

PROCEDURE: Unexpected Contaminated Land and Asbestos Finds Procedure

1. SCOPE

This document has been prepared in accordance with MCoA D77 of the project approval (SSI 10038) and details the procedure for managing unexpected finds of contamination or asbestos during demolition as carried out by Delta Group. The scope of this procedure applies to all demolition control aspects and to all Delta personnel and sub-contractors.

This document describes the required management and controls of contaminated material in the context of waste handling from first identification onsite to removal to an appropriately licensed facility. This Procedure will be implemented for the duration of the Project as required under MCoA 078.

The scope of this Procedure does not include handling, monitoring and management measures to comply with Work Health and Safety legislation nor to provide management controls required to protect human safety or meet health and safety industry requirements. The management of the discovery, handling and removal of asbestos is the responsibility of the Occupational Hygienist under the direction of the Project Safety Team.

2. PURPOSE

The primary objective of this Procedure is to detail best practices for managing contaminated land discovered during construction. This Procedure describes a process to ensure that appropriate measures and controls are established and maintained to manage the discovery of contaminated land during construction of the Project.

There is the potential for previously unidentified contaminants to be uncovered during construction of the Project. Unexpected finds may include the discovery of hazardous materials, such as asbestos, Asbestos Containing Material (ACM), or contaminants that are not known to be occurring in that location.

For clarity, the detailed process for managing asbestos and ACM is outlined in the Delta IMS Procedure 37 Unexpected Find Procedure found in Attachment 1 to this project. A summary for managing

3. RESPONSIBILITIES

The management of the discovery, handling and removal of asbestos is the responsibility of the Occupational Hygienist with overview by the Safety Team.

The management of other (not asbestos) contaminants is the responsibility of the environment team insofar as the prevention of spread (within or off-site) and engagement of the contaminated lands consultant for the collection and interpretation of materials and waste classification data.

The Environmental Team are responsible for the tracking and ensuring appropriate disposal of all waste, including contaminated waste and asbestos, in accordance with the Project Waste Management Sub Plan.

The construction workers would be informed of the potential of finding contaminated materials during construction activities within site, as well as the content of this Unexpected Finds Procedure.

4. PROCEDURE

An unexpected find of contamination is triggered in the event of identification or disturbance of contamination including asbestos containing materials (ACM) in any area of works (excluding ACM identified through the pre-demolition hazardous materials surveys).

The process of disturbance of the existing ground or buildings in any location may result in the discovery of unexpected contamination, however the potential for contaminated land disturbance depends on a variety of factors including the location, nature, extent and magnitude of construction activities.

If contaminated land is discovered and not controlled appropriately there is potential for the contamination to impact soil, water and human health during construction, including:

- Contaminant exposure risk to construction personnel and the general public
- Contaminant exposure to environmental receptors
- Cross contamination associated with the incorrect handling or disposal of spoil/unexpected finds
- Contamination of previously uncontaminated areas

In order to ensure appropriate management, the process in the following Unexpected Find Process Flow diagram, which is adopted from the unexpected finds protocol section of the Sydney Metro Waste Classification Procedure (SM-20-00040677), will be implemented in the event of an unexpected find of potential contamination. The full procedure (SM-20-00040677) has been appended to the Waste Management Sub Plan.

An unexpected find may result in additional works being required for the remediation of contaminated materials which fall outside of Delta’s current scope for the project. Any such works will comply with all relevant legislation and guidelines and will require appropriately qualified persons to prepare the methodology and controls. Any such works will require approval from the Principal.

Table 1 Unexpected finds procedure - general contamination (not asbestos)

Step	SM Process Ref.	Action	Responsibility		
			Other	Enviro	Safety
1	1 2 3	Immediately Stop work in the area potentially impacted by contaminated material as soon as it is safe to do so and delineate the area using fencing and/or appropriate barriers and signage to prevent further works. Implement minimum environmental controls to contain material (i.e., water diversion, dust, odour)	✓	✓	✓
2	4a	If the contaminant is an emergency and poses risk to health and/or environmental impacts. If so the Incident response procedure (Appendix H CEMP) will be triggered and further remediation work will occur in accordance with this Procedure.	✓	✓	✓
3	4b	Notify the Site Manager and Environmental and Sustainability Manager (EM) or delegate, who will notify Principals Representative (PR) and Environmental Representative (ER).	✓	✓	
4	4b	EM and/or Project Manager (PM) to contact Occupational Hygienist/Hazmat Consultant or Contaminated Land Specialist (external consultant) as required for sampling of material and further advice.	✓	✓	
5		The EM and/or PM will develop management options after guidance from the Occupational Hygienist/Hazmat Consultant or Contaminated Lands Specialist is received, in consideration of the type and level of contamination discovered and the proposed final land use.	✓	✓	
6		The Safety Manager (SM) will assess if works can recommence in alternate areas if safe and practicable to do so.			✓
7a	5a 6c	The removed contaminated material will be managed in accordance with the Waste Management Sub Plan developed as part of the CEMP. Contaminated material will be disposed of off-site in accordance with the Waste Management Plan at a licensed waste facility or as otherwise identified within the Waste Management Sub Plan. Notification to EPA will be undertaken where required in line with the NSW EPA Guidelines on the Duty to Report Contamination (2015) and the CLM Act (1997).		✓	✓
7b	5b 6b	If the agreed scope for management will not result in complete removal of the contamination, the PR will be informed to ensure an alternative management plan is developed for any remaining contamination. Following implementation of agreed management, work can recommence after clearance from EM.		✓	

Table 2 Unexpected finds procedure - asbestos/ACM

Step	SM Process Ref.	Action	Responsibility		
			Other	Enviro	Safety
1	1 2 3	Immediately Stop work in the area potentially impacted by contaminated material as soon as it is safe to do so and delineate the area using fencing and/or appropriate barriers and signage to prevent further works. Implement minimum environmental controls to contain material (i.e., water diversion, dust, odour)	✓	✓	✓
2	4a	If the contaminant is an emergency and poses risk to health and/or environmental impacts. If so the Incident response procedure (Appendix H CEMP) will be triggered and further remediation work will occur in accordance with this Procedure.	✓	✓	✓
3	4b	Notify the Site Manager and Environmental and Sustainability Manager (EM) or delegate, who will notify Principals Representative (PR) and Environmental Representative (ER).	✓	✓	
4	4b	EM and/or Project Manager (PM) to contact Occupational Hygienist/Hazmat Consultant or Contaminated Land Specialist (external consultant) as required for sampling of material and further advice.	✓	✓	
5		The EM and/or PM will develop management options after guidance from the Occupational Hygienist/Hazmat Consultant or Contaminated Lands Specialist is received, in consideration of the type and level of contamination discovered and the proposed final land use.	✓	✓	
6		On confirmation of actual asbestos or ACM that requires removal for the continuation of work, install appropriate signage warning that the area is undertaking asbestos removal in accordance with the SafeWork NSW: Code of Practice: How to safely remove asbestos (August 2019) [Safework NSW asbestos removal notification to be lodged and approved prior to removal]			✓
7		The Safety Manager (SM) will assess if works can recommence in alternate areas if safe and practicable to do so.			✓
8a	5a 6c	An Asbestos Removal Control Plan (ARCP) is required to be completed in accordance with Work Health and Safety Regulation 2017 (Regulation 464). The ARCP will be developed prior to undertaking any asbestos removal works. The aim of the plan is to outline the specific methods and processes that will be used to ensure the removal is safe and effective. The removed contaminated material will be managed in accordance with the Waste Management Sub Plan developed as part of the CEMP. Contaminated material will be disposed of off-site in accordance with the Waste Management Plan at a licensed waste facility or as otherwise identified within the Waste Management Sub Plan. Notification to EPA will be undertaken where required in line with the NSW EPA Guidelines on the Duty to Report Contamination (2015) and the CLM Act (1997).		✓	✓

Step	SM Process Ref.	Action	Responsibility		
			Other	Enviro	Safety
8b	5b 6b	<p>Asbestos removal will be undertaken by suitably qualified personnel and/ or subcontractors who are licensed by SafeWork NSW.</p> <p>Following removal of asbestos / ACM, the licensed asbestos removalist will arrange for a clearance inspection of the area to facilitate the issue of a clearance certificate and allow construction to recommence in the affected area in accordance with Work Health and Safety Regulation 2017 (Regulation 474)</p> <p>If the agreed scope for management will not result in complete removal of the contamination, the PR will be informed to ensure an alternative management plan is developed for any remaining contamination.</p> <p>Following implementation of agreed management, work can recommence after clearance from EM.</p>		✓	

5. WASTE MANAGEMENT

All waste associated with unexpected finds will be management in accordance with the Waste Management Sub Plan, with all waste:

- Appropriately segregated and stored;
- Classified in accordance with the NSW EPA Waste Classification Guidelines (2014);
- Tracked by the Project and evidence of receipt at an appropriately licensed waste facility.

6. External Reporting

Sydney Metro would be informed immediately when encountering of a potential or actual contaminant which may require a Duty to Report. In the case of an unexpected find triggering the process described in Table 1 and Table 2, notification and reporting to authorities such as the EPA and Environmental Representative (ER) will be undertaken by the Environmental and Sustainability Manager or delegate in accordance with the NSW EPA Guidelines on the Duty to Report Contamination (2015) and the CLM Act (1997).

In the event of an environmental incident, the Sydney Metro Environmental Incident and Non-compliance Reporting Procedure will be implemented. The full procedure is provided in Appendix H of the CEMP.

Under section 148 of the POEO Act, anyone causing a pollution incident are required to report the incident 'immediately' to the relevant authorities. 'Immediately' is defined as promptly and without delay, after the person becomes aware of the incident.

6.1. Community Notification

Section 6 of the Overarching Community Communication Strategy outlines the communication tools and guidelines for emergency works associated with unexpected finds procedure. Community notification for unexpected finds will be undertaken in consultation with relevant stakeholders and Sydney Metro communication team. If required, crisis communication management system outlined in section 8.20 Crisis or incident communications in the OCCS will be implemented.

This may involve communication tools such as (but not limited to):

- Site signage and visual mitigations for exclusion zone requirement around site if applicable.
- Display of asbestos removal works in progress signs around site
- Community notification such as letterbox drop and etc if required

Attachment 1 - Delta IMS Procedure 37 Unexpected Find Procedure

PROCEDURE: UNEXPECTED FIND PROCEDURE

1. SCOPE

This procedure is to provide advice to an unidentified and unexpected (situation) find/s in the workplace, to ensure that unexpected finds (e.g. asbestos) are controlled and managed so as to prevent harmful effects to personnel from short-term irritation to long-term health effects.

2. KEY REQUIREMENTS

This procedure shall apply to all operations performed on Demolition/Civil sites where Deltahas responsibility for unexpected finds.

3. DEFINITIONS

Asbestos-related	Any material, object, product or debris that contains asbestos.
<i>Foreman - Supervisor</i> <i>Project manager</i>	Also means contractor and sub-contractor
<i>Asbestos Removal</i>	Asbestos removal work requires the appointment of a Principal Contractor. Asbestos removal work is a high-risk construction activity.
<i>Asbestos Material Report</i>	A report by an appropriately qualified person which states: <ul style="list-style-type: none"> • Where and what the types of materials that were found; • The form of the materials. • The condition of the material (i.e. friable, poorly bonded, unstable). • The potential health risks to building occupants.
<i>Asbestos Register</i>	A register that must be kept by the owner of the building and which must: <ul style="list-style-type: none"> • Contain information, including any changes/updates, from the Asbestos Material Report. • Be available for inspection by any person requiring inspection. • Be available to all maintenance/building contractors. • Be available to any contractors.
<i>Bonded ACM (B class)</i>	When asbestos fibers are bonded in another material, such as cement or resin binder, it is known as bonded ACM. Bonded ACM cannot be crumbled, pulverised or reduced to a powder by hand pressure when dry. Asbestos cement (AC) sheeting is the most common form of bonded ACM in buildings.
<i>Friable ACM (A class)</i>	Some materials containing asbestos are potentially more hazardous than others. These materials are described as friable which means they crumble easily and have the potential to release asbestos fibres into the air. When dry, friable ACM can be crumbled, pulverised or reduced to powder by hand pressure. It is this friability that releases asbestos fibers into the atmosphere and increases the risk of exposure. For example, sprayed-on fireproofing is considered a friable ACM as it is very easily crumbled to a powder.
Competent person	A competent person is a person who possesses adequate qualifications, such as suitable training and sufficient knowledge, experience or skill, to perform a specific task safely.
Unidentified and or Unexpected find	A sudden unexpected event, (unidentified material) including work required by non-routine failures of equipment, that may result in persons being exposed to unidentified or hazardous materials including airborne asbestos fibres. Unexpected also means unidentified and vice versa

4. AUTHORITY

National QSE Manager

- Approve this procedure
- Oversee this procedure

5. UNEXPECTED (ASBESTOS) FIND

Subject	Action Steps	Responsible
<p>Procedural steps to follow when an unexpected find occurs</p>	<p>In an unexpected situation, the demolisher must cease work in the immediate vicinity of the unexpected find and report their findings to their supervisor. The unexpected find area should be barricaded off until the unexpected find sample can be verified. Turn off fans and air-conditioners and seal ducts and vents to prevent the spread of any dust, use water spray to dampen the unexpected find clothing considered affected by airborne particles should remove their outer clothing and place clothing in a 200-micron thick plastic bag marked asbestos waste, the bag should be goose-neck wrapped for disposal to an asbestos approved collection site. An employer or self-employed person must not remove from a workplace protective clothing contaminated with asbestos unless the clothing is—</p> <ul style="list-style-type: none"> (a) disposed of— <ul style="list-style-type: none"> (i) as soon as is reasonably practicable; and (ii) in an appropriate manner that eliminates the release of airborne asbestos fibres; and (iii) at a waste disposal site licensed by the Environment Protection Authority; or (b) laundered at a commercial laundry and for that purpose the clothing is contained so as to eliminate the release of airborne asbestos fibres and the exterior of the container— <ul style="list-style-type: none"> (i) is decontaminated before being removed from the work area; and (ii) indicates the presence of asbestos before the clothing is transferred to the laundry. <p>Sampling should be arranged for a competent person to take a sample of the material and have it analysed by a National Association of Testing Authorities (NATA) accredited laboratory.</p>	<p>Project Manager</p>
<p>Procedural steps to follow when an unexpected find occurs, continued</p>	<p>In an unexpected find situation, the contractor involved in the work must not later than 24 hours after identifying the asbestos removal work, notify the Authority of the unexpected find.</p> <p>A notification must be in writing and include the information below:</p> <ol style="list-style-type: none"> 1. The name, registered business name, Australian Business Number, licence number and contact details of the licence holder. 2. The name of the supervisor who will oversee the asbestos removal work and the supervisor's contact details. 3. The client name and contact details. 4. The name, including registered business or corporate name, and address of the workplace and type of workplace where the asbestos removal work will be performed including the specific location if it is a large workplace. 5. The date of notification. 	<p>Project Manager</p> <p>Operations Manager</p>

Subject	Action Steps	Responsible
Procedural steps to follow when an unexpected find occurs, continued	<p>6. The commencement date and estimated duration of the asbestosremoval work.</p> <p>7. Whether the asbestos is friable asbestos-containing material or non-friable asbestos-containing material.</p> <p>8. If friable asbestos-containing material is to be removed, details of the way that the area where the asbestos removal work is to be performed will be enclosed.</p> <p>9. The type of asbestos-containing material.</p> <p>10. The estimated quantity of asbestos to be removed.</p> <p>11. The number of employees who will perform the asbestos removalwork.</p> <p>12. Details of training and experience of those individual employees, ifdifferent to the information notified previously.</p> <p>13. The date of any asbestos register or employer's asbestos register used to prepare the asbestos control plan.</p> <p>The Authority may vary the notification requirements by including a specific condition in a licence with respect to the notification. Additionally, the Project Manager and the Operations Manager must inform the National QSE Manager</p>	<p>Project Manager</p> <p>Operations Manager</p>
Limited asbestos removal work without licence permitted	<p>An employer or self-employed person may perform asbestos removal work in relation to non-friable asbestos-containing material if—</p> <p>(a) the area of asbestos-containing material to be removed does notexceed 10 square metres in total; and</p> <p>(b) the total time over which asbestos removal work is performed in any period of 7 days does not exceed 1 hour.</p>	Project Manager
Duty to inform	<p>An employer at a workplace must, before asbestos removal work commences at the workplace, inform employees in the immediate and adjacent areas of the workplace of the proposed removal work.</p>	Project Manager
Identification of asbestos-related activities	<p>An employer must identify whether an asbestos-related activity is being carried out at the employer's workplace.</p>	Project Manager
Uncertainty as to presence of asbestos	<p>If there is uncertainty (based on reasonable grounds) as to whether an activity is an asbestos-related activity, the employer must—</p> <ul style="list-style-type: none"> • assume that asbestos is present; or • arrange for analysis of a sample to be undertaken 	Project Manager
Asbestos register must be obtained	<p>If any asbestos-related activities are carried out at an employer's workplace, the employer must obtain—</p> <ul style="list-style-type: none"> • a copy of the asbestos register in relation to the activities; or • if there are other employers at the workplace where the activities are carried out, a copy of the employer's asbestos register of each of those other employers <p>The relevant asbestos-related activities are:</p> <ul style="list-style-type: none"> • research involving asbestos • sampling or analysis involving suspected asbestos • the enclosing or sealing of asbestos • hand drilling and cutting of asbestos-containing material 	Project Manager

Subject	Action Steps	Responsible
	<ul style="list-style-type: none"> if no period has been determined by the Authority, 30 years 	
<p>Decontamination facilities</p> <p>Decontamination facilities, continued</p>	<p>An employer carrying out an asbestos-related activity must ensure that a person does not remove personal protective clothing or personal protective equipment that is likely to be contaminated with asbestos from the work area used for the asbestos-related activity unless the clothing or equipment is decontaminated or contained before its removal.</p> <p>An employer carrying out an asbestos-related activity must ensure that any equipment (other than personal protective equipment) that is used for the asbestos-related activity and that is likely to be contaminated with asbestos is—</p> <ul style="list-style-type: none"> decontaminated before removal from the work area used for the asbestos-related activity placed in a sealed container, the exterior of which is decontaminated before the container is removed from the work area used for the asbestos-related activity 	<p>Supervisor Project manager</p>
<p>Waste containment</p>	<p>An employer carrying out an asbestos-related activity must ensure that—</p> <ul style="list-style-type: none"> any asbestos derived from or associated with the activity, and that is no longer required in connection with the activity, is contained so as to eliminate the release of airborne asbestos fibres the exterior of the container— <ul style="list-style-type: none"> is decontaminated before being removed from the work area used for the activity indicates the presence of asbestos 	<p>Foreman Supervisor Project manager</p>
<p>Disposal of asbestos waste</p>	<p>An employer carrying out an asbestos-related activity must ensure that asbestos waste is—</p> <ul style="list-style-type: none"> disposed of as soon as is reasonably practicable disposed of in an appropriate manner that eliminates the release of airborne asbestos fibres disposed of at a waste disposal site licensed by the Environment Protection Authority 	<p>Foreman Supervisor Project manager</p>
<p>Laundering of clothing contaminated with asbestos</p>	<p>An employer carrying out an asbestos-related activity must provide for the laundering of personal protective clothing that is used for an asbestos-related activity and that is likely to be contaminated with asbestos and that is not contained and disposed. If the employer arranges for personal protective clothing that is likely to be contaminated with asbestos to be laundered at a commercial laundry, the employer must ensure that—</p> <ul style="list-style-type: none"> the clothing is contained so as to eliminate the release of airborne asbestos fibres; and the exterior of the container— <ul style="list-style-type: none"> is decontaminated before being removed from the work area; and indicates the presence of asbestos before the clothing is transferred to the laundry 	<p>Project manager</p>
<p>Provision of information to job applicants</p>	<p>An employer must provide each applicant who applies for employment with the employer to carry out an asbestos-related activity with information about the nature of the hazard and the risks associated with exposure to airborne asbestos fibres.</p>	<p>Project Manager</p>

Subject	Action Steps	Responsible
Training record	An employer must make a record of training provided in relation to carrying out asbestos-related activities and retain that record for so long as it is applicable	QSE Manager Project Manager

6. NOTIFICATION

A sudden, unexpected find, including work required by non-routine failures of equipment, that may result in persons being exposed to airborne asbestos fibres; or an unexpected breakdown of an essential service (including gas, water, sewerage, electricity and telecommunications) that requires immediate rectification to enable continuance of that service. In an unexpected situation, the asbestos licence holder must, not later than 24 hours after commencing asbestos removal work, notify the Authority of the removal work in accordance with legislation.

7. WILDLIFE

Subject	Action Steps	Responsible
Wildlife and Protected species	<p>Kangaroo: If the kangaroo approaches, turn your body sideways, exposing a narrow profile to the animal and protecting your face and organs. Raise your hands and lean your head away from the animal to minimize the chances of being scratched across the face by the kangaroo's nasty claws. Retreat, but do not turn your back and run.</p> <p>Snake: If you discover a snake, do not approach it closely. If you step on a snake or are very close to a snake then move away quickly. If the snake is only about a meter away, freeze at first and see the snake's reaction - it will likely look for an escape route. If it is cornered, back away slowly.</p> <p>Bats: Do not be alarmed. Like most wild animals, bats are shy. You are advised to leave bats alone. They will fly away after they have done feeding. As bats are drawn to fruit trees such as Chiku (Manilkara zapota), especially when they are fruiting, residents are advised to harvest the fruits within their premises. Bats are shy and will usually not attack humans unless they feel threatened or are attacked. You are advised to leave bats alone, they will usually fly off after feeding. To discourage bats from visiting your property, install bright outdoor lights as they prefer dark places.</p> <p>Fox: If you encounter a fox or dingo who does not immediately run away, make some noise. Yell, clap your hands, wave your arms, stomp your feet—make your presence felt, but do not approach or chase the animal.</p> <p>Bull: Use your common sense and instincts when handling or walking in a pasture with a bull in it, to avoid getting charged at the bull, do not instigate him nor tease him. Climb the nearest tree if you can, if you are or end up in a tree area, try to keep a large tree between you and the bull and stay close to the fence.</p> <p>Pigeons: Pigeons are a problem because their droppings stain buildings and public amenities. They can also spread diseases to humans. In some areas, you can be fined for feeding pigeons. If you have a problem with pigeons in your neighbourhood or home, contact your town council or estate manager. You can also hire a pest control company.</p>	Project Management Team

8. REFERENCE

- OHS/OSH/WHS Act - OHS/OSH/WHS Regulations
- Australian Standard 1319: 1994 Safety Signs for the Occupational Environment Australia/New Zealand Standard 1715: 1994 Selection Use and Maintenance of Respiratory Protective Devices
- Australia/New Zealand Standard 1716: 2003 Respiratory Protective Devices
- Australian Standard 3544: 1988 Industrial Vacuum Cleaners for Particulates Hazardous to Health
- Australian Standard 4260: 1997 High Efficiency Particulate Air (HEPA) Filters – Classification, Construction and Performance
- WorkSafe Australia - Code of Practice for the Safe Removal of Asbestos NOHSC: 2002 (2005).
WorkSafe Australia - Code of practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)] AS 2601-2001 Demolition of Structures
- Environmental Protection Act
Environmental Protection
Regulations Planning and
Development Act
- Public Health Act
- Managing Asbestos in Workplaces Compliance Code (VWA)
Removing Asbestos in Workplaces Compliance Code (VWA)
Coveralls used for Asbestos Removal (VWA)
- Asbestos-A Handbook for Workplaces (VWA)
Asbestos Removal Application Package (VWA)
Notification of Asbestos Removal (VWA)
- COP for the safe removal of asbestos (NOHSC)
- COP for the management & control of asbestos in workplaces (NOHSC)
COP How to safely remove asbestos in the workplace (QLD)
- COP How to safely remove asbestos (NSW)
- COP How to manage and control asbestos in the workplace (SA)

Attachment 2 – Unexpected Find Process Flow (excerpt from Sydney Metro IMS Waste Classification Procedure (SM-20-00040677))

