement | **Step 2 – Within 1 hour**<br>**Regional Director / Senior Project Director / Project Director informs:**<br>Executive Director Western Region/Executive Director Northern Region/Executive Director Rural & Regional<br>HI Communications Business Partner and Director Communications and Engagement | **Step 2 – Within 8 hours**<br>**Project Director/Senior Project Director:**<br>Engage with HI Communications Business Partner and Director Communications and Engagement |
| **Step 3 – Immediate**<br>**Chief Executive and Executive Director:** Inform<br>Secretary (and if instructed to the Minister),<br>Ministry, Local Health District/s Inform the HI<br>Board Chair<br>Engage with Director Communications and Engagement | **Step 3 – Immediate**<br>**At discretion of CE and ED.**<br>Chief Executive and Executive Director inform Secretary (and Minister if instructed), Ministry, Local Health District/s<br>Informs the HI Board Chair<br>Engage with Director Communications and Engagement | **Step 3 – Within 2 hours**<br>**Executive Director:**<br>Informs CE and Leadership Team | **Step 3 – Within 3 working days**<br>Incident report submitted with recommended mitigation to Executive Director<br>Incident Management Team not required<br>Managed through routine project governance and reporting |
| **Step 4 – Immediate**<br>**HI Chief Executive / Executive Director** officially declare incident as detailed in the NSW health Incident Management Policy | **Step 4 – Immediate**<br>**At discretion of CE and ED**<br>HI Chief Executive / Executive Director officially declare incident | **Step 4 – Within 24 hours**<br>Stakeholder Communications Plan implemented<br>Media Management Plan implemented, as required | **Step 4 – Within 24 hours**<br>Stakeholder Communications Plan implemented<br>Media Management Plan implemented, as required |
| **Step 5 – Within 1 hour**<br>Upon CE / ED officially declaring incident, a **HI Incident Management Team is formed** – see Section 2 below | **Step 5 – Within 1 hour**<br>Upon CE / ED officially declaring incident, a **HI Incident Management Team is formed** – see Section 2 below | **Step 5 – Within 3 working days**<br>Incident report submitted with recommended mitigation to Executive Director<br>Incident Management Team not required<br>Managed through routine project governance and reporting<br>Employee status monitored and incident escalated if condition becomes serious | |
| **Step 6 – Ongoing**<br>**Incident Management Team assumes control of incident response**<br>**Media and stakeholder communication** managed in line with Section 3 – Stakeholder Relationship Managers and Appendix 1 – Incident Media Protocols | **Step 6 – Ongoing**<br>**Incident Management Team assumes control of incident response**<br>**Media and stakeholder communication** managed in line with Section 3 – Stakeholder Relationship Managers and Appendix 1 – Incident Media Protocols | | |

# ATTACHMENT 5

## Improvement Notice

## ATTACHMENT 5 (Clause 3.5)

## Improvement Notice

**This notice is issued as a consequence of your failure to maintain adequate environmental controls during the performance of your contract works**

| | |
|---|---|
| **PROJECT – CHILDREN'S HOSPITAL WESTMEAD STAGE 2.** | **PROJECT NO.** |
| **SITE MANAGER – Shane Reilly** | **DATE:** |

TO: ..... Company Name

FROM: ..... Company Name

| | | | |
|---|---|---|---|
| ❑ | Noise | ❑ | Dust and/or Odour |
| ❑ | Waste | ❑ | Chemicals |
| ❑ | Contamination (slurry, wash water, oil) | ❑ | Erosion and Sediment |
| ❑ | Flora / Fauna | ❑ | Mud on road |
| ❑ | Heritage | ❑ | Air Pollution |
| ❑ | Other | ❑ | |

**Where this Improvement Notice is issued as a result of an environmental incident,**

**IDENTIFY ACTION TAKEN TO CLEAN UP**

**ACTION TAKEN TO ELIMINATE THE CAUSE** (i.e re-induction, improved control measure etc)

**VERIFICATION OF ACTION TAKEN** (Kane Site Management use only)

☐ Action verified as completed

☐ Action inadequate (describe why inadequate)

.....

.....

**Signed:** .....

**Date:**.....
Kane Representative

**In the event the company issued this notice fails to action, all costs incurred to undertake these works will be back-charged.**

☐ Labour to Rectify

men x hours = Total Hours

**Distribution**:
☐Site File
☐Project Manager
☐Subcontractor

# ATTACHMENT 6

## Quarterly Audit Report

## ATTACHMENT 6 (Clause 4.1.2)

## Environmental Management Audit

| | |
|---|---|
| Who shall implement | Project Manager (Auditor) - Audit and submit report<br>Site Manager (Auditee) - Implement actions identified |
| When to implement | Quarterly (minimum) |
| How to use/implement | Project Manager to check compliance, with the Site Manager, of all items against actual site record/observations and score out of 150. If not applicable, write N/A and award total points. Do not award negative points. Lowest score possible is zero.<br>Any issue identified shall be listed *(immediate actions required column)* and actioned by the Site Manager *(sign and date in the closed column)*.<br>The report is to be issued to the Systems Manager (Vic) or Construction Supervisor (NSW/QLD). |

| | | |
|---|---|---|
| **Job Title: CHILDREN'S HOSPITAL WESTMEAD STAGE 2** | | **Period Audited** |
| **Site Manager: Shane Reilly** | **Job No.** | **Date Audited** |

*** if not applicable write N/A and award total points**

| EMS Sch / CL Ref | Audit Criteria | * Points Scored | Immediate Actions Required | Closed Sign/Date |
|---|---|---|---|---|
| **Sch 1B** | 1. All EMS (body and schedules) implemented on site is the most current revisions i.e check documents against revision control table *(Award 15 points, less 2 points for each document not current)* | | | |
| **Sch 3** | 2. Environmental Management Plan is signed, dated and prepared using current revision *(15 points if signed, dated and current. Less 10 points if not signed and dated. Zero points if not current revision used)* | | | |
| **Sch 3 Att 2** | 3. Environmental Risk Assessment and Checklist prepared *(15 points if prepared, less 10 points if not signed and dated by PM, less 10 points if risk rating is not completed, less 5 points if names of attendees not listed, zero points if not prepared)* | | | |
| **Sch 3 Att 2** | 4. Environmental Risk Assessment implementation *(15 points for completed weekly checks, less 10 points for weeks not completed, zero points for no implementation)* | | | |
| **Sch 3 Att 2** | 5. Tally of Compliant / Non-Compliant Controls Maintained *(5 points, less 2 points if tally not updated, zero points if no tally)* | | | |
| **Sch 3 Att 2** | 6. Environmental Risk Assessment minor actions required *(10 points for minor actions required and closed out, less 2 points each action not closed out)* | | | |

| EMS Sch / CL Ref | Audit Criteria | * Points Scored | Immediate Actions Required | Closed Sign/Date |
|---|---|---|---|---|
| **Sch 3 Att 3** | 7. Environmental Induction Booklet displayed in induction room *(10 points for induction book displayed, zero points if not displayed)* | | | |
| **Sch 3 Att 4** | 8. Incident Response Flowchart completed with Site manager's name and displayed on site noticeboard *(10 points if completed and displayed, less 5 points for not displaying on the noticeboard and zero points if not completed)* | | | |
| **Sch 3 Att 5** | 9. Improvement notices raised and closed out *(20 points for notices closed out, less 10 points for each notice raised and not closed out)* | | | |
| **Sch 4** | 10. Materials Waste Data Sheets displayed on site notice board relevant to stage of project works *(10 points, less 2 points for each data sheet not relevant to works)* | | | |
| **Sch 3 Att 6** | 11. Quarterly environmental reporting statistics are submitted by the requested date *(15 points, less 10 points if not submitted on time)* | | | |
| **Sch 3 Att 6** | 12. Are issues/actions repeated from previous audits? *(10 points, less 10 points if answered Yes without an explanation why the issues/actions are repeated from previous audits)* | Yes/No | If Yes, list the reasons why the issues/actions are not actioned from previous audits | |
| **4.1.2** | 13. Is the Kane EMS effective in achieving the objectives and targets? *(10 points, less 10 points if answered No without an explanation why the system is not effective)* | Yes/No | If No, list why *(i.e system change, training etc)* | |

| **Total Points achieved** | maximum score 160 | **Date Immediate Actions must be closed by** | write date above |
|---|---|---|---|

**If maximum points are <u>not achieved</u> on the Audit Criteria 1 and 2 above, the Total Points achieved for this audit shall default to "Improvement Required"**

**If maximum points are <u>not achieved</u> on the Audit Criteria 3, 4 and 6 above, the Total Points achieved for this audit shall default to "Unsatisfactory Result"**

| | |
|---|---|
| **Between 90 - 100% (144 – 160) Points** | **Kane EMS trainer/mentor suitable to train young foreman** |
| **Between 70 – 89 % (112 – 143) Points** | **Good Implementation (above average implementation)** |
| **Between 50 – 69 % (80 – 111) Points** | **Improvement Required (average implementation)** |
| **Below 50 % (0 – 79) Points** | **Unsatisfactory result (Non-conformance report and re-induction)** |

Print Name …… (Site Manager)

Print Name…… (Project Manager)

<u>Distribution</u>
Site File
Systems Manager/Systems Coordinator (VIC)/Construction Supervisor (NSW, QLD)

# ATTACHMENT 7

## Confirmation of Responsibilities

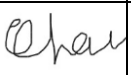
## ATTACHMENT 7

## Confirmation of Responsibilities

The project staff responsible for management of environmental management is assessed for competence, understanding and acceptance of their environmental responsibilities. Confirmation of this is provided below.

Each individual shall complete the table to verify the items listed below. Write either Yes or No (alongside the item in your column only) sign and date.

**Item 1** I understand my responsibilities identified in the Kane EMS (revision A2)
**Item 2** I understand my responsibilities identified in the Environmental Management Plan (revision 1)
**Item 3** I was consulted and given opportunity for input in the development of this Environmental Management Plan
**Item 4** I am competent to carry out my responsibilities identified in the Kane EMS and this Environmental Management Plan
**Item 5** I will carry out my responsibilities identified in the Kane EMS and this Environmental Management Plan

| | **Project Manager** | **Site Manager** | **Site Foreman** | **Project Engineer** | **Contracts Administrator** | **Cadet Contracts Administrator** | **Cadet Project Engineer** | **HSEQ Manager** |
|---|---|---|---|---|---|---|---|---|
| **Name** | Christopher Chau | Shane Reilly | Mark Smith | Marcus Owen | Billy Katsiris | Joseph Augustin | Alisia Hanna | Matthew Murphy |
| **Item 1** (yes/ no) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Item 2** (yes/ no) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Item 3** (yes/ no) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Item 4** (yes/ no) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Item 5** (yes/ no) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Sign** |  |  |  |  |  |  |  |  |
| **Date** | ~~21/12/23~~28 /03/24 | ~~21/12/23~~28/ 03/24 | ~~21/12/23~~28/ 03/24 | ~~21/12/23~~28/ 03/24 | ~~21/12/23~~28/ 03/24 | ~~21/12/23~~28/ 03/24 | ~~21/12/23~~28/ 03/24 | ~~21/12/23~~28/ 03/24 |

R – Responsible
A – Accountable
C – Consulted
I – Informed

# ATTACHMENT 8

Unexpected Finds Protocol Contamination and Associated Communications Procedure

# UNEXPECTED FINDS PROTOCOL FOR CONTAMINATION AND ASSOCIATED COMMUNICATIONS PROCEDURE

It is acknowledged that previous investigations of the site have been undertaken to assess the identified contaminants of potential concern in selected parts of the site. However, ground conditions between sampling points may vary, and further hazards may arise from unexpected sources and/or in unexpected locations during remediation. The nature of any residual hazards which may be present at the site are generally detectable through visual or olfactory means, for example;

- >10 m2 of ACM fragments encountered in one location (visible);
- Friable ACM such as lagging (visible);
- bottles / containers of chemicals (visible);
- construction / demolition waste (visible);
- ash and/or slag contaminated soils / fill materials (visible);
- petroleum contaminated soils (staining / discolouration visible) beyond the identified impact, or at levels that prevent off-site disposal without treatment; and
- volatile organic compound contaminated soils (odorous).

As a precautionary measure to ensure the protection of the workforce and surrounding community, should any of the abovementioned substances be identified (or any other unexpected potentially hazardous substance), the procedure summarised in the following flowchart is to be followed.

An enlarged version of the unexpected finds protocol, suitable for use on-site, will be posted in the Site Office and referred to during the Site Specific Induction by the Contractor.

## Revision History

| Revision | Date | Author | Approval | Description |
|---|---|---|---|---|
| REV A | 09/03/2022 | MO | | DRAFT |
| REV 1 | 26/05/2022 | SS | SB | ISSUED FOR CC |
| | | | | |
| | | | | |

# BE AWARE

# UNEXPECTED HAZARDS MAY BE PRESENT

drums

asbestos

chemical bottles

odour

ash / slag

demolition waste

If you <u>SEE</u> or <u>SMELL</u> anything unusual

<u>STOP WORK</u> & contact the Site Manager / WHS Coordinator

do not restart working before the area has been investigated and cleared by an Environmental Consultant.

# ATTACHMENT 9 -

## Unexpected Finds Protocol Aboriginal & Non-Aboriginal Heritage Items

# UNEXPECTED FINDS PROTOCOL FOR ABORIGINAL AND NON-ABORIGINAL HERITAGE ITEMS

## PURPOSE

This management plan has been developed to provide a consistent method for managing unexpected finds of either Aboriginal or non-Aboriginal heritage discovered during work on a project site.

This procedure assumes that an appropriate level of Aboriginal and non-Aboriginal heritage assessment has been undertaken prior to work commencing.[1]

Despite appropriate and adequate investigation, unexpected heritage items may still be discovered during construction works. When this happens, the following procedure must be followed.

### REVISION HISTORY

| Revision | Date | Author | Approval | Description |
|---|---|---|---|---|
| Rev A | 09/03/2022 | MO | | DRAFT. |
| Rev 1 | 26/05/2022 | SS | SB | ISSUED FOR CC |
| | | | | |
| | | | | |

# LEGISLATIVE REQUIREMENTS

*Table 1* below identifies some of the relevant legislation / regulations for the protection of heritage and the management of unexpected heritage finds in NSW.

*Table 1: Requirement and Objectives*

| Relevant Requirement | Objectives and offences |
|---|---|
| Environmental Planning and Assessment Act 1979 (EP&A Act | Requires heritage to be considered within the environmental impact assessment of projects. This guideline is based on the premise that an appropriate level of Aboriginal and non-Aboriginal cultural heritage assessment and investigations and mitigation have already been undertaken under the relevant legislation, including the EP&A Act, during the assessment and determination process. It also assumes that appropriate mitigation measures have been included in the conditions of any approval |
| Heritage Act 1977 | The Heritage Act provides for the care, protection and management of (Heritage Act) heritage items in NSW. Under section 139, it is an offence to disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed, unless the disturbance or excavation is carried out in accordance with an excavation permit issued by the Heritage Division of the . Under the Act, a relic is defined as: 'any deposit, artefact, object or material evidence that: (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and (b) is of State or local heritage significance.' A person must notify the Heritage Division of DPE, if a person is aware or believes that they have discovered or located a relic (section 146). Penalties for offences under the Heritage Act can include six months imprisonment and/or a fine of up to $1.1million. |

[1] If previous studies have identified that finds are likely, an *application may be required under the Heritage Act 1977 or the National Parks and Wildlife Act 1974*.

| | |
|---|---|
| National Parks and Wildlife Act 1974 (NPW Act) | The NPW Act provides the basis for the care, protection and management of Aboriginal objects and places in NSW. An Aboriginal object is defined as: 'any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains'. An 'Aboriginal place' is an area declared by the Minister administering the Act to be of special significance with respect to Aboriginal culture. An Aboriginal place does not have to contain physical evidence of occupation (such as Aboriginal objects). Under section 87 of the Act, it is an offence to harm or desecrate an Aboriginal object or place. There are strict liability offences. An offence cannot be upheld where the harm or desecration was authorised by an AHIP and the permit's conditions were not contravened. Defences and exemptions to the offence of harming an Aboriginal object or Aboriginal place are provided in section 87, 87A and 87B of the Act. A person must notify DPE if a person is aware of the location of an Aboriginal object. Penalties for some of the offences can include two years imprisonment and/or up to $550,000 (for individuals), and a maximum penalty of $1.1 million (for corporations) |

It should be noted that significant penalties exist for breaches of the listed legislation as a result of actions that relate to unauthorised impacts on heritage items. Further, it is noted that heritage that has been assessed and is being managed in accordance with relevant statutory approvals(s) can be exempt from these offences.

To avoid breaches of legislation, it is important that Kane and its contractors are aware of our statutory obligations under relevant legislation and that appropriate control measures are in place to ensure that unexpected heritage items are appropriately managed during construction.

## AN UNEXPECTED FIND

An *unexpected find* in the context of heritage is usually categorized as one or more of the following:

**a) Aboriginal objects**
**b) Historic (non-Aboriginal) heritage items**
**c) Human skeletal remains**

All of these are protected by law and destruction or disturbance of them could result in significant fines or even jail terms. The relevant legislation that applies to each of these categories is described below.

### a) ABORIGINAL OBJECTS

The *National Park and Wildlife Act 1974* protects *Aboriginal objects*. These include stone tool artefacts, shell middens, axe grinding grooves, pigment or engraved rock art, burials and scarred trees.

If any impact is expected to an Aboriginal object, an Aboriginal Heritage Impact Permit (AHIP) is usually required from the Department of Planning and Environment (DPE). When a person becomes aware of an Aboriginal object they must notify the Secretary of the Department Planning Industry and Environment about its location. Assistance on how to do this is provided in Section 7.

### b) HISTORIC HERITAGE ITEMS

Historic (non-Aboriginal) heritage items may include:

- Archaeological 'relics'

  Other historic items (i.e. works, structures, buildings or movable objects).

### c) ARCHAEOLOGICAL RELICS

The *Heritage Act 1977* protects relics which are archaeological items of local or state significance which may relate to past domestic, industrial or agricultural activities in NSW, and can include bottles, remnants of clothing, pottery, building materials and general refuse.

### d) OTHER HISTORIC ITEMS

Some historic heritage items are not considered to be 'relics'; but are instead referred to as works, buildings, structures or movable objects. Examples of these items may be encountered include culverts, historic road formations, historic pavements, buried roads, retaining walls, tramlines, cisterns, fences, sheds, buildings and conduits. Although an approval under the *Heritage Act 1977* may not be required to disturb these items, their discovery must be managed in accordance with the procedure as per *Figure 1.*

As a general rule, an archaeological relic requires discovery or examination through the act of excavation. An archaeological excavation permit under Section 140 of the *Heritage Act 1977* is required to do this. In contrast, 'other historic items' either exist above the ground's surface (e.g. a shed), or they are designed to operate and exist beneath the ground's surface (e.g. a culvert).

Despite this difference, it should be remembered that relics can often be associated with 'other heritage items', such as archaeological deposits within cisterns and underfloor deposits under buildings.

### e) HUMAN SKELETAL REMAINS

Human skeletal remains can be identified as either an Aboriginal object or non-Aboriginal relic depending on ancestry of the individual (Aboriginal or non-Aboriginal) and burial context (archaeological or non-archaeological). Remains are considered to be archaeological when the time elapsed since death is suspected of being 100 years or more. Depending on ancestry and context, different legislation applies.

As a simple example, a pre-European settlement archaeological Aboriginal burial would be protected under the NPW Act, while a historic (non-Aboriginal) archaeological burial within a cemetery would be protected under the Heritage Act. In addition to the NPW Act, finding Aboriginal human remains also triggers notification requirements to the Commonwealth Minister for the Environment under section 20(1) of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984(Commonwealth*).

However, where it is suspected that less than 100 years has elapsed since death, the human skeletal remains come under the jurisdiction of the State Coroner and the *Coroners Act 2009* (NSW). Such a case would be considered a 'reportable death' and under legal notification obligations set out in section 35(2); a person must report the death to a police officer, a coroner or an assistant coroner as soon as possible. This applies to all human remains less than 100 years old[2] regardless of ancestry (i.e. both Aboriginal and non-Aboriginal remains). Public health controls may also apply.

## SEEKING ADVICE

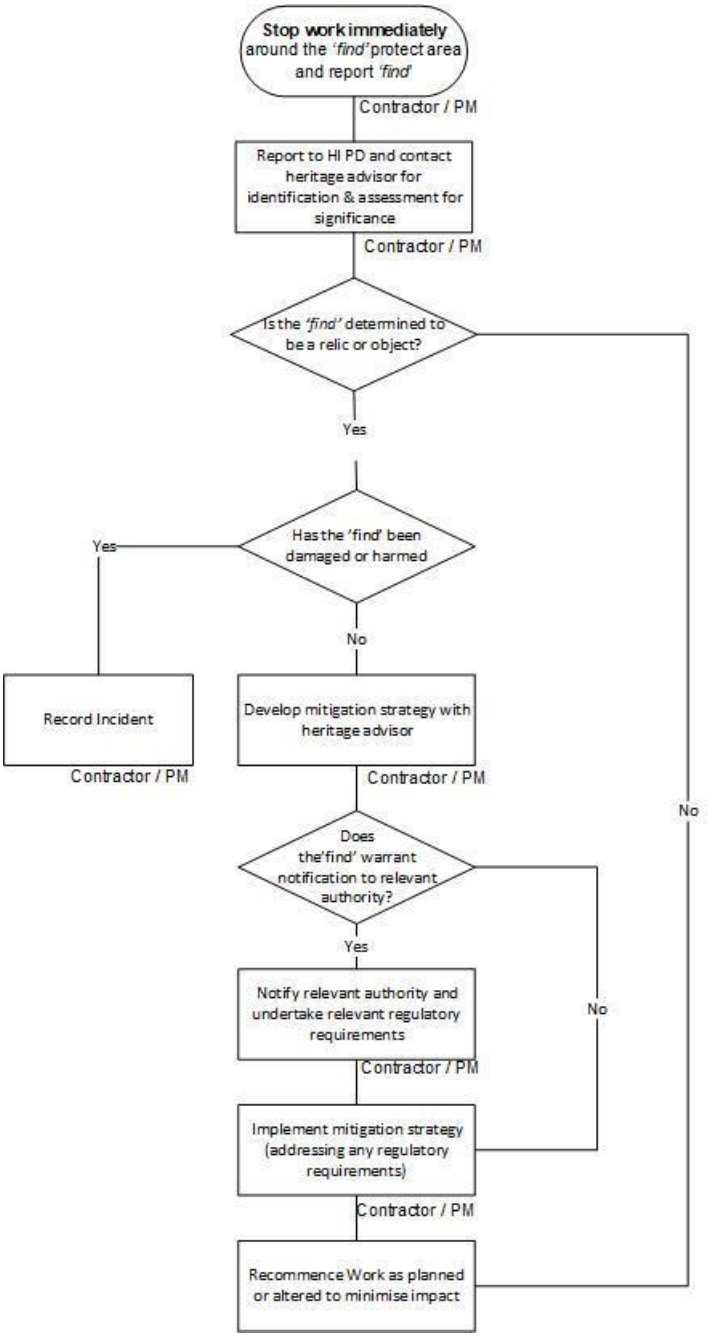
Technical archaeological or heritage advice regarding an unexpected heritage item should be sought from HI and the contracted archaeologist. Technical specialist advice can also be sought from heritage policy staff within Environment Branch to assist with the preliminary archaeological identification and technical reviews of heritage/archaeological reports.

[2] Under section 19 of the *Coroners Act 2009*, the coroner has no jurisdiction to conduct an inquest into reportable death unless it appears to the coroner that (or that there is reasonable cause to suspect that) the death or suspected death occurred within the last 100 years.

# UNEXPECTED HERITAGE ITEMS PROCEDURE

In the event that an unexpected find is encountered, refer to flow chart below for procedure.

*Figure 1: Procedure flow chart with an unexpected finding*



# APPENDIX A

# UNCOVERING BONES

All matters relating to uncovering bones/human remains require notification to HI Development Team staff. They will guide Project Managers through occurrences of uncovering bones.

This appendix A provides Project Managers with advice (1) on what to do on first uncovering bones (2) the range of human skeletal notification pathways and (3) additional considerations and requirements when managing the discovery of human remains.

## 1. FIRST UNCOVERING BONES

Stop all work in the vicinity of the find. All bones uncovered during project works should be **treated with care and urgency** as they have the potential to be human remains. Therefore they must be identified as either human or non-human as soon as possible by a qualified forensic or physical anthropologist. These specialist consultants can be sought by contacting regional environment staff and/or heritage staff at Environment Branch.

On the very rare occasion where it is instantly obvious from the remains that they are human, the Project Manager (or a delegate) **should inform the police by telephone** prior to seeking specialist advice. It will be obvious that it is human skeletal remains where there is no doubt, as demonstrated by the example in Figure 2. Often skeletal elements in isolation (such as a skull) can also clearly be identified as human. Note it may also be obvious that human remains have been uncovered when soft tissue and clothing are present.

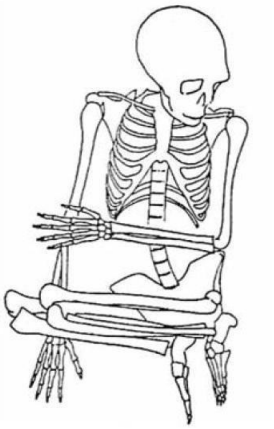


**Figure 2:** Schematic of a complete skeleton that is 'obviously' human[12].

**Figure 3:** Disarticulated bones that require assessment to determine species.

[12] After Department of Environment and Conservation NSW (2006), *Manual for the identification of Aboriginal Remains*:

Where it is not 'obvious' that the bones are human (in the majority of cases, illustrated by Figure 3), specialist assessment is required to establish the species of the bones. Photographs of the bones can assist this assessment if they are clear and taken in accordance with guidance provided in photo above. Good photographs often result in the bones being identified by a specialist without requiring a site visit; noting they are nearly always non-human. In these cases, non-human skeletal remains must be treated like any other unexpected archaeological find.

If the bones are identified as human (either by photographs or an on-site inspection) a technical specialist must determine the likely ancestry (Aboriginal or non-Aboriginal) and burial context (archaeological or forensic). This assessment is required to identify the legal regulator of the human remains so urgent notification (as below) can occur. Preliminary telephone or verbal notification by the Project Manager to the HI Representative, and/or HI's planning team is essential.

## 2. RANGE OF HUMAN SKELETAL NOTIFICATION PATHWAYS

The following is a summary of the different notification pathways required for human skeletal remains depending on the preliminary skeletal assessment of ancestry and burial context.

### A) HUMAN BONES ARE FROM A RECENTLY DECEASED PERSON (LESS THAN 100 YEARS OLD).

**☑ Action**

A police officer must be notified immediately as per the obligations to report a death or suspected death under s35 of the Coroners Act 2009 (NSW). It should be assumed the police will then take command of the site until otherwise directed.

### B) HUMAN BONES ARE ARCHAEOLOGICAL IN NATURE (MORE THAN 100 YEARS OLD) AND ARE LIKELY TO BE ABORIGINAL REMAINS.

**☑ Action**

The DPE and the HI's Planning Team must be notified immediately. The Planning Team, must then contact and inform the relevant Aboriginal community stakeholders who may request to be present on site. .

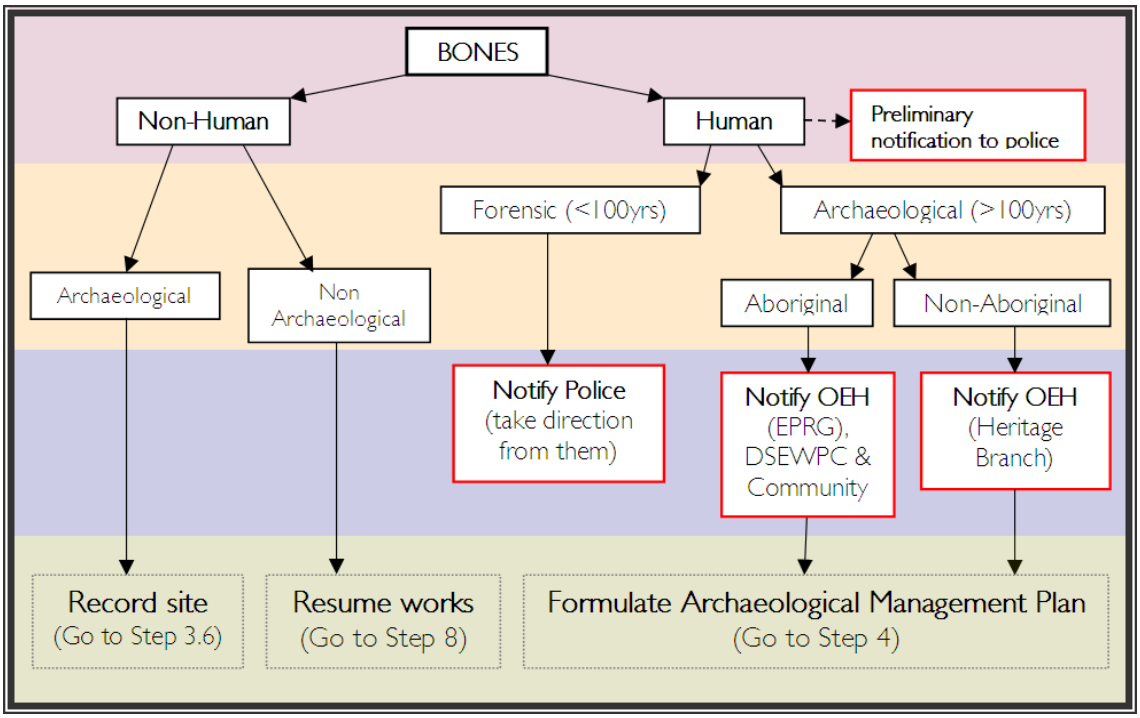
### C) HUMAN BONES ARE ARCHAEOLOGICAL IN NATURE (MORE THAN 100 YEARS OLD) AND LIKELY TO BE NON-ABORIGINAL REMAINS.

**☑ Action**

The DPE (Heritage Branch, Conservation Team) must be notified immediately.

The simple diagram below summarises the notification pathways on finding bones.

*Figure 2: Notification pathways on bones finding*




After the appropriate verbal notifications (as described in B and C), the Kane Project Manager must proceed through the Unexpected Heritage Items Procedure to formulate an archaeological management plan (Step 4). Note no archaeological management plan is required for forensic cases (A), as all future management is a police matter.

Non-human skeletal remains must be treated like any other unexpected archaeological find and so must proceed to recording the find as per Step 3.6.

[13] This requirement is in addition to heritage approvals under the *Heritage Ac*

# ATTACHMENT 10

## Imported Material Tracking Register & Waste Tracking Register