

# WAVERLEY COUNCIL



# ASBESTOS MANAGEMENT PLAN

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# 1 Introduction

Waverley Council (Council) is committed to providing its workforce with a working environment that is safe, healthy and as free from risk as possible. The safety of our employees will always be one of our highest priorities and a key factor in the continued success of the organisation.

As part of this commitment, Council has recognised that asbestos related issues must be adequately addressed. Council is aware that Council owned property contains asbestos in a wide variety of types and applications, and has determined to prepare procedures designed to effectively manage any asbestos issue that may arise. The purpose of the Asbestos Management Plan (AMP) is to address Council's legal obligation under the NSW Occupational Health and Safety Act 2000, as it relates specifically to the presence of asbestos on Council owned or leased property.

The AMP is a working document designed to effectively manage and minimise asbestos related health risks to personnel working on or visiting Council sites. The AMP is to be read in conjunction with existing asbestos survey reports prepared for Council owned or leased property.

## 2 Objectives

It is the ultimate goal of Council is to have an asbestos-free workplace. This is a long-term plan. In the interim, Council intends to manage asbestos hazards based on prioritisation and assessment of risk. Currently, a comprehensive asbestos survey program of Council sites identifies asbestos situations and the potential for personnel on site, to be exposed to airborne asbestos. This AMP details the Council's approach towards managing the asbestos hazards identified at its workplaces, by documenting procedures designed to minimise the risk of exposure to asbestos.

This applies to all Council owned or leased property, for maintenance personnel, contractors, construction workers and other visitors. This AMP has been developed in line with the National Occupational Health and Safety Commission's 'Code of Practice for the Management and Control of asbestos in Workplaces' [NOHSC: 2018 (2005)], which states:

*“The purpose of an AMP is to help persons with control of premises to comply with asbestos prohibition and prevent exposure to airborne asbestos fibres while ACM remain in the workplace.”*

## 3 Scope and Limitations

This document has been developed specifically for Council and applies only to Council owned and leased property. It has been developed to manage and minimise asbestos-related health risks to personnel working at or visiting Waverley Council sites. The AMP must be read in conjunction with the asbestos survey report prepared for each building or structure.

## 4 Definitions

**Accredited Laboratory:** means a testing laboratory accredited by the National Association of Testing Authorities, Australia (NATA) or a similar accreditation authority, or otherwise granted recognition by NATA, either solely or in conjunction with one or more other persons.

**Air Monitoring:** means airborne asbestos fibre sampling to assist in assessing exposures and the effectiveness of control measures. Air monitoring includes exposure monitoring, control monitoring and clearance monitoring.

*Note: Air monitoring should be undertaken in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC: 3003 (2005)]*

**Airborne Asbestos Fibres:** means any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable asbestos fibres (those fibres less than 3 µm wide, more than 5 µm long and with a length to width ratio of more than 3 to 1) are counted.

*Note: Airborne asbestos fibres are generated by the mechanical disintegration of Asbestos-Containing Materials (ACM) and subsequent dispersion of the fibres into the air from activities such as mining and the use, removal and disposal of asbestos and ACM. Airborne dust has the potential to contain respirable asbestos fibres.*

**ALARP:** means As Low As Reasonably Practicable. The exposure of workers and others to asbestos must be eliminated or otherwise kept as low as reasonably practicable, and in all circumstances must be kept below the NES.

**Asbestos:** means the fibrous form of mineral silicates belonging to the serpentine and amphibole groups of rock-forming minerals, including actinolite, amosite (brown asbestos), anthophyllite, chrysotile (white asbestos), crocidolite (blue asbestos), tremolite, or any mixture containing one or more of the mineral silicates belonging to the serpentine and amphibole groups.

**Asbestos Cement (AC):** means products consisting of sand aggregate and cement reinforced with asbestos fibres (e.g. asbestos cement pipes and flat or corrugated asbestos cement sheets).

**Asbestos-Containing Material (ACM):** means any material, object, product or debris that contains asbestos.

**Asbestos Removalist:** means a competent person who performs asbestos removal work.

*Note: An asbestos removal licence is required for the removal of friable ACM and any ACM over 10m<sup>2</sup>.*

**Asbestos Vacuum Cleaner means:** a vacuum cleaner that is fitted with a High Efficiency Particulate Air (HEPA) Filter and complies with Australian Standard 3544-1988 Industrial Vacuum Cleaners for Particulates Hazardous to Health. A domestic vacuum cleaner is not suitable for use with asbestos.

**Asbestos Waste:** means all removed ACM and disposable items used during the asbestos work, such as plastic sheeting used to cover surfaces in the asbestos work area, disposable coveralls, disposable respirators, rags used for cleaning.

**Asbestos Work Area:** means the immediate area in which work on ACM is taking place. The boundaries of the asbestos work area must be determined by a risk assessment.

*Note: The asbestos work area should include the boundaries of an enclosure or barriers set up to warn or restrict access to the area where the work is being undertaken.*

**Breathing Zone:** means a hemisphere extending in front of a person's face, with a radius of 300 mm from the midpoint of an imaginary line between the ears.

**Bonded asbestos material:** means asbestos material is any material that contains asbestos in a bonded matrix. It may consist of Portland cement or various resin/binders and cannot be crushed by hand when dry. Asbestos cement (AC) products and electrical metering boards in good condition are examples of bonded asbestos material.

A large number of products made from asbestos cement are still found in Australian buildings. These products include:

- flat (fibro), corrugated or compressed asbestos cement sheeting asbestos cement pipes such as electrical, water, drainage and flue pipes.

**Clearance Inspection:** means an inspection, carried out by a competent person, to verify that an asbestos work area is safe to be returned to normal use after work involving the disturbance of ACM has taken place. A clearance inspection must include a visual inspection, and may also include clearance monitoring and/or settled dust sampling.

*Note: A clearance inspection should only be carried out when the work area is dry.*

**Clearance Monitoring:** means air monitoring using static or positional samples to measure the level of airborne asbestos fibres in an area following work on ACM. An area is 'cleared' when the level of airborne asbestos fibres is measured as being below 0.01 fibres/mL.

*Note: Static or positional samples are taken at fixed locations, which are usually between one and two metres above floor level.*

**Competent Person:** means a person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of the specific work.

*Note: A licence may be required for some of the tasks described in this document as requiring a competent person.*

**Control Level:** means the airborne concentration of a particular substance that, if exceeded, indicates a need to implement a control, action or other requirement. Control levels are generally set at no more than half the NES for the substance. Control levels are occupational hygiene 'best practice', and are not health-based standards.

*Note: The first Control Level for Asbestos is set at 0.01 fibres/mL of air.*

**Control Monitoring:** means air monitoring, using static or positional to measure the level of airborne asbestos fibres in an area during work on ACM. Control monitoring is designed to assist in assessing the effectiveness of control measures. Its results are not representative of actual occupational exposures, and should not be used for that purpose.

*Note: Static or positional samples are taken at fixed locations, which are usually between one and two metres above floor level*

**Dust and Debris:** means visible particles, fragments or chunks of material, large and heavy enough to have settled in the work area, that are likely to have originated from ACM.

**Exposure Monitoring:** means air monitoring to determine a person's likely exposure to a hazardous substance. Exposure monitoring is designed to reliably estimate the person's exposure, so that it may be compared with the NES.

*Note: Exposure monitoring includes airborne asbestos fibre sampling, analysis, estimation of time-weighted average exposure and interpretation. Samples are taken within the breathing zone and are usually obtained by fastening the filter holder to the worker's jacket lapel.*

**Friable Asbestos Material:** Friable asbestos material is any material that contains asbestos and is in the form of a powder or can be crumbled, pulverized or reduced to powder by hand pressure when dry. Sprayed limpet, millboard, pipe and boiler lagging are examples of friable asbestos.

*Note: This may include ACM that have been subjected to conditions that leave them in a state where they meet the above definition, such as weathering, physical damage, water damage etc.*

**Hazard:** means any matter, thing, process or practice that may cause death, injury, illness or disease.

**Health Surveillance:** means the monitoring of a person to identify any changes in their health as a result of exposure to a hazardous substance. It does not include exposure monitoring.

**High Efficiency Particulate Air (HEPA) Filter:** means a disposable, extended media, dry type filter, in a rigid frame, with a minimum filtration efficiency of 99.97% for nominal 0.3 µm diameter thermally generated dioctylphthalata (DOP) particles or an equivalent efficiency for a specified alternative aerosol and with an initial maximum resistance to airflow of 250 pa when tested at its rated airflow capacity (see Australian Standard 4260-1997 High Efficiency Particulate (HEPA) Filters – Classification, Construction and Performance).

**In situ:** means fixed or installed in its original position, not having been moved.

**Inaccessible Areas:** means areas that are difficult to access, such as wall cavities and the interiors of plant and equipment.

**Membrane Filter Method (MFM):** means the technique outlined in the NOHSC Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003 (2005)].

**National Exposure Standard (NES):** means an airborne concentration of a particular substance, within the worker's breathing zone, which according to current knowledge, should not cause adverse health effects or undue discomfort to nearly all workers. NES are established, from time to time, by the National Occupational Health and Safety Commission (NOHSC) and are published on the NOHSC website.

**Person with Control:** means, in relation to premises, a person who has control of premises used as a workplace. The person with control may be:

- (a) the owner of the premises
- (b) a person who has, under any contract or lease, an obligation to maintain or repair the premises
- (c) a person who is occupying the premises
- (d) a person who is able to make decisions about work undertaken at the premises, or

(e) an employer at the premises

**Personal Protective Equipment (PPE):** means equipment and clothing that is used or worn by an individual person to protect themselves against, or minimise their exposure to, workplace risks. It includes items such as facemasks and respirators, coveralls, goggles, helmets, gloves and footwear.

**Respirable Asbestos Fibre:** means a fibre of asbestos small enough to penetrate into the gas exchange regions of the lungs. Respirable asbestos fibres are technically defined as fibres that are less than 3 µm wide, more than 5 µm in length and have a length to width ratio of more than 3 to 1.

**Risk:** means the chance of something happening that will have an impact upon objectives. It is measured in terms of consequence and likelihood.

*Note: In this AMP, Risk relates to potential illness or disease arising from exposure to Airborne Asbestos Fibres.*

**Settled Dust Sampling:** means the sampling and analysis of settled surface dust to provide an indication of cleanliness following disturbance of ACM. Settled dust sampling does not provide an indication of risk to health. Sampling techniques include the use of adhesive tape, wipe or micro-vacuum (using an air sampling pump and filter). Analysis can be by polarised light microscopy (PLM) or transmission electron microscopy (TEM).

*Note: Contamination may occur as a result of deterioration of, or work processes involving ACM.*

**Shadow Vacuuming:** means the operation of an asbestos vacuum cleaner that is either directly attached to a tool or hand-held by a second worker as close as possible to the source of released asbestos fibres throughout the use of the tool.

**Structure:** means any construction, whether temporary or permanent.

*Note: A structure includes a bridge, erection, edifice, wall, chimney, fence, earth works, reclamation, ship, floating structure or tunnel.*

**Work:** means any activity, physical or mental, carried out in the course of a business, industry, commerce, an occupation or a profession.

**Worker:** means a person who does work, whether or not for reward or recognition.

*Note: 'Workers' include persons working under contracts of employment, apprenticeships, traineeships and other contracts of service, but they also include other persons subject to direction by persons with control, such as volunteers and work experience students.*

**Workplace:** means any place where a person works.

## 5. Health Hazards

### 5.1 Causes

Asbestos fibres are made up of many very fine fibrils, so that as asbestos is further processed or disturbed, the airborne fibres become progressively finer and more



hazardous. The most dangerous fibres are the smallest ones which are invisible to the naked eye, but which penetrate the deepest part of the lungs.

Chrysotile fibres are curly and are less likely to become airborne to the same extent as the straight amphibole fibres such as amosite and crocidolite.

## 5.2 Effects

Breathing in the fibres brings a risk of asbestosis, lung cancer, and mesothelioma. There is evidence that asbestos causes gastrointestinal and laryngeal cancers in humans, but to a far lesser extent than lung cancer.

Asbestos-related diseases have a delay or lag period usually of the order of 20 to 40 years between first exposure and onset of symptoms and detection of the disease. Asbestos disease can appear or progress even after a person is no longer exposed.

**Asbestosis** is the scarring of lung tissue that can result from the inhalation over a period of years of substantial amounts of asbestos. This results in breathlessness, which may lead to disability, and in some cases early death. Minor changes in X-ray pictures may exist for many years without symptoms or progression.

**Lung cancer** risk is related to the amount of fibre inhaled and is also greatly increased in persons who also smoke cigarettes. No safe level of asbestos exposure for lung cancer has been identified.

**Mesothelioma** is a cancer of the pleura (outer lung lining) or of the peritoneum (the lining of the abdominal cavity). The risk of mesothelioma is less with chrysotile than with other types of asbestos. Both pleural and peritoneal mesothelioma can result from exposure to amosite and crocidolite. Exposure of humans to chrysotile alone has caused few pleural mesotheliomas, and has never produced peritoneal mesothelioma without exposure to either amosite or crocidolite. Mesothelioma rarely occurs in less than 15 years from first exposure, and most cases occur over 30 years after first exposure.

## 6 Risk Assessment

The asbestos risk assessment process entails identifying, analysing, evaluating, controlling and monitoring sources of asbestos within buildings or other structures. Asbestos within a building represents a health risk to people only when the asbestos fibres have become airborne, and are subsequently inhaled. The risk to health increases as the number of fibres inhaled increases, that is, the health risk is related to the dose, or level of exposure. Dose is a function of the amount, or concentration, of airborne asbestos fibres, and the duration of exposure. Asbestos that is in a stable matrix, or effectively encapsulated or sealed, and remains in a sound condition while left undisturbed, represents a negligible asbestos-related health risk. It is necessary to differentiate between 'asbestos hazard' and 'asbestos risk'. 'Hazard' indicates potential for harm, while 'risk' refers to the probability of that harm becoming actual. For example, the presence of asbestos in a building is a hazard, but while that asbestos remains in sound condition and does not release fibres into the air, the risk is negligible.

A qualitative asbestos risk assessment is undertaken each time an asbestos survey of Council buildings or structures is conducted. Each asbestos situation is allocated either a 'High', 'Medium' or 'Low' risk rating. These ratings are defined as follows:

**High Risk:** Friable (un-bonded) asbestos material that has deteriorated significantly. The material is readily accessible and prone to further disturbance, or Unsealed friable asbestos material located in air conditioning systems.

**Medium Risk:** Minor deterioration of the asbestos material is evident and/or the asbestos material is prone to mechanical disturbance due to routine building activity and/or maintenance.

**Low Risk:** Asbestos material shows no or very minor signs of damage/deterioration. Regular access to the asbestos material is unlikely to cause significant deterioration, or the material is adequately sealed.

Should materials of unknown composition, or materials suspected of containing asbestos, be encountered on site, and are not documented in the existing asbestos register, such materials should be sampled and treated as if they were asbestos until sample analysis confirms otherwise.

In the event that additional asbestos is identified, an appropriately qualified and competent person shall then conduct a risk assessment. For example, in the event that demolition or refurbishment works are to be carried out in areas previously not inspected for the presence of asbestos, such as inaccessible wall cavities or beneath floors, an inspection and risk assessment should be performed by an appropriately qualified person prior to the commencement of the planned demolition/refurbishment works.

## 7 Regulatory Requirements

The control of asbestos-related health risks in the New South Wales workplace is enshrined in several pieces of legislation. Any asbestos-related issues associated with Council owned or leased property, including the removal, encapsulation, transport, disposal or otherwise potential disturbance of asbestos materials, shall be performed in accordance with all relevant State and Commonwealth Acts, Regulations, Advisory Standards, Codes of Practice and industry standards, including, but not limited to, the following:

- Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)]
- Code of Practice for the Safe Removal of Asbestos [NOHSC: 2002 (1998)]
- Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust [NOHSC: 2003 (1988)]
- NSW Code of Practice for the Control of Workplace Hazardous Substances. [No. 0153 2<sup>nd</sup> Edition (2006)]
- NSW Occupational Health and Safety Act 2000
- NSW Occupational Health and Safety Regulation 2001

## 8 Responsibilities

This AMP is intended to be integrated into the existing Waverley Councils OH&S programs and procedures. The following key personnel are responsible for the implementation of the control measures discussed in this document:

### 8.1 Organisational Responsibilities

#### Council

Council has the responsibility of ensuring employees and other persons are not placed at risk due to the potential exposure of asbestos at a workplace or Council premises. In particular, Council is to ensure the following matters are addressed:

- any work involving asbestos must be carried out in accordance with OHS Regulation, Part 8.7 and *Guide to the Control of Asbestos Hazard in Building and Structures*, National Occupational Health and Safety Commission 3002 (NOHSC) (1988), and *Code of Practice for the Safe Removal of Asbestos* (NOHSC) 2002 (1988)
- all employees are informed of the potential hazards and risks associated with asbestos
- a register is prepared which provides details of the following:
  - \* location of all asbestos and material containing asbestos in Council premises
  - \* the type of asbestos and condition of material
  - \* any assessments concerning the asbestos that took place before the work is carried out
  - \* details as of who carried out the work
  - \* dates when the work was carried out

### **Managers**

Managers are responsible for ensuring that the procedures below are implemented within their workgroup. In particular managers are to ensure:

- all premises containing asbestos or asbestos products are listed in the register;
- there is in place a system for the signage of the areas
- employees have been instructed about the importance of not disturbing or breaking friable asbestos products
- as required, arrangements are made for monitoring of contaminated atmospheres

### **Supervisors**

Supervisors are responsible for ensuring that tasks are carried out according to the procedures. In particular supervisors are to ensure:

- employees have been informed and are aware of the hazards associated with asbestos and products containing asbestos
- employees have been instructed in the correct procedures when working in areas which have been identified as containing asbestos or asbestos containing products

### **Employees**

Employees must carry out all activities in a safe manner with regard to Council procedures and the training they have undertaken. In particular employees are to:

- be aware of the hazards associated with asbestos and products containing asbestos
- be aware of the asbestos register and how to access it
- observe the proper procedures when working in areas which have been identified as containing asbestos or asbestos related products
- not to interfere with, crush, break or pulverise any products which have been labelled as asbestos, or containing asbestos

## **8.2 Individual / Specific Responsibilities**

### **Divisional Manager Business Services and Properties Division**

Has a responsibility to ensure registers of hazardous materials are maintained in a form that are accessible to staff. The DM BS&PD also has a responsibility to ensure occupants of Council buildings are aware of those hazardous materials, through formal communications and signage. Further the DM BS&PD has a responsibility to regularly survey the conditions of those hazardous materials, maintain the register and advise of any changes in conditions.

### **Safety Manager (Asbestos Contact Officer)**

The Safety Manager is to act as the Asbestos Contact Officer. Where suspected hazardous materials are located the Safety Manager will ensure that no further persons are exposed to the potential ACM by placing appropriate controls to prevent further exposure. The Safety Manager with a member of BS&P Division will organize visual inspection of the materials to determine if the suspect material contains asbestos. This may require testing from a NATA certified laboratory.

The Safety Manager shall ensure that any personnel (contractor or employee) who come into contact with friable asbestos make the correct injury / incident notification to their employer. They will further ensure that notification has been made to the Dusts Diseases Board of NSW within 48 hours of the incident.

The Safety Manager will make notification to the Maintenance and Construction Division where required, to organize removal of the ACM through a licensed contractor.

## **9 Principles of Asbestos Management**

### **9.1 General Principles**

The Waverley Council's principles of asbestos management have been adapted from general principles published by the National Occupational Health and Safety Commission (2005). These principles are summarised below:

- The ultimate goal is for Council premises to be free of ACM
- Council's preference will be to remove all ACMs during renovation, refurbishment and/or maintenance where this is practicable
- Removal of asbestos will be subject to priority setting, determined by the condition and location of the asbestos as well as scheduled works
- Where appropriate, products containing asbestos shall be labeled accordingly (refer section 11.4).
- All identified and presumed ACM will be recorded in the Council Asbestos Register (Hazardous Materials Register). The register is available through Business Services and Properties Division
- A competent person will conduct a risk assessment for all identified and presumed ACM (refer section 6).
- Asbestos presents a risk only when it is airborne. The risk to health increases as the number of fibres inhaled increases
- Control measures will be established to prevent any exposure to airborne asbestos fibres (refer section 12)
- No person shall be exposed to the risk of inhalation of asbestos in the course of employment without being provided with full information of the occupational health and safety consequences of exposure and appropriate control strategies. The provision of this information will be recorded in the permit to work
- Asbestos removalists must abide by the Code of Practice for the Safe Removal of Asbestos [NOHSC: 2002 (1998)]
- The recognised occupational exposure standard for asbestos is that adopted by the National Occupational Health and Safety Commission. The method used to measure exposure to asbestos is the Membrane Filter Method as endorsed by the National Commission
- Construction jobs including refurbishments impacting on asbestos are to have the asbestos removed as part of the job.

## 9.2 Hierarchy of Control

The general principles of asbestos management are broadly covered by four separate phases and follow the risk assessment process. These are:

1. Identification phase
2. Evaluation phase
3. Control phase, and
4. On-going monitoring/re-assessment

These phases are best illustrated by the flow chart in Figure 1.

Procedures need to be designed and implemented to appropriately control any asbestos hazard, to ensure that personnel are not exposed to asbestos to an extent likely to cause danger to health. The procedures or control measures reflect the follow hierarchy of controls:

In order of preference:

1. Elimination/removal
2. Isolation/enclosure/sealing
3. Engineering controls
4. Administrative controls (Safe Work Method Practices)
5. Personal Protective Equipment (PPE)

A combination of these procedures may be required to adequately control ACM.

## 9.3 Control of Asbestos Hazards

The control of asbestos hazards should utilise the most appropriate method applicable to the particular circumstances. Based upon the assessment of the condition of the asbestos, its potential to suffer damage or mechanically degrade, and the likelihood of exposing people to airborne asbestos, the following control strategies are relevant:

- Leave in-situ (defer action)
- Encapsulation
- Enclosure, and
- Removal

These control strategies are discussed below:

### 9.3.1 Leave in Situ (defer action)

The identification of asbestos in a building does not automatically necessitate its immediate removal. Asbestos in a stable condition and not prone to mechanical damage can generally remain in situ. The asbestos will need to be inspected on a regular basis (determined during risk assessment, generally every one or two years) to ensure its integrity is maintained. It should be labeled with an appropriate warning, and must be removed under controlled conditions prior to demolition or refurbishment works that may disturb the asbestos.

### 9.3.2 Encapsulation or Sealing

Encapsulation refers to the coating of the outer surface of the asbestos material by the application of some form of sealant compound that usually penetrate to the substrate and harden the material. Sealing is the process of covering the surface of the material with a protective coating impermeable to asbestos. Encapsulation or sealing helps protect the asbestos from mechanical damage, and is designed to reduce the risk of exposure by inhibiting the release of asbestos fibres into the airborne environment, and increase the length of serviceability of the product. The use of encapsulation or sealing may be of limited application. It is not considered to be an acceptable alternative to repairing or removing severely damaged asbestos materials.

### 9.3.3 Enclosure

Enclosure involves installing a barrier between the asbestos material and adjacent areas. This is effective in inhibiting further mechanical damage to the asbestos, and friable products such as calcium silicate pipe lagging or sprayed limpet asbestos may be targeted for enclosure where removal is not an option. The type of barrier installed may include plywood or sheet metal products, constructed as boxing around the asbestos.

### 9.3.4 Removal

Removal of asbestos must be performed under certain controlled conditions, depending on the type of asbestos product to be removed. Removal is considered preferable to the other abatement options such as enclosure or encapsulation, as it eliminates the hazard from the work place. The removal process, however, does pose an increased risk to personnel engaged in the removal, and may result in increased airborne fibre levels in adjacent occupied areas if the removal program is not strictly controlled. Asbestos removal is generally an expensive exercise, and can cause major disruptions to building occupants. The removal of asbestos is considered appropriate when the asbestos product is deteriorated, has reached an unserviceable condition, or is at risk of being disturbed, and the other control options are not feasible. Where demolition or refurbishment works are to occur, and this work is likely to impact on asbestos materials, the asbestos must be removed under controlled conditions prior to the commencement of any site works.

Table 1 provides a summary of the relative advantages and disadvantages of each control method, as well as situations in which each may be considered appropriate.

**Table 1: Determination of Appropriate Control Method for Asbestos**

<b>Leave in-situ (Defer)</b>		<b>Encapsulate or Seal</b>	
<b>Appropriate when</b>	<b>Not appropriate when</b>	<b>Appropriate when</b>	<b>Not appropriate when</b>
Negligible risk of exposure	Possibility of deterioration or damage	Removal is difficult or not feasible	Asbestos deteriorating
And		Firm bond to substrate	Application of sealant may cause damage to material
Asbestos inaccessible and fully contained,	Airborne asbestos dust exceeds exposure standard	Damage unlikely	Water damage likely
Or		Short life of structure	Large areas of damaged asbestos
Asbestos stable and not liable to damage		Readily visible for regular assessment	
<b>Advantages</b>	<b>Disadvantages</b>	<b>Advantages</b>	<b>Disadvantages</b>
No initial cost	Hazard remains	Quick and economical for repairs to damaged areas	Hazard remains
Cost of removal deferred	Need for continuing assessment	May be an adequate technique to control release of asbestos dust	Cost for sealing large areas may be similar to removal costs
	Asbestos		Asbestos

	management program required		management program required
			Eventual removal may be more difficult and costly

<b>Enclosure</b>		<b>Removal</b>	
<b>Appropriate when</b>	<b>Not appropriate when</b>	<b>Appropriate when</b>	<b>Not appropriate when</b>
Removal extremely difficult	Enclosure itself liable to damage	Surface friable or asbestos poorly bonded to substrate	Located on complex and inaccessible surfaces
Fidres can be completely contained within enclosure	Water damage likely	Asbestos is severely water damaged or liable to further damage or deterioration	Removal extremely difficult and other methods offer a satisfactory alternative
Most of the surface already inaccessible	Asbestos material cannot be fully enclosed	Located in Air-conditioning duct	
Disturbance to, or entry into enclosure area not likely		Airborne asbestos exceeds exposure standard	
		Other control methods inappropriate	
<b>Advantages</b>	<b>Disadvantages</b>	<b>Advantages</b>	<b>Disadvantages</b>
May minimise disturbance to occupants	Hazard remains	Hazard removed	Increases immediate risk of exposure
Provides an adequate method of control	Need for continuous maintenance of enclosure	No further action required	Creates major disturbance within a building
	Asbestos management program required		High cost, most complex and time consuming method
	Need to remove enclosure before eventual removal of asbestos		Removal may increase fire risk within a building, substitute required
	Precautions necessary for entry into enclosure		Possibility of contaminating whole of building

## 10 Asbestos Survey and Register

Waverley Council has developed a standard asbestos survey report template that will ensure consistent reporting of information when Council buildings or structures are surveyed for asbestos. The standardised asbestos survey report documents the location, item description application, type, approximate quantity and condition of asbestos materials identified during the survey. The report also includes a qualitative risk assessment. Each asbestos situation identified is given a health risk rating, based on the

extent, asbestos type and category, condition and accessibility of the asbestos at the time of the site assessment. **The report will also include a floor plan and photos of the location of asbestos**

Such assessments are only performed by suitably qualified persons/organisations experienced in identifying asbestos. All visible and accessible sources of asbestos identified are documented in tabular format in the asbestos register. Those areas not able to be accessed during the course of the site assessment are also documented. This is important for future reference.

Representative samples of materials suspected of containing asbestos are collected during the assessment. Analysis of these samples will typically be by polarised light microscopy (PLM), supplemented with dispersion staining techniques. Other analytical techniques, such as scanning electron microscopy (SEM), may be required where PLM does not provide a definitive result.

Each survey report is accompanied by sample analysis reports, a photographic record of identified asbestos materials, and background information on typical applications and information on the health effects of asbestos.

The Asbestos register (Hazardous Material Register) is available through the Business Services and Property Division.

## **11 Managing In situ Asbestos**

### **11.1 General**

The management of in situ asbestos is important to ensure asbestos materials are not damaged or deteriorate to such an extent that Council staff; external contractors or visitors are unnecessarily exposed to airborne asbestos fibres. The requirements of the contractor site induction and permit to work system (refer section 12) will aid in the management of in situ asbestos materials. It is also the policy of the Council to incorporate asbestos issues into building works contracts, designed to ensure any asbestos on, or in, Council property is dealt with in the appropriate manner.

### **11.2 Re-inspections**

Re-inspections of asbestos materials remaining on site are to be conducted by an appropriately qualified person. Such re-inspections will comprise a visual assessment of the condition of the materials to determine whether the material remains in a satisfactory condition, or if it has deteriorated since the previous inspection. Such re-inspections will determine if any remedial action, such as encapsulation, isolation or removal of the asbestos materials, is required. Re-inspections will be performed on a regular basis (every one to two years depending on risk assessment). Normally, re-sampling of materials would not be required during re-inspections. If, however, previously unidentified or undocumented asbestos, or materials suspected of containing asbestos, are encountered during the re-inspection process, sampling and analysis will need to be performed. The asbestos register, where necessary, will be updated and re-issued at the completion of the re-inspection work.

### **11.3 Record Keeping**

Council's Business Services and Property Division shall maintain detailed records of all activities and work permits relating to asbestos works, which have been undertaken on Council property. The records kept should include:



- Copies of all asbestos survey reports, including updates and amendments.
- Copies of all 'permit to work' documents
- Site induction records pertaining to the informing of contractors about the presence of asbestos on site, and that such contractors have been appropriately trained in safe work procedures and practices
- Records pertaining to the informing of Council employees about the presence of asbestos on site, and that such employees have been appropriately trained in safe work procedures and practices
- Records of any asbestos abatement works performed on site; Clearance certificates indicating areas are safe to reoccupy after asbestos abatement works; and Asbestos fibre air monitoring results

## 11.4 Labelling

The Waverley Council has implemented a system of labelling throughout Council premises, to clearly identify and provide warning of the presence of asbestos containing materials. Labels must comply with Australian Standards AS1216 and AS1319. Some examples of the standard warning labels are illustrated in **Figure 2. Examples of standard Asbestos warning labels.**

Labels for internal usage must be waterproof and self-adhesive. Weatherproof signage constructed from rigid, hardwearing materials, such as sheet metal, may be required for outdoor applications (e.g. warning signage fixed on, or near, brittle corrugated asbestos cement roof cladding). Alternatively, a spray paint template, including black text on an orange background, may be used where appropriate. The policy of Council is to install self-adhesive labels, or other clear signage, in prominent positions on, or near, asbestos containing materials located in nonpublic areas, where maintenance personnel may operate from time to time. Such areas would typically include plant rooms, ceiling spaces, service ducts and the like. The purpose of such labelling is to immediately bring to the attention of such personnel the presence of asbestos, to avoid the inadvertent mechanical disturbance of the material via maintenance or other works.

In the public areas of Council property, frequented by staff and visitors, it is not intended to install labels with cautionary text. Such areas would include offices and public thoroughfares.

For certain plant and equipment in non-public areas, including insulated air conditioning heater banks and lagged pipe work/vessels, where sampling and analysis has confirmed the in situ insulation material to be asbestos-free, labels indicating 'non-asbestos' material shall be installed to avoid any uncertainty. Asbestos materials installed and accessible in public areas may be highlighted at Council's discretion, using a colour coded labelling system with no cautionary text. The reasoning behind such a system is to alert relevant personnel (e.g. maintenance staff and contractors) to the presence of asbestos in public places, while avoiding the emotive issues that may arise by installing labels with an asbestos warning text.

Council may also require the clear labelling of asbestos materials present in public areas prior to the commencement of refurbishment or demolition work in these areas. This is to ensure such materials are immediately recognised and not damaged during the works, or are removed under appropriate controlled conditions in accordance with all legislative requirements.

## 11.5 Occupational Exposure Standards

It is the aim of Council to keep personal exposure to asbestos as low as reasonably achievable. Where occupational exposure to asbestos is likely to occur, exposure is not to exceed half the occupational exposure standards for asbestos published by the NSW Occupational Health and Safety Regulation 2001.

Occupational exposure is measured using the Membrane Filter Method, by collecting a sample of air from the breathing zone of a person, over a minimum of four hours duration. The current NSW occupational exposure standards is:

Amosite (brown)	0.1 fibres per millilitre
Crocidolite (blue)	0.1 fibres per millilitre
Chrysotile (white)	0.5 fibres per millilitre

Note: The National Occupational Health and Safety Commission (NOHSC) sets the exposure limit for Chrysotile (white) at 1 fibre per millilitre, this is currently under review.

## 12 Safe Work Practices

### 12.1 General

Prior to commencing any works on Council premises, such as demolition, refurbishment or maintenance, the asbestos survey report for the particular building or structure in question must be consulted to determine if any asbestos materials are present which are at risk of being disturbed. If it is documented asbestos materials are present in the area, and may be impacted upon by the proposed works, the asbestos must be removed under controlled conditions, prior to the commencement of any building works. Depending on the nature of the asbestos, abatement options other than removal (such as encapsulation) may be feasible. If unknown materials, or undocumented materials suspected of containing asbestos are encountered during building works, such materials are to be sampled and treated as if they contain asbestos and any work that would impact on that material must immediately cease, pending sampling and analysis by a qualified person. This will allow Council to determine what control methods are required.

Guidelines for dismantling and removal of asbestos can be found in the Code of Practice for the Safe Removal of Asbestos [NOHSC: 2002 (1998)] Available from: <http://www.nohsc.gov.au/PDF/Standards/Codes/AsbestosCode.pdf>

### 12.2 Site Induction

Any external contractor contracted by Council to perform works on or in a building of such an age that asbestos materials may be present, must, prior to commencing work, undergo a Council site induction. Such an induction is designed to alert the contractor to the possible presence of asbestos, and the various issues associated with working with asbestos materials. The asbestos survey report for the building in question will be consulted in the presence of the contractor during the site induction, and it will be determined if any asbestos materials are at risk of being disturbed as a result of the intended works. If this is suspected to be the case, the contractor engaged to perform work on site may require an **Asbestos Work Permit**, prior to commencing the work. The features of the permit to work system are outlined below.

### 12.3 Asbestos Work Permit

If it is determined, after consulting the asbestos register, that asbestos materials are present in the vicinity of the planned works, an Asbestos Work Permit authority will need to be issued to, and signed by, the contractor. Permit to work authorities will only be issued by Business Services and Properties Division, or the person authorised to act on

behalf of the Business Services and Properties Division. Before being issued with an Asbestos Work Permit, individuals will be required to read and understand the AMP as well as copies of relevant asbestos registers. Individuals must be aware of their legal obligations in relation to health and safety specified in the NSW Occupational Health and Safety Act 2000 and the NSW Occupational Health and Safety Regulation 2001.

Where practicable, project personnel should be made aware of the requirements of the AMP prior to tendering to ensure they allow for such requirements when quoting. Workers engaged in the removal of friable asbestos will not be issued with a permit to work unless they are a licenced asbestos Removalist (issued by WorkCover NSW) or, they are working under the direct supervision of a certified asbestos Removalist. The Asbestos Work Permit formally transfers the responsibility for compliance with this AMP and the NSW Occupational Health and Safety Act 2000 and Regulation 2001 to the signatories. The Asbestos Work Permit is designed to ensure appropriate work practices are employed in the vicinity of asbestos containing materials. The Asbestos Work Permit will document what asbestos materials are to be removed, encapsulated or otherwise protected, prior to the contracted maintenance or building works proceeding. The Asbestos Work Permit will also indicate other requirements such as the need for personal protective equipment (PPE), barricading and airborne fibre monitoring.

When a project involves a team of more than one worker, the person in charge of the team will be issued with an Asbestos Work Permit. He/she will be responsible to ensure that his/her workers are aware of their responsibilities. He/she will also be responsible to ensure that each worker's signature appears on the appropriate section of the permit.

When work is completed, or the Asbestos Work Permit expires (whichever occurs first), the permit shall be signed and returned to Business Services and Property Division who will cancel it after ensuring that a safe situation exists. Business Services and Property Division shall be advised immediately of any incidents of non-compliance with the AMP have occurred. Business Services and Property Division will maintain a register of all Asbestos Permits to Work that have been issued and cancelled. It will be a condition of engagement of contractors who are required to work on site that an Asbestos Work Permit be issued and cancelled as required. The format of the Asbestos Work Permit is illustrated in Annexe A.

## **13 Asbestos Removal**

### **13.1 General**

A detailed and site specific work scope and technical specification will be developed prior to the removal of friable asbestos materials from any Council building or structure. The removal of friable asbestos materials will only be performed by a reputable, licensed asbestos Removalist.

The removal of friable asbestos materials will generally require a complete asbestos removal set-up with full plastic enclosure, multi-stage wet decontamination unit and extraction ventilation utilising high efficiency particulate air (HEPA) filters.

### **13.2 Asbestos Removal Communication**

The removal of asbestos will require certain people to be informed of the removal and process. Especially for large asbestos removal jobs certain requirements are to be met to ensure that all necessary people have been informed of the nature of the removal of asbestos and to ensure that the people involved and impacted upon have a better understanding of the process and risk to health.

### 13.2.1 Asbestos removal will be classified into three types:

- **Small Asbestos Removal Job** – This is a small job of less than 10 m<sup>2</sup> that may require a few items to be removed that are small in size, low in risk and in a location that has minimal or no disruption to occupants of the building. It will have minimal visible barricading.
- **Large Asbestos Removal Job** - This is a large job of greater than 10 m<sup>2</sup> that requires more than a few items or large areas of asbestos products to be removed. This may be of a risk higher than low but may not always be the case, is in a location that will cause disruption to the building occupants during the removal process and that has large visible barricading and signage.
- **Demolition Job Discovering Asbestos** – This is a job that did not originally involve the removal of asbestos but during the course of the demolition may discover asbestos.

### 13.2.2 Requirements of removal:

The communication of information to personnel is an integral component of any removal job for asbestos. Information required to be given to people involved in the building affected by the removal should take place as described below:

#### Small Asbestos Removal Job

1. Project Manager to inform the person in charge, of the area, of the removal of asbestos from the building
2. Information may be given via email and must be provided at the earliest known time and at least one week in advance of the actual removal date
3. Information given is to include size, location, risk, removal dates, removal method and any other special precautions
4. All interested parties must agree on the asbestos work area and the removal boundaries before any asbestos removal work may commence
5. The PM must keep a record of the email or communications given

#### Large Asbestos Removal Job

1. Project Manager to inform the person in charge, of the area, of the removal of asbestos from the building
2. Information may be given via email and must be provided at the earliest known time and at least one week in advance of the actual removal date
3. Information given is to include size, location, risk, removal dates, removal method and any other special precautions
4. All interested parties must agree on the asbestos work area and the removal boundaries before any asbestos removal work may commence
5. The PM must keep a record of the email or communications given
6. Person in charge must inform all staff working in the area concerned. This must be in the form of face-to-face meetings. Staff may ask for the project manager to be present during any meetings
7. All information must be made available to staff, including health risks. Staff should be encouraged to ask any questions and voice any fears
8. The Safety Manager and (Asbestos contact person) will be present during these meetings

#### Demolition Job Discovering Asbestos

1. Normal demolition to take place until a suspect material has been found
2. Project Manager and Contractor to liaise with the Safety Manager. Follow process as per the Asbestos Emergency Response Flow Chart located in the Asbestos Management Plan

3. PM to notify person in charge of area of asbestos identification and removal process to take place including: location, dates and times of removal, safety precautions and areas closed

## 13.3 Asbestos Cement Sheet Removal

All work must abide by the Code of Practice for the Safe Removal of Asbestos [NOHSC: 2002 (1998)]

The code can be found at:

<http://www.nohsc.gov.au/PDF/Standards/Codes/AsbestosCode.pdf>

### For removal of less than 10m<sup>2</sup> as a minimum;

- **Do not use power tools.** The use of power tools, abrasive disc cutting tools or high pressure water blasting is strictly prohibited
- If External **do not remove** in high wind
- The work area is to be barricaded off with barricade tape and asbestos warning signs for a minimum distance of 10 metres around the work area
- Wear an Australian Standards Protection Level 2 (P2) minimum half face disposable mask and disposable coverall
- Wet sheets down to reduce dust generation and movement.
- Take the sheets off whole (again, do not use power tools as this may create dust movement)
- Seal sheets in construction grade plastic. This should be a minimum of 200 microns thick (0.2mm)
- Surfaces behind and adjacent to the asbestos cement sheet removed shall be vacuumed using an approved asbestos vacuum cleaner fitted with a HEPA filter, and asbestos cement residues removed from screws, nail heads and adjacent surfaces via the use of a wet mop method etcetera

**Should the asbestos be in powder form or can be crumbled, pulverized or reduced to powder by hand pressure when dry, then an asbestos removal contractor with a WorkCover approved licence is required for its removal.**

**If there is greater than 10m<sup>2</sup> of asbestos cement sheet a NSW WorkCover licensed removalists must be employed.**

## 13.4 Disposal of Asbestos

### 13.4.1 Collection and Storage

All waste containing asbestos must be:

- Kept damp (you must prevent excess runoff water)
- Collected, labelled and sealed using recommended plastic or leak proof containers
- Stored in labelled lined bins or a leak-proof container, and covered
- Stored in a secure area
- Removed from the site as soon as practicable and/or
- Collected and stored in a manner approved by the EPA or an appropriate disposal authority

Note: EPA legislation requires friable asbestos waste to be collected into plastic bags.

### 13.4.2 Transportation

All asbestos waste must be transported:

- In a covered leak-proof vehicle and/or
- In a manner approved by the EPA

Note: Only vehicles licensed by the EPA can transport friable asbestos waste.

### 13.4.3 Disposal

- Asbestos waste in any form must be disposed of in a manner – and at a site – approved by the EPA or an appropriate disposal authority
- Vehicles and their containers must be cleaned before leaving the landfill site
- Contact the Environment Protection Authority (EPA) and local council for transport requirements of asbestos waste and approved waste facilities. Most local councils and WorkCover NSW require tipping receipts for proof of proper disposal

Note: Most landfills will not accept asbestos without prior booking or notification. Always contact the landfill beforehand to find out when asbestos is accepted and any requirements for delivering asbestos to the landfill.

### 13.4.4 Sydney metro asbestos landfills

<b>Belrose</b>	Belrose Waste Management Centre, Crozier Road, Belrose; 1300 651 116
<b>Blaxland</b>	Blaxland Waste Management Facility, Attunga Road, Blaxland; (02) 4782 1104
<b>Camden</b>	Jacks Gully Waste Management Centre, Richardson Road, Camden; 1300 651 116
<b>Horsley Park</b>	Horsley Park Waste Management Facility, 716-56 Wallgrove Road, Horsley Park; (02) 9620 1944
<b>Kemps Creek</b>	SITA Environmental Solutions, 1725 Elizabeth Drive, Kemps Creek; (02) 9756 6899
<b>Kemps Creek</b>	Kari and Ghossayn Pty Ltd, Lot 17 Clifton Avenue, Kemps Creek; (02) 9826 1137
<b>Lucas Heights</b>	Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights; 1300 651 116
<b>Marsden Park</b>	Marsden Park Landfill, 920 Richmond Road, Marsden Park; (02) 9835 4544
<b>St Peters</b>	Alexandria Landfill, 10 Albert Street, St Peters; (02) 9519 5333

## 13.6 Project Supervision

Depending on the nature (size, scope and budget) of the work, Council may also engage a hygienist to oversee the removal of certain bonded asbestos products. The hygienist will be responsible for ensuring the asbestos removal contractor achieves a satisfactory level of workmanship, and complies fully with statutory requirements and the requirements of the technical specification.

Commensurate with the above requirements, the specific duties of the supervising occupational hygienist may include:

1. Inspection of the integrity of the containment prior to commencement of asbestos removal works
2. Inspection of the asbestos removalists equipment, including decontamination and negative air units, water filtration systems, vacuum equipment, personal protective equipment (PPE) etcetera
3. Assessment of the asbestos removalists work methods, use and maintenance of PPE and decontamination procedures
4. Clearance visual inspection of the work area after the removal of asbestos to ensure the asbestos has been removed to a satisfactory standard, and
5. Asbestos fibre air monitoring in accordance with the NOHSC Australia Membrane Filter Method, during asbestos removal works and as clearance air monitoring after the removal of asbestos, but before dismantling of the containment.

## 13.7 Emergency Response Procedures

An emergency situation is most likely to entail such a scenario where asbestos materials present on site have been inadvertently disturbed through actions of Council employees, maintenance personnel, contractors, visitors, or damaged by severe weather conditions (i.e. hail damage to a corrugated asbestos cement roof). Where such damage has occurred, the Safety Manager and [Co-ordinator Maintenance and Construction](#) shall be notified immediately. **Emergency Response Procedures shall be initiated and implemented in accordance with the flow chart diagram in Figure 3.**

## 14 Training

Council personnel should not normally be involved with asbestos removal work. Licensed, reputable asbestos removalists should undertake all asbestos removal work. At present an asbestos removal license is not required for the removal of non-friable asbestos: products such as undamaged asbestos cement products that is less than 10m<sup>2</sup>.

*Note: It is however, Waverley Council's policy to engage a licensed contractor for removal all such materials, to ensure the appropriate removal methods are adopted.*

Where asbestos-related work is undertaken by Council employees, as there is no practical alternative (such as in emergency response situations), such employees must receive training on legislative requirements, health risks associated with asbestos exposure, safe working procedures, and the proper use and maintenance of personal protective equipment (PPE), prior to commencing removal work.

Council personnel who are not likely to be occupationally exposed to asbestos but who work in areas where asbestos is, or may be present, should also be provided with asbestos awareness training. Such training shall include the following:

- Overview of asbestos-related State acts and regulations, standards and codes of practice
- Information on the presence of asbestos in Waverley Council premises, including the types of asbestos and typical locations where asbestos may be encountered. Information should be provided on the differences between bonded and un-bonded products
- Information on the health risks associated with asbestos
- Highlighting the need to avoid disturbing in situ asbestos materials
- Information on the labelling system for asbestos materials adopted by the Waverley Council, and

- Procedures to be followed in the event damaged or disturbed asbestos materials are identified, or unknown materials or materials suspected of containing asbestos are encountered, including the relevant point of contact within Waverley Council.

## 15 Future Initiatives

### 15.1 Short Term

#### 15.1.1 Surveys and Availability of the Database

Council will have all centrally owned buildings surveyed for asbestos containing materials. Reports of survey's will be forwarded to the Business Services and Properties Division and stored in the electronic data base, which will be available to all project officers/managers. It is intended that all project officers/managers will be responsible for asbestos management during their projects. This will be covered in the training sessions still to be developed.

#### 15.1.2 Training and Awareness

All staff and contractors who are likely to impact on asbestos products while working at the Council will be required to attend asbestos awareness training as detailed in section 13 of the asbestos management plan. Council will assess the needs and requirements of its staff and contractors, then develop a training programme in line with the requirements of the asbestos management plan. Contractors or staff who do not attend training sessions will not be permitted to work on or with asbestos containing products/materials on Council sites.

#### 15.1.3 Reporting

Data gathered from asbestos surveys and removal projects would be collated and reported quarterly as part of the Operational Risk Management. This demonstrates Council's commitment to the management of asbestos.

A summary of this report will be made available annually and may include, but not be limited to, the following information:

- Number of sites surveyed;
- Number of asbestos-related incidents;
- Items of high, medium and low risk asbestos removed
- Buildings and instances of high, medium and low risk asbestos still on site

#### 15.1.4 Removal Program

With the completion of all surveys and the updating of the register, a program will be developed to address the areas of highest priority asbestos-containing products. Until that time, the current highest priority levels will continue to be addressed. Individual projects that will impact on asbestos products will be examined closely to determine the best method for management. Money may be allocated, if warranted, for work outside the original scope if it will improve the overall management of asbestos in the vicinity of the project.

### 15.2 Long Term

It is the long-term goal of Council to remove all risk of asbestos on all of its sites. This will be achieved by addressing each occurrence of asbestos products as detailed in the management plan.



# 16 References

## Council Documents

### Authoritative References

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*

National Occupational Health and Safety Commission (NOHSC) (2005), *Code of Practice for the Safe Removal of Asbestos* [NOHSC:2002(2005)], NOHSC, Canberra, Australia.

National Occupational Health and Safety Commission (NOHSC) (2005), *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC:2018(2005)], NOHSC, Canberra, Australia

National Occupational Health and Safety Commission (NOHSC) (2005), *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres* [NOHSC:3003(2005)], NOHSC, Canberra, Australia.

Occupational Health and Safety Act (NSW) 2000

Occupational Health and Safety Regulations (NSW) 2001 and as amended

# Figure 1

Figure 1. General principles of an asbestos management plan

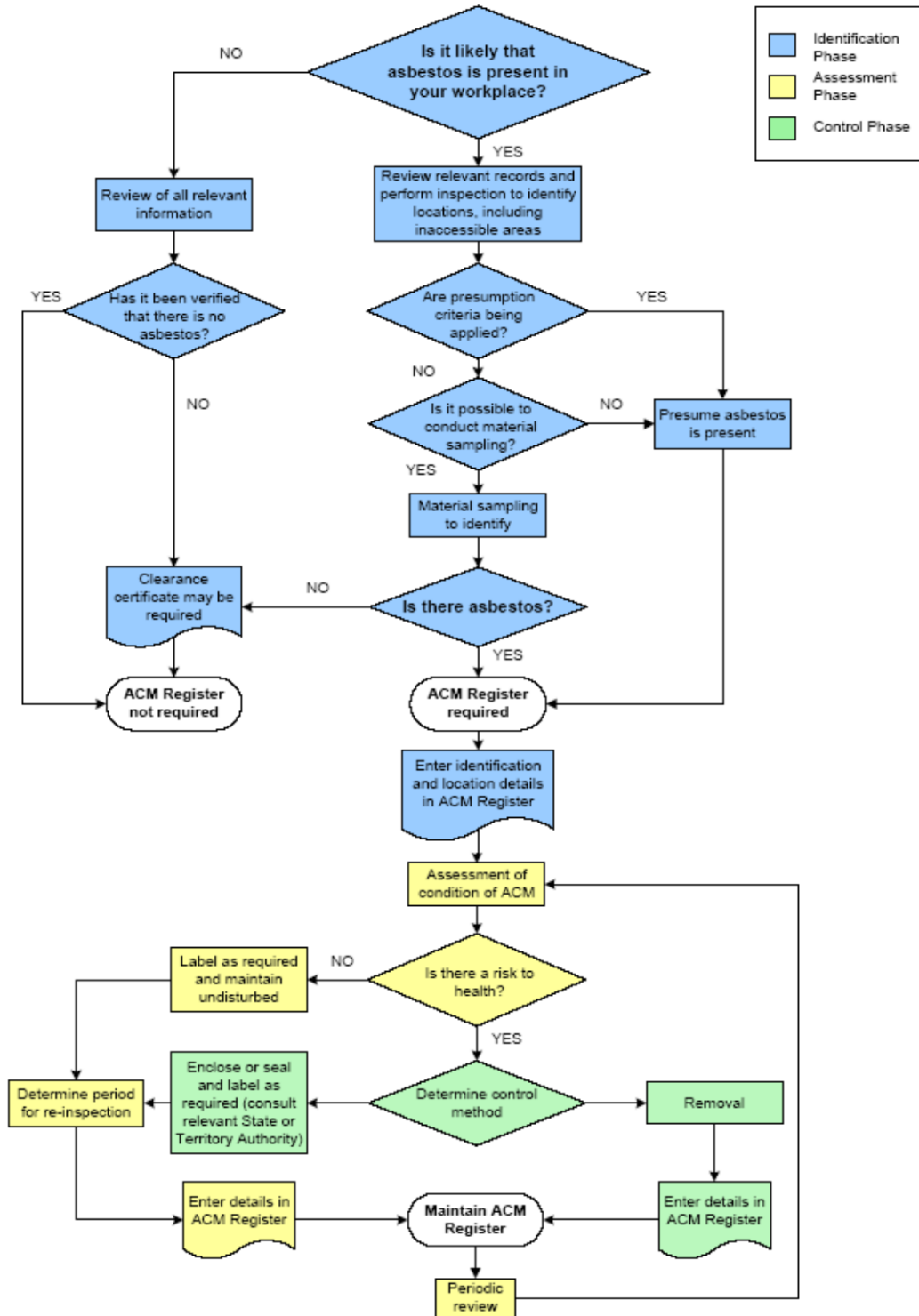
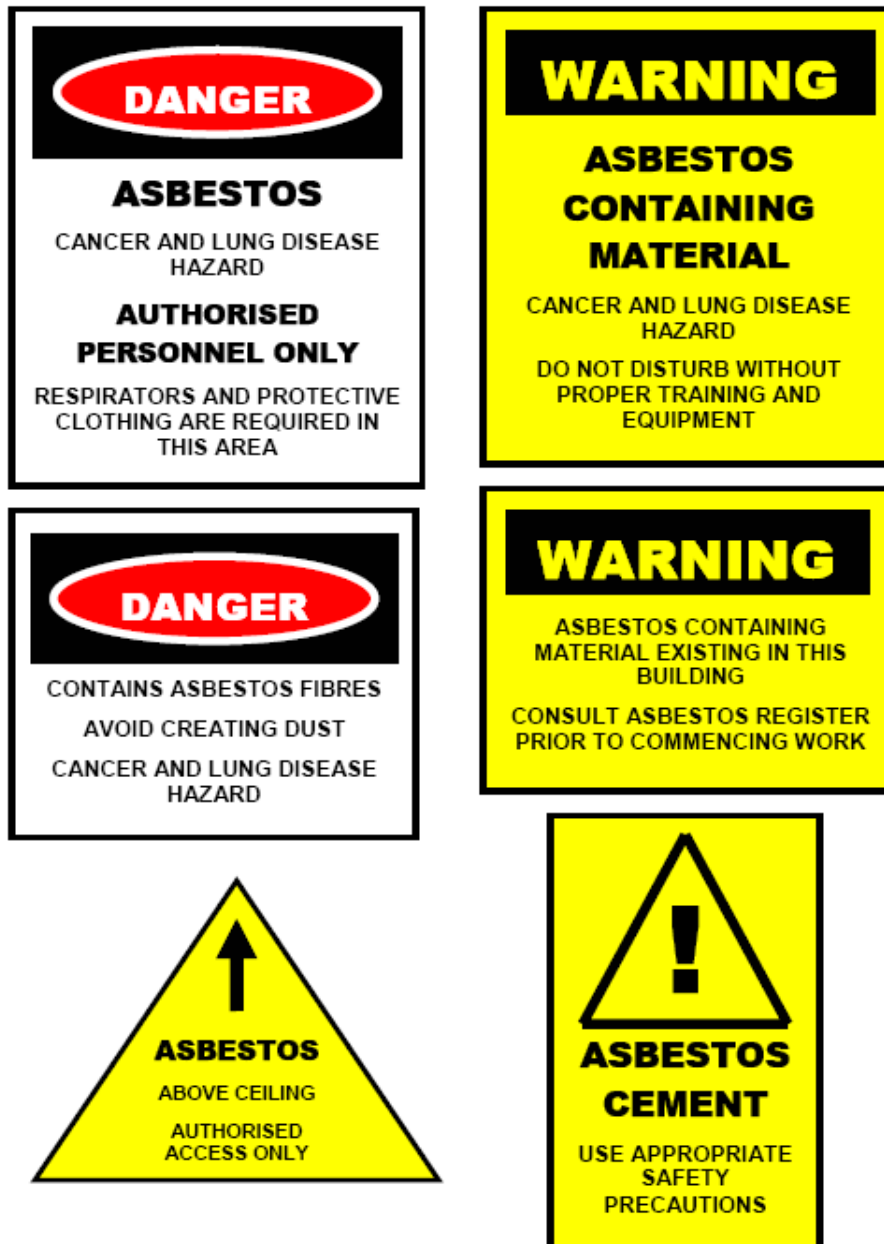
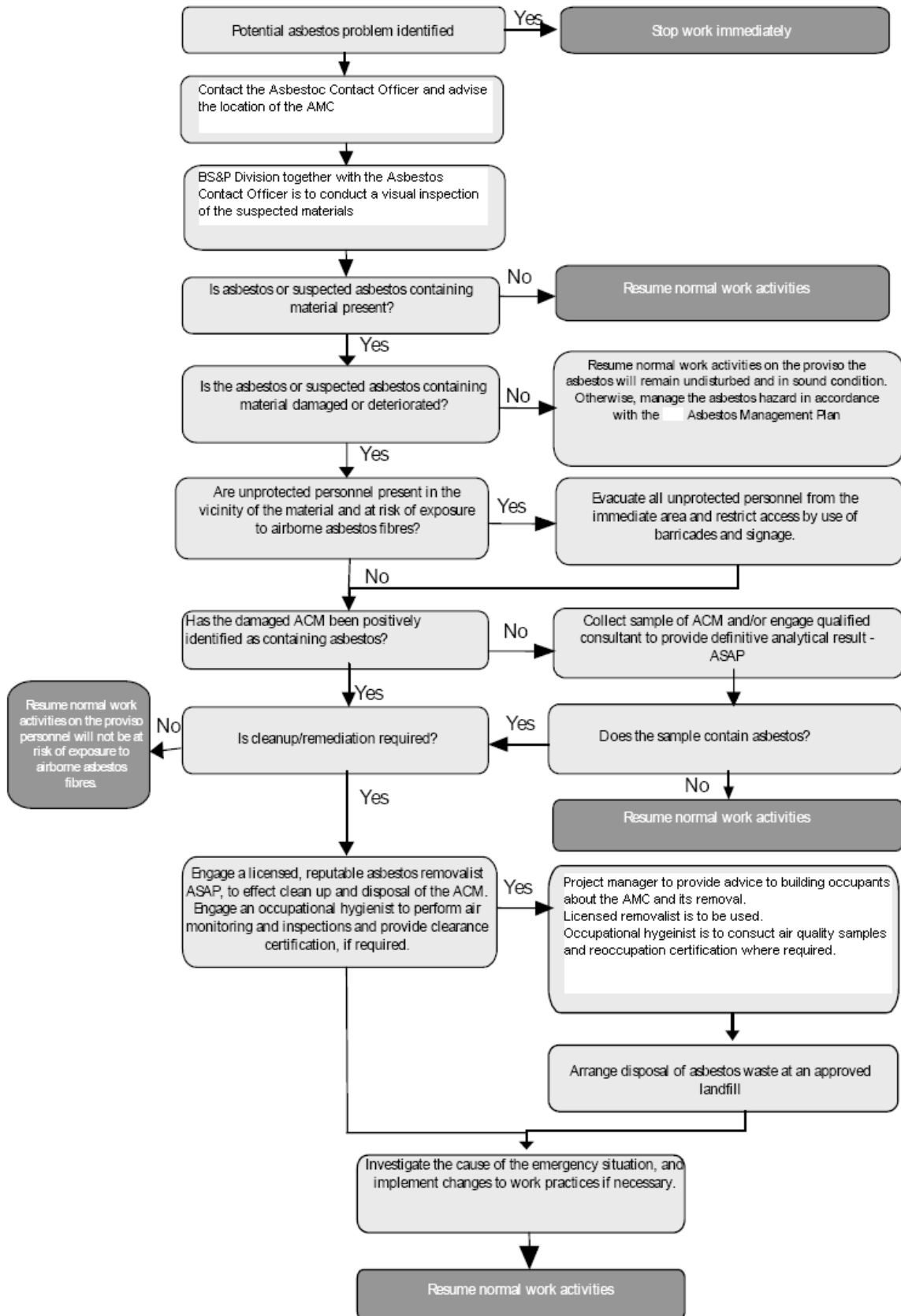


Figure 2



# Figure 3 Emergency Response Flow chart



# ASBESTOS PERMIT TO WORK – WAVERLEY COUNCIL

Building and/or maintenance work in areas known to contain asbestos containing materials is prohibited, unless an **Asbestos Permit to Work** has been issued to the Contractor.

Asbestos containing materials have been used in various locations throughout Council owned or leased buildings. Before approval is granted to proceed with work, you are required to confirm the following:

1. Has the Asbestos Register been examined jointly by the Contractor and Council BS&P Staff (Project Manager / Supervisor or Properties Officer)?	YES / NO / NA
2. Has the area where the intended works are to be performed been examined jointly with the appropriate Council BS&P Staff personnel?	YES / NO / NA
3. Are there asbestos containing materials present in the work area?	YES / NO / NA
4. Will the works impact on or disturb the asbestos containing materials?	YES / NO / NA
5. If YES to question 4 above, are the appropriate asbestos work as outlined in the Council Asbestos Management Plan documented and understood?	YES / NO / NA
6. If YES to question 4 above, have you submitted a risk assessment and/or a work method statement for the task that you intend to undertake?	YES / NO / NA
7. Are Council personnel, visitors and/or members of the public at risk from airborne asbestos?	YES / NO / NA
8. Is it necessary to evacuate Council personnel, visitors or members of the public prior to work commencing?	YES / NO / NA
9. Has the Person in charge of the building been notified of the asbestos removal including all details?	YES / NO
10. What is the risk category of the Asbestos?	HIGH MED LOW
11. What is the type of Asbestos ?	CHRYBOTILE AMOSITE CROCIDOLITE

All works are to be performed in accordance with the special requirements or work procedures outlined in the Asbestos Management Plan. If any unknown materials, or materials suspected of containing asbestos are encountered, work is to cease immediately and Business Services and Property Division notified. This **Asbestos Permit to Work** is issued to the nominated recipient for the specific occasion stipulated below:

Work Permit No. (Issued by BS&P):

Date of Issue:

This Permit is issued to (Company / Contractor/):

Contact Telephone Number (Office):

Mobile:

Asbestos Removalist License Number:

Location of Works:

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Description of Works:

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Duration of Works:

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This Permit is Valid up to:

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Type of Asbestos Containing Material:

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I have read and understood the requirements and procedures described in the Waverley Council Asbestos Management Plan and the requirements of this permit to work.

I hereby authorise Waverley Council to engage a licensed asbestos removal contractor to clean any asbestos particles/debris/hazards that was created as a result of work carried out by my/our Company and the removal cost will be payable by my/our Company.

Name of Recipient (*please print*):

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Signature of Recipient:

BS&P Div. Rep. Signature:

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#### **Asbestos Permit to Work Checklist**

(Tick if Applicable)

- WorkCover NSW Asbestos Removal Licence
- Health & Safety Plan/Work Method Statement to be prepared and approved prior to works commencing
- Council Safety Manager or other authorised person to be present whilst work is being carried out
- Council Safety Manager or other authorised person to make frequent site inspections during job
- Low speed power tools only allowed
- Personal protection equipment to be worn
- No air conditioning to be running on affected building/floor
- 'Asbestos No Entry' signs to be placed at each end of affected floor and in the lift lobbies
- Barricades and 'Asbestos No Entry' signs to be placed around perimeter of job site
- Special black plastic lined bins required for removal of asbestos waste
- Occupants of building/floor to be advised of the work and that entry will be barred during the work time
- Procedures documented in asbestos removal technical specifications/procedures for this work to be adhered to
- Air monitoring required during work period and upon completion of work
- Air monitoring required upon completion of work only
- Visual clearance inspection by independent party only required

**Waverley Council Officer to sign if they are to be project manager / supervisor or in attendance.**

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Signature

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Date