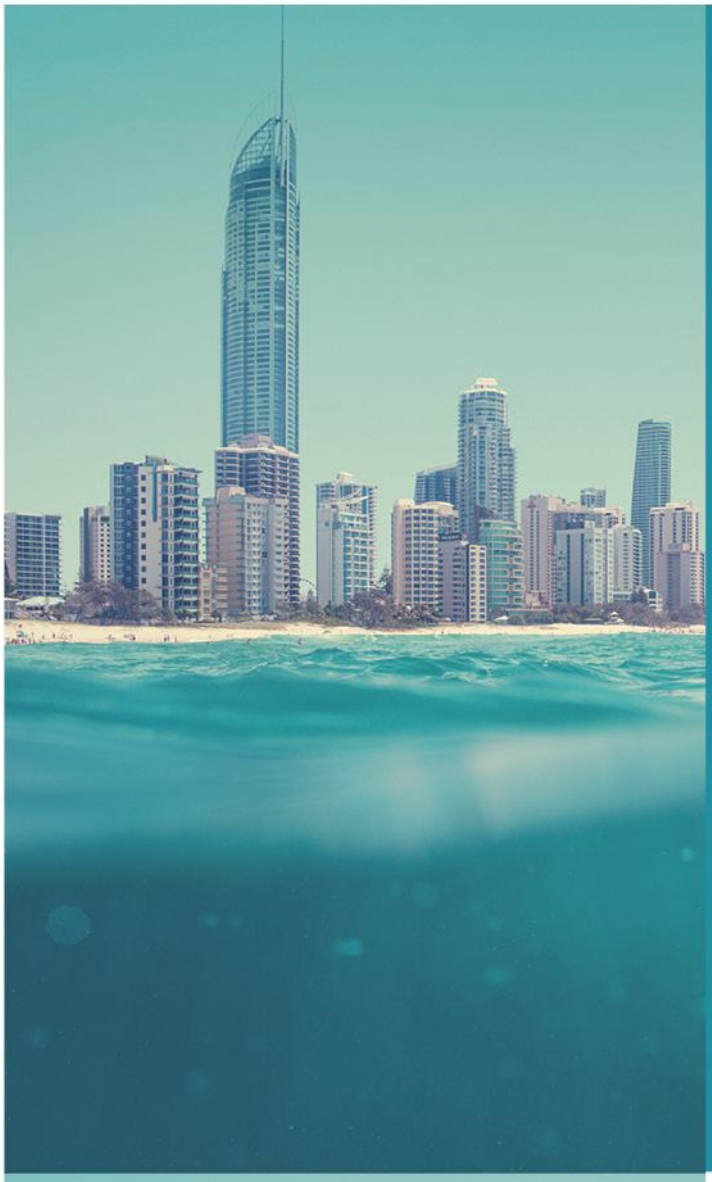
CITY OF GOLDCOAST.



Council of the City of Gold Coast

Asbestos Management Plan

Facilities Management

September 2014

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Asbestos Management Plan Amendment Record

Amendment record

Version No.	Issue Date	Revision date	Description of amendment	Amended by
Draft	08 December 2013	07 May 2014	Draft revised document issued following release of new Work Health & safety Regulation 2011 and associated Codes of Practice	Parsons Brinckerhoff
		09 January 2015	Revised document for specific council processes.	Mark Graham

Approval

Name	Signature	Date

1. Introduction

City of Gold Coast is aware that its workplaces may contain asbestos in a wide variety of types and applications and is determined to prepare procedures designed to effectively manage any asbestos issue that may arise. Asbestos containing materials (ACM) may be above or below ground work areas.

Meaning of *workplace (extract from Qld Work Health & Safety Act 2011)*

*(1) A **workplace** is a place where work is carried out for a business or undertaking and includes any place where a worker goes, or is likely to be, while at work.*

The workplace may incorporate a worker, visitor, tenant or volunteer.

This document has been developed specifically for City of Gold Coast and applies only to City of Gold Coast ACM workplaces. The AMP is a working document designed to effectively manage and minimise asbestos-related health risks to personnel working on, or visiting City of Gold Coast ACM workplaces. The AMP is to be read in conjunction with existing City of Gold Coast asbestos registers for buildings or spatial mapping system for underground ACM.

The purpose of this Asbestos Management Plan (AMP) is to address City of Gold Coast legal obligation under the Queensland Work Health and Safety Act 2011, as it relates specifically to the presence of asbestos containing material (ACM) within City of Gold Coast owned and leased properties (ACM workplaces). The intent of the AMP is to clearly define management processes required to ensure that ACM is not damaged or deteriorates to such an extent that City of Gold Coast employees, contractors, tenants or visitors are unnecessarily exposed to airborne asbestos fibres above that of normal ambient levels (typically <0.01 fibres/millilitre of air).

Underground ACM is not specifically covered by legislative asbestos Code of Practices. However, there is a safety requirement to manage underground ACM in a fair and reasonable manner to protect persons. Council Directorate/Branches such as GCW, CS Waste & Resource Management and ES Beaches and Foreshore are also developing underground ACM asbestos management plans to achieve this fair and reasonable approach. This may include spatial mapping systems in conjunction with a specific asbestos management plan that meets the overall requirements of this plan.

Nothing contained within this document may be considered to alter or modify guidelines as set down in the Workplace Health and Safety Queensland Code of Practice How to Manage and Control Asbestos in the Workplace 2011 and the Safe Work Australia Code of Practice How to Safely Remove Asbestos 2011 or the requirements laid down under all relevant Queensland Legislation.

Property Services Branch, Facilities Management Unit will assist asset custodians by coordinating the council wide central asbestos register and procurement of asbestos consultancy services. Asset custodians are responsible for their sites inclusion into the central asbestos register, responsible for their site data in the register, have their asbestos management plans in place, a copy of the asbestos register located on site and any site asbestos changes/updates are notified to Facilities Management Unit.

2. Objective

The long term goal of the City of Gold Coast asbestos management strategy is for all workplaces in their control to be free of ACM.

This is a long term plan and in the interim, City of Gold Coast intends to manage asbestos hazards through a risk management based strategy incorporating the identification, assessment, prioritisation of risk and control of ACM.

An asbestos register for all City of Gold Coast workplaces constructed prior to 01 January 1990 shall be maintained and all ACM will be managed in accordance with this City of Gold Coast asbestos management plan (AMP). The purpose of the asbestos register is to record the location of all ACM identified in City of Gold Coast workplaces and to maintain those records. All workplaces constructed prior to 01 January 1990 shall be recorded in the City of Gold Coast asbestos database as presumed to contain ACM until a survey and sampling of suspect materials is undertaken. This asbestos database register will also contain buildings and other structures, constructed prior to 1990, that don't have ACM. This information also assists worker safety when working in pre 1990 buildings.

This AMP has been developed in line with industry best practice and the Workplace Health and Safety Queensland Code of Practice How to Manage and Control Asbestos in the Workplace 2011 and the Workplace Health and Safety Queensland Code of Practice How to Safely.

The objective of this AMP is to ensure as far as possible, that no persons whether directly or indirectly employed or visiting City of Gold Coast workplaces are exposed to the risk of the inhalation of airborne asbestos fibres. In addition, it is essential that all employees, contractors, tenants and visitors be fully informed of the control strategies that have been established and the factual health consequences of exposure to airborne asbestos fibres.

Strategies to be implemented by asset custodians are to:

- Ensure compliance with this Asbestos Management Plan.
- Ensure asbestos surveys have been completed as required by legislation. Any new or resurvey requests shall be submitted to Facilities Management Unit who will coordinate the asbestos consultancy services.
- Provide an onsite asbestos register to assist staff, workers, visitors and volunteers understand the ACM site requirements.
- Ensure the asbestos database register is up to date and accurate.
- Deliver effective asbestos management work programs including asbestos removal during refurbishment or maintenance work in preference to other control measures such as encapsulation, enclosure and sealing.
- Ensure that no persons at City of Gold Coast workplaces are exposed to airborne asbestos fibres above background levels.
- Ensure there is a safe system in place for the safety of workers, visitors, tenants and volunteers when ACM is being worked on or removed. Codes of Practice are in place for this work.
- Remove all high-risk asbestos situations where practicable. Where this is not practicable, the ACM shall be managed in situ to ensure that no person is exposed to levels of airborne fibre above that of the current exposure standard for asbestos
- Ensure when asbestos is removed safely from the workplace, the workplace is "cleared" safe for workers to return.
- Ensure if any ACM is removed that the necessary documentation of a clearance certificate and if necessary, air monitoring results, is provided is to Facilities Management Unit.
- Ensure that a site ACM safety condition audit is conducted maximum 5 yearly subject to a risk assessment. Asset Custodians are required to risk assess the site ACM and advise Facilities Management to include this asbestos condition resurvey frequency decision in the comments field of the SAP site asbestos register.
- Perform ACM safety condition resurveys. Asset Custodians shall request Facilities Management assistance to engage asbestos consultancy services on their behalf. A centralised service contract is provided to assist with this work.
- All asbestos related incidents must be recorded in Council's WHS incident recording system (HandS)

2.1 Review Asbestos Management Plan

Current legislation (Regulation 430 of the Queensland Work Health and Safety Regulation 2011 and Section 4.2 of the Workplace Health and Safety Queensland Code of Practice How to Manage and Control Asbestos in the

Workplace 2011 requires that as a minimum, the AMP should be reviewed and if necessary, revised at least once every five years or when:

- There is a review of the asbestos register or a control measure
- Asbestos is removed from or disturbed, sealed or enclosed at the workplace
- The plan is no longer adequate for managing asbestos or ACM at the workplace
- A health and safety representative requests a review if they reasonably believe that any of the matters listed in the above points affects or may affect the health and safety of a member of their work group and the asbestos management plan was not adequately reviewed.

2.2 Regulatory Requirements

This AMP is consistent with City of Gold Coast approach to asbestos management in the identification, removal, encapsulation, transport, and disposal or otherwise potential disturbance of asbestos containing materials. All these activities shall be performed in accordance with relevant Commonwealth and State Acts, Regulations, Queensland Asbestos Codes of Practices, City of Gold Coast asbestos waste disposal requirements, Advisory Standards and Industry Standards.

2.3 State Legislative Requirements - Queensland

The *Queensland Work Health and Safety Act 2011* establish mandatory requirements for asbestos containing materials (ACM) in the workplace through Chapter 8 'Asbestos' of the Queensland Work Health and Safety Regulation 2011. Under Part 8.3 'Management of asbestos and associated risks' of the Queensland Work Health and Safety Regulation 2011, City of Gold Coast has a legal obligation to identify and manage ACM in the workplace in accordance with the regulation. The control of asbestos-related health risks in Queensland workplaces is documented in several pieces of legislation. Any asbestos related issues associated with City of Gold Coast workplaces, including the identification, removal, encapsulation, transport, disposal or otherwise potential disturbance of ACM shall be performed in accordance with all relevant State and Commonwealth Acts, Regulations, City of Gold Coast asbestos waste disposal requirements, Advisory Standards, Codes of Practice and industry standards.

A list of relevant referenced documents is provided in Section 8.5 and Appendix E.

3. Organisational Responsibilities and Authorities

This Asbestos Management Plan (AMP) is designed for integration with the existing City of Gold Coast workplace management, maintenance operations programs, asbestos removal, demolition and construction works. Ultimately the City of Gold Coast Asset Custodians and Engineering Services are responsible for ensuring the appropriate preventative and control measures are implemented and maintained.

Employees and contractors shall also be committed to working in accordance with this AMP and participate in maintaining the health and safety of themselves and their co-workers. To achieve these goals, consultation shall occur between management, employees and contractors in maintaining and improving the intentions of this AMP and ultimately ensuring health and safety conditions are maintained.

Full consultation, involvement and information sharing shall occur between management, HSE specialists, OHS representatives and employees through a well-established consultative mechanism e.g. Toolbox Talks.

3.1 City of Gold Coast Responsibility Overview

The following key personnel are responsible for the implementation of the control measures discussed in this document.

Person/Party	Responsibility
Office of the CEO Chief Executive Officer	• Set City of Gold Coast asbestos related policies/strategies.
Organisational Services Director	• Promote the AMP across all City of Gold Coast departments • Ensure City of Gold Coast wide distribution of AMP.
Organisational Services Facilities Management Unit (FMU)	• Comply with Chapter 8 'Asbestos' of the Queensland Work Health and Safety Regulations 2011 and what is detailed within this AMP. • Review and update of the AMP in accordance with section 2.1. Of this document. • Keep informed on advice given by competent persons in relation to inspections and meeting health and safety commitments. • Co-ordinate the procurement of asbestos consultancy works to ensure consistency of SAP data collection and SAP formatting • Provide ongoing data maintenance of the City of Gold Coast SAP asbestos register including liaison with asset custodians and Information Systems to ensure accurate site data is uploaded. (note, GCW, Waste & Resource Management and Beaches & Foreshore will be responsible for spatial mapping of known in ground workplaces with ACM). • Arrangement of periodic asbestos condition re-inspections of known asbestos sites (as requested by Asset Custodians). • On completion of each survey or re-inspection the FMU shall provide the Asset Custodian representative with a copy of the asbestos register for the nominated site. • Ensure consultancy service supplier is trained in the use of the SAP asbestos system and manage the external remote SAP access and council asbestos laptop. • Assist with asset custodian with asbestos management queries. • Email asset custodians every six months a reminder of their asbestos management responsibilities.
Asset Custodians as defined by EOC – October 2001 (refer Appendix E Nominated Custodians)	• Comply with Chapter 8 'Asbestos' of the Queensland Work Health and Safety Regulations 2011 and what is detailed within this AMP. • Keep informed on advice given by competent persons in relation to inspections and meeting health and safety commitments. This may be provided by Qld State Government, City of Gold Coast Asset Custodian representatives, Facilities Management Unit, Risk Management Branch or the FMU appointed asbestos consultancy service. • Ensure pre 1990 building workplaces are on the City of Gold Coast SAP asbestos register or for underground ACM utilise the GCW, Waste & Resource Management and Beaches & Foreshore ACM spatial mapping systems. • Any pre 1990 buildings/structures not on the SAP asbestos register then the asset custodian must submit a request to Facilities Management Unit, FacilitiesManagement@goldcoast.qld.gov.au ,to assist with procurement of site asbestos survey works. FMU will provide a schedule of rates and scope of council standard works that will be undertaken.

Person/Party	Responsibility
	• Review all asbestos containing buildings/structures and perform an official risk assessment to decide on the asbestos condition frequency resurvey, ie, maximum 5 yearly. If the site is a school/kindergarten, suggest annual asbestos condition resurvey and if the site is low risk than 5 yearly. Also, email FMU with the risk assessment frequency outcome and this will be input into the SAP site asbestos survey details for future reference, eg, SAP site descriptor, ##########, *5 yearly condition resurvey/I Spot doc######* • Any new or resurveys the asset custodian project officer will be the point of contact with the asbestos survey consultant. FMU will assist with the consultancy procurement and standardisation of council scope of works. Site access is the asset custodian's responsibility to assist/coordinate with the consultant. • In addition to the above, the Asset Custodian owns the site SAP asbestos register data. Asset custodians are to check site descriptor data and photos to ensure it is accurate. SAP has changed site descriptors so the data needs to be rechecked, that it is relevant, up to date, easy to understand and easy to locate asbestos onsite. This is especially important where multiple building extensions are now one SAP functional location/equipment descriptor. Ongoing annual accuracy asbestos register data/site photo check must be undertaken by all asset custodians. • It is just as important the site details for pre 1990 buildings without asbestos is correct. This information is just as important to communicate to all workers, staff, visitors the site has no asbestos and is safe to work on. This will save time and money on future queries, project scope of works. etc. Note, any concealed building areas may contain ACM and may not be in the register. Work conducted in concealed areas of buildings shall be risk assessed for asbestos prior to performing any work. • Ensure a copy of the most current asbestos register is available on site. • If a building/structure has asbestos it requires a black and yellow asbestos warning sign at the building entry/foyer as per the code of practice requirements. • Labelling of asbestos components shall be labelled as per https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0011/58169/how-to-manage-control-asbestos-workplace-cop-2011.pdf section 2.5. • Note, Sap maintenance work order requests to ES/BM are interfaced to the SAP asbestos register and a warning flag on the maintenance work order will be automated if the building/structure has asbestos. Another reason to ensure any asbestos building is on the SAP register. Note any concealed building areas may contain ACM and may not be in the SAP building register. Work conducted in concealed areas of buildings shall be risk assessed for asbestos prior to performing any work. • Liaise with employees on a continual basis so that the existence and condition of asbestos in the work environment is known • Provide FMU legislative documentation on all asbestos remediation works including clearance certifications and asbestos air

Person/Party	Responsibility
	monitoring results. For less than 10m2 asbestos removal, provide a clearance certificate or SWMS for inclusion into asbestos site register historical records. This requirement is important to ensure council meet its legal legislative record keeping requirements. The documentation provided shall match the descriptors in the SAP asbestos register or spatial mapping attribute descriptors. • Any council officer requiring training please email a request to Facilities Management and training procurement can be arranged with the asbestos consultancy service. • Budget for asbestos related survey and removal works. • Action findings and recommendations from asbestos surveys/re-surveys and ensure they are planned, implemented and tracked. • Engagement of service provider(s) for project works shall include any site asbestos information in the scope of work request. • Anticipate the need for the control of asbestos risks to be initiated in any particular case. • Any building asbestos removed must be performed by Engineering Service approved licensed supplier and a site clearance certificate must be provided to FMU to update the site SAP asbestos register information. If the asbestos is the more dangerous friable asbestos material than air monitoring results is also required. Documentation must be sent to FMU whom will I-Spot these records to the SAP site asbestos site information. Without this information FMU cannot update the site information correctly. Note, EDMP, ES Design & ES Projects are required to ensure any asbestos records are provided to relevant parties via contract documentation and provide FMU appropriate clearance certificates and air-monitoring results so that FMU can adjust the SAP asbestos register.
Engineering Services EDMP Superintendent Construction Services	• Comply with Chapter 8 'Asbestos' of the Queensland Work Health and Safety Regulations 2011 and what is detailed within this AMP. • Arrangement of asbestos removal/remediation works in liaison with the Asset Custodian and or employees and or contractors. • Ensure Council's asbestos management plan and QLD Government asbestos removal code of practice is complied with. • Ensure asbestos removalist is licensed as per Queensland Government legislative requirements. • Ensure site asbestos records are obtained and checked. Any site concealed areas to be risk assessed to determine if further asbestos analysis works is required to be undertaken. Any analysis works required shall be arranged via FMU so the collected data can be uploaded into the council SAP asbestos register. This cannot be arranged with other suppliers due to restrictions/training on the SAP asbestos access requirements. • Note, EDMP, ES Design & ES Projects are required to ensure any asbestos records are provided to relevant parties via contract documentation and provide FMU appropriate clearance certificates and air-monitoring results so that FMU can adjust the SAP asbestos register.

Person/Party	Responsibility
	• Ensure all asbestos related works are preformed accurately and in accordance with a Permit to Work System or the Directorate specific Safe Work Instruction or Safe Work Procedure. • Identification and bringing to the attention of Asset Custodians, any suspect asbestos materials • Ensure asbestos removal clearance certificates, safe work method statement (for less than 10m2) and air monitoring results if applicable are provided to both Facilities Management Unit and Asset Custodian. • Keep informed on advice given by competent persons in relation to inspections and meeting health and safety commitments. • Liaise with contractors during contract specification and on a continuous basis so that the existence and condition of asbestos in the work environment is known. • Ensure all asbestos removal works are conducted in accordance with this AMP (refer to section 7.0), City of Gold Coast procedures and current legislative requirements. • Communicate with key stakeholders and their representatives on the control of exposure to airborne asbestos. • Control all works associated with asbestos containing materials through the permit to work system • Ensure application of and compliance with the AMP by employees and contractors engaged to perform works. • Ensure project personnel (including contractors) are inducted • For asbestos removal of less than 10m2 and a SWMS is to be utilised the person removing the asbestos must have a class B asbestos removal license.. This must be documented in the SWMS. • Report immediately to their supervisor any perceived safety or health risk • Anticipate the need for the control of asbestos risks to be initiated in any particular case. • Note, EDMP, ES Design & ES Projects are required to ensure any asbestos records are provided to relevant parties via contract documentation and provide FMU appropriate clearance certificates and air-monitoring results so that FMU can adjust the SAP asbestos register. • Any asbestos waste removed from site must be disposed in accordance with Council's asbestos Waste & Resource Management local government requirements. Note, landfill asbestos waste is data recorded by CS Waste & Resource Management Branch.
Risk Management Unit- Safety	• Comply with Chapter 8 'Asbestos' of the Queensland Work Health and Safety Regulations 2011 and what is detailed within this AMP. • Audit council's asbestos safety systems. • Provide feedback on any necessary upgrade to the council asbestos management safety system. • Provide peer review of the asbestos management plan to achieve alignment to the overall Council Safety Management System.

Person/Party	Responsibility
City of Gold Coast Employees	• Comply with instructions given for their own safety and health and that of others generally. • To not impact an asbestos containing materials without complying with the AMP. • Identification and bringing to the attention of Asset Custodians, any suspect asbestos materials. • Ensure all asbestos related works are performed accurately and in accordance with the Permit To Work System. • Co-operate with supervisors and managers in their fulfilment of legislative obligations. • Comply with Chapter 8 'Asbestos' of the Queensland Work Health and Safety Regulations 2011 and what is detailed within this AMP. • Report immediately to their supervisor any perceived safety or health risk. • Wear and maintain in good order all protective clothing and apparatus provided by the manager or supervisor for personal protection and maintain same in good order.
Visitors and others	• Comply with instructions given for their own safety and health and that of others generally. • Comply with all work procedures and instructions related to asbestos. • Report immediately to their supervisor any perceived safety or health risk. • Identification and bringing to the attention of Asset Custodians, any suspect asbestos materials.
City of Gold Coast Residential/Commercial Tenants	• Comply with instructions given for their own safety and health and that of others generally. • Comply with all procedures and instructions related to asbestos as part of the tenancy agreement. • Report immediately to their City of Gold Coast representative any perceived safety or health risk from ACM. • Report immediately to their City of Gold Coast representative any damage to known or presumed ACM within the tenanted property.

3.2 Consultant Occupational Hygienist

The “Consultant Occupational Hygienist” referred to in the AMP should be suitably qualified and competent. For the purposes of air monitoring and clearance inspections the Consultant Occupational Hygienist must be licensed in line with the requirements of Part 8.10, Division 2 of the Work Health and Safety Regulation 2011. Asbestos Identification Analysis and Airborne Asbestos Monitoring and Analysis must be undertaken by NATA Approved Identifiers and Counters. The “Consultant Occupational Hygienist” will be employed by and at the cost of City of Gold Coast to conduct asbestos monitoring during all removal works, clearance inspections at the completion of all removal works, auditing, risk assessment, consulting and other technical services relating to asbestos at the Site and in accordance with the requirements of this AMP.

4. Asbestos Identification, Risk Assessment and Control

4.1 Asbestos

Asbestos is a term applied to some mineral silicates present in a fibre form. There are many members of this mineral group; common among these are blue asbestos (crocidolite), white asbestos (chrysotile) and brown or grey asbestos (amosite).

Due to its unique properties – flexibility, tensile strength, insulation (from heat and electricity) and chemical inertness – asbestos was one of the most useful and versatile minerals known to mankind. It is the only natural mineral that can be spun and woven into useful fibres and fabrics in a similar way to cotton or wool.

Uses of asbestos have included fibro-sheeting, corrugated roofing, asbestos cement (AC) pipes, thermal insulation and fireproofing. It has also been used as an additive in paints and sealants, in textiles such as felts and theatre curtains, in gaskets, and in friction products like brake linings and clutches. During the peak building years, i.e. 1950s, 1960s and 1970s, asbestos found its way into most public buildings, including hospitals, schools, libraries, office blocks and factories.

Due to the extensive use of asbestos in a wide variety of products it is present in many workplaces. Consequently it may pose an occupational health risk to persons who work in close proximity to ACM.

4.2 General Principals

The general principles of asbestos management are broadly covered by four separate phases. These are:

1. Identification phase.
2. Assessment phase.
3. Control phase.
4. On-going monitoring/re-assessment.

These phases are best illustrated by the flow chart in Figure 5-1.

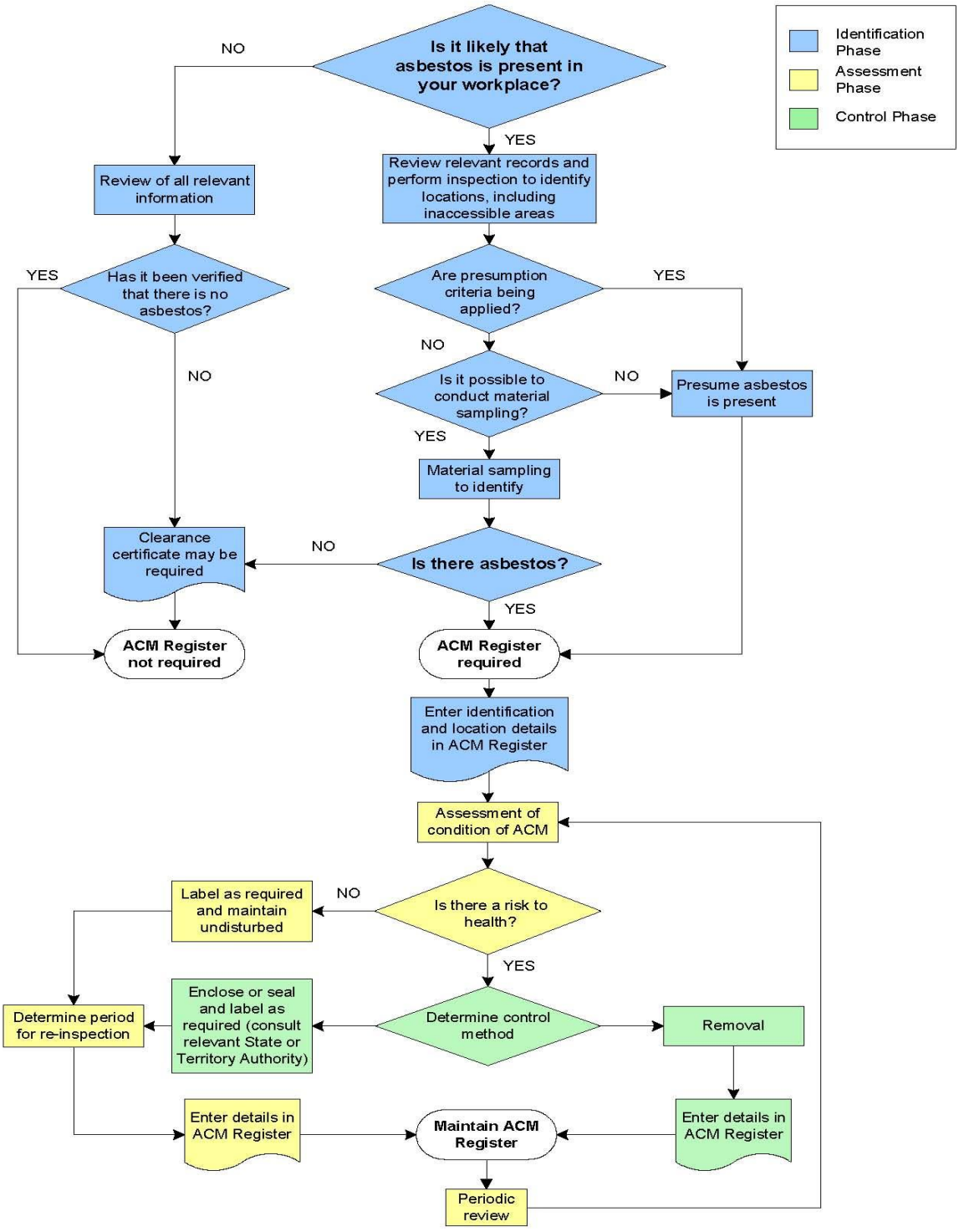


Figure 5.1 **General Principles of Asbestos Management**

Source: *National Occupational Health and Safety Commission*

Code of Practice and for the Management and Control of Asbestos in Work Places [NOHSC: 2018 (2005)]

NOTE: This flowchart was not included in the Workplace Health and Safety Queensland Code of Practice How to Manage and Control Asbestos in the Workplace 2011

4.3 Identification of ACM

In accordance with the current requirements of the Queensland Work Health and Safety Regulation 2011, City of Gold Coast shall identify and record asbestos containing materials in all structures constructed prior to 1 January 1990. This shall include the undertaking of asbestos audits, including presumptive surveys and the sampling of suspect materials to produce asbestos containing materials registers for each workplace. To ensure this requirement is met, City of Gold Coast will adopt any or all of the following options to identify the presence of asbestos at City of Gold Coast workplaces (Note: All workplaces constructed prior to 1 January 1990 shall be recorded in the City of Gold Coast asbestos database as presumed to contain ACM until a survey and sampling of suspect materials is undertaken).

Asset Custodians are required to check and ensure their pre 1990 workplaces are on the City of Gold Coast Asbestos Database and if not request Facilities Management assistance.

4.4 City of Gold Coast Asbestos Register

All asbestos survey and re-survey data shall be recorded in the City of Gold Coast Asbestos Database. This will ensure consistent reporting of information when buildings or structures are surveyed for asbestos. The asbestos database documents the location, extent, type, approximate quantity and condition of ACM identified during the survey and includes a qualitative risk assessment. Each asbestos situation identified is given a health risk rating, based on the extent, type, condition and accessibility of the asbestos at the time of the site assessment.

Generally, each asbestos survey will be undertaken by means of performing a visual assessment of the building, structure or workplace in question. The asbestos survey and assessments shall only be performed by persons/organisations trained and experienced in identifying and assessing the risk of asbestos. Consultant survey works shall only be arranged by Facilities Management Unit.

Representative samples of materials suspected of containing asbestos may be collected during the survey. Analysis of these samples will only be undertaken by NATA Accredited personnel using polarised light microscopy (PLM), supplemented with dispersion staining techniques.

All visible and accessible sources of asbestos identified are documented in the asbestos register, as well as those areas not able to be accessed during the course of the site survey. This is important for future reference. Each register is accompanied by sample analysis reports, a photographic record of identified ACM, risk assessment of the ACM discovered, background information on typical applications and information on the health effects of asbestos.

4.4.1 Presumptive Asbestos Surveys

Sometimes referred to as ‘Walk-through Surveys’, this type of survey does NOT involve sample collection of materials suspected of containing asbestos instead they are presumed to be ACM. This survey essentially defers the need to sample and analyse for asbestos until a later date .e.g. prior to demolition or major refurbishment.

The purpose of this survey is to locate as far as reasonably practicable, the presence and extent of any suspected ACM in the building and assess the condition. This is achieved by a visual inspection only. Presumptive surveys are typically conducted in sensitive areas (e.g. secure areas, high risk areas, etc.) where it is either not possible or difficult to collect samples.

4.4.2 Non-Destructive Asbestos Surveys

Asbestos surveys are typically non-destructive in nature and involve inspecting all accessible areas within a building and identifying materials suspected of containing asbestos by collecting samples. The scope of the asbestos survey includes all construction materials, finishing materials, and building services (including fixed plant and equipment) within and adjacent to the building. Equipment stored within a structure is not usually included in the scope of works unless otherwise specified.

The asbestos survey is to be undertaken by a competent person who is responsible for:

- Identifying suspect materials
- Collecting samples of suspect materials
- Recording of the location of asbestos
- Assessing the physical condition of the ACM
- Assessing the risk to health posed by the ACM
- Preparing a detailed asbestos register.

4.4.3 Destructive Asbestos Surveys

Destructive asbestos surveys are similar to non-destructive asbestos surveys except the Competent Person is required to partially demolish the structure (e.g. expose wall cavities, rip up floor coverings, open blind service ducts/risers) in order to identify asbestos containing materials which may be hidden. This may result in damage and destruction to the building fabric and ideally should be undertaken only after the occupants have vacated the building.

The purpose of a destructive asbestos survey is to identify all ACM prior to the commencement of refurbishment/demolition works, which may impact on the unidentified ACM.

If the ACM identified during the survey is to be removed as part of the refurbishment/demolition works, it may not be necessary for the Competent Person to assess the condition and risk posed by the ACM as this is largely irrelevant if the ACM is to be removed.

4.4.4 Asbestos Re-Surveys/Re-Inspections

In alignment with Regulation 426 of the Queensland Work Health and Safety Regulation 2011 and Section 3.2 of the Workplace Health and Safety Queensland Code of Practice How to Manage and Control Asbestos in the Workplace 2011, the asbestos register shall be reviewed and revised by a competent person if:

- The asbestos management plan is reviewed
- Further asbestos or ACM is identified at the workplace
- Asbestos is removed from or disturbed, sealed or enclosed at the work place
- The register is reviewed at least once every five years to ensure it is kept up-to-date.

All re-surveys or re-inspections shall be conducted by a Consultant Occupational Hygienist and will comprise a visual assessment of the condition of the in-situ ACM to determine whether the material remains in a satisfactory condition, or if deterioration has occurred since the previous inspection. Such re-inspections will determine if any remedial action, such as encapsulation, isolation or removal of the asbestos containing materials, is required.

Normally, re-sampling of materials would not be required during re-inspections. However, if previously unidentified or undocumented ACM, or suspected ACM, are encountered during the re-inspection process, sampling and analysis may be performed. The Consultant Occupational Hygienist will be required to update and re-issue the asbestos register at the completion of the re-survey.

At City of Gold Coast, suitably qualified external contractors are engaged to undertake all asbestos surveys including re-surveys and inspections. Contractor selection and engagement is conducted in accordance with the City of Gold Coast procurement process with the assistance of Facilities Management.

Asset Custodians are required to ensure an asbestos re-survey/re-inspection is conducted for each workplace identified as containing asbestos at least every 5 years. The time period between surveys is based on a risk assessment incorporating site use and the condition and accessibility of identified asbestos materials. It is generally seen that low risk asbestos material (as identified by the asbestos register) can be surveyed at the maximum time frame intervals of five years, whereas medium risk materials may need to be re-inspected every 12 to 24 months, where high risk and very high risk materials are identified removal of the material are to be

organised or where that is not practicable, managed in situ to ensure that no person is exposed to levels of airborne fibre above that of the current exposure standard for asbestos.

4.4.5 Asbestos Survey Request – New Sites & Re-Surveys

Where there is a requirement to survey a new site or condition re-survey for ACM, the following process shall be implemented:

- Asset Custodian will email FMU a request to arrange a site asbestos survey. The Asset Custodian must provide the FMU with the project officer contact details.
- The FMU will allocate an officer whom will reply and provide a site template data sheet and site schedule of rates costs which is to be completed by the Asset Custodian project officer and returned. Also, a cost centre number shall be supplied to cover the survey costs.
- The FMU is responsible for co-ordinating the City of Gold Coast asbestos consultancy works to ensure the processes are in compliance with City of Gold Coast requirements and in the appropriate format for data loading into the information systems network.

Asbestos consultancy works or site audits cannot be arranged by anyone other than the FMU.

An example of an asbestos register is included in Appendix H

4.5 Asbestos Risk Assessment

As part of any asbestos survey or subsequent re-survey, the Consultant Occupational Hygienist is required to assess the risk posed by the ACM and determine what, if any, control measures may be required.

Risk assessments of any ACM shall include the following information:

1. Date of the assessment.
2. Condition of the ACM (i.e. whether the ACM is friable or non-friable and stable, or liable to damage or deterioration, etc.).
3. Surface treatment applied to the material.
4. Likelihood of possible exposure.
5. Whether the nature or location of any work to be carried out is likely to disturb the ACM.
6. Control measures recommended as a result of the risk assessment.

Current legislation determines that risk assessments shall be reviewed every five years as a minimum.

However, the review of risk assessments may be more frequent and re-evaluation should occur when:

- There is evidence that the risk assessment is no longer valid
- There is evidence that control methods are not effective
- A significant change is proposed in the place of work or in work practices or procedures to the area that the risk assessment relates
- There is a change in the condition of the ACM
- The ACM has been removed, enclosed or sealed

4.6 Asbestos Risk Rating

Asbestos is hazardous when fibres become airborne. The health risks posed by ACM in premises are due to a number of factors including:

- Accessibility of the material
- Condition of the material
- Friability of the material
- Location of the material

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 a reality. For example, the presence of asbestos in a building is a hazard, but while that asbestos remains in a stable condition and does not release fibres into the air, the risk is negligible.

A qualitative asbestos risk assessment shall be undertaken for each ACM identified within the building or structure being inspected. Each situation is allocated either a 'Very High', 'High', 'Medium' or 'Low' risk rating. These ratings are defined as follows:

- **Very High** – ACM that pose an immediate or elevated health risk to employees or the public. The level of risk is applicable to the presence of friable material such as limpet asbestos insulation and asbestos ropes. The materials are readily accessible, in poor or friable condition. Immediate actions shall be taken. Removal to be undertaken by licensed asbestos removal contractors.
- **High** – ACM that pose a potential health risk to employees and the public in their current state. This level of risk is applicable to damaged or unstable material that is friable with force, accessible within a high activity area such as broken or deteriorated cement sheeting, which presents a potential immediate health risk if disturbed. Control measures to stabilise the material shall be initiated immediately and regular air monitoring of the material is recommended for these materials. Formal abatement should be considered when capital allows or where planned maintenance, refurbishment or demolition works will disturb these materials. Removal, when required should be undertaken by licensed asbestos removal contractors.
- **Medium** – ACM that pose little health risk to employees and the general public. They consist of materials that are currently damaged but stable or non-friable condition with a low accessibility. The material does not present a health risk unless further disturbed. Maintenance work shall be carried out to stabilise or repair the damaged area. Control shall be implemented to protect these materials from further damage including materials identified by warning signs. Reassessment of the priority rating will be required if any planned maintenance, refurbishment or demolition works impact on their condition. If any damage is present, maintenance work shall be carried out to stabilise and repair the damaged area. Removal, when required should be undertaken by licensed asbestos removal contractors.
- **Low** – ACM that pose negligible health risk to employees and the general public, such as painted cement sheeting, vinyl floor tiles etc. They consist of materials that currently are in an undamaged, stable, non-friable condition within a low accessible area. The material does not present a health risk unless disturbed by intrusive work such as drilling, cutting, breaking or sanding. Control shall be implemented to protect these materials from damage including materials identified by warning signs. Reassessment of the priority rating will be required if any planned maintenance, refurbishment or demolition works impact on their condition. If damage, maintenance work shall be carried out to stabilise and repair the damaged area.

Should materials of unknown composition, or materials suspected of containing asbestos, be encountered on site and are not documented in the existing asbestos survey report, such materials shall be treated as if they were asbestos until sample analysis confirms otherwise. In the event that additional asbestos is identified, a risk assessment shall then be conducted by a suitably qualified and competent person. 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 shall be performed by a Consultant Occupational Hygienist prior to the commencement of the planned demolition/refurbishment works.

4.7 Control of Asbestos Hazards

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

1. Leave in-situ and manage
2. Enclose
3. Encapsulate

4. Remove

Regardless of the identified risk level and in accordance with the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011, ACM shall be removed prior to the commencement of demolition, partial demolition, renovation or refurbishment if it is likely to be disturbed by those works.

4.7.1 Leave in Situ (Defer Action)

The identification of asbestos in a building or plant does not automatically necessitate its removal. Asbestos in a stable condition and not prone to mechanical damage can generally remain in-situ and, presents little or no significant risk to health, compared to the potential for exposure during unnecessary removal activities.

The asbestos shall be inspected on a regular basis to ensure its integrity is maintained and should be labelled with an appropriate warning.

4.7.2 Enclosure

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

4.7.3 Encapsulation

Encapsulation refers to the coating of the outer surface of the asbestos material by the application of a sealant compound that usually penetrates to the substrate and hardens 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. The use of encapsulation or sealing may be of limited application and should not be considered as an acceptable alternative to repairing or removing severely damaged ACM.

4.7.4 Removal

Removal of all asbestos containing materials from a City of Gold Coast workplace shall be performed by approved licensed contractors under controlled conditions, in accordance with the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011. Refer to section 7.0 for detailed information.

This asbestos removal works can only be arranged by Engineering Services or EDMP or GCW or Superintendent of Construction Services with the use of an approved Queensland licensed asbestos removalist. Asbestos removal clearance certificates, if necessary air monitoring results, must be sent to the asset custodian as well as a copy to Facilities Management Unit. The site asbestos database record can only be updated on receipt of this legal record.

Removal is considered preferable to the other abatement options such as enclosure or encapsulation, as it eliminates the hazard from the workplace. 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 ACM, the asbestos shall be removed under controlled conditions prior to the commencement of any site works.

ACM falls into two broad categories (non-friable and friable) and the category the ACM falls under will determine how the ACM is removed.

If the ACM is classified as friable (e.g. sprayed limpet, pipe lagging, millboard insulation, vinyl sheet floor coverings with asbestos backing material) it is necessary to engage a contractor who possesses an A class licence for friable asbestos removal. Additionally in line with industry best practice all material analysed and

determined to be low density asbestos fibre board (LDB) will be removed by a contractor who possesses an A class licence for friable asbestos removal.

If the ACM is classified as non-friable ACM (e.g. asbestos cement wall linings, corrugated roof sheeting or fencing material, vinyl floor tiles, Zelemite electrical boards) the ACM may be removed by a contractor who possesses a B class licence for non-friable asbestos removal.

Important Note: While some ACM may be classified as non-friable when left in-situ, the nature of a removal process may render the ACM friable, for example the sanding of asbestos backing on vinyl floor coverings and the removal of low density asbestos fibre board.

Table 5.1 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 5.1 Determination of appropriate control method for asbestos

Appropriate When	Not Appropriate When	Advantages	Disadvantages
Defer			
• Negligible risk of exposure and • Asbestos inaccessible and fully contained or • Asbestos stable and not liable to damage	• Possibility of deterioration or damage • Airborne asbestos dust exceeds recommended exposure standard	• No initial cost • Cost of removal deferred	• Hazard remains • Need for continuing assessment • Asbestos management program required
Enclosure			
• Removal extremely difficult • Fibres can be completely contained within enclosure • Most of surface already inaccessible • Disturbance to, or entry into, enclosure area not likely	• Enclosure itself liable to damage • Water damage likely • Asbestos product cannot be fully enclosed	• May minimise disturbance to occupants • Provides an adequate method of control for some situations	• Hazard remains • Continuing maintenance of enclosure • Asbestos management program required • Need to remove enclosure before eventual removal of asbestos • Precautions necessary for entry into enclosure
Encapsulate			
• Removal difficult or not feasible • Firm bond to substrate • Damage unlikely • Short life of structure • Readily visible for regular assessment	• Asbestos deteriorating • Application of sealant may cause damage to material • Water damage likely • Large areas of damaged asbestos	• Quick and economical for repairs to damaged areas • May be an adequate technique to control release of asbestos dust	• Hazard remains • Cost for large areas may be near removal cost • Asbestos management system required • Eventual removal may be more difficult and costly

Appropriate When	Not Appropriate When	Advantages	Disadvantages
Removal			
• Surface friable or asbestos poorly bonded to substrate • Asbestos is severely water damaged or liable to further damage or deterioration • Located in A/C duct • Airborne asbestos exceeds recommended exposure standard • Other control techniques inappropriate	• Located on complex and inaccessible surfaces • Removal extremely difficult and other techniques offer satisfactory alternative	• Hazard removed • No further action required	• Increases immediate risk of exposure especially to removal workers • Creates major disturbance in building • Often highest cost, most complex and time consuming method • Removal may increase fire risk within building; substitute required • Possible contamination of whole building if removal done poorly

Source: *National Occupational Health and Safety Commission*

Asbestos: *Code of Practice and Guidance Notes August 1988*

NOTE: The above table was removed from the April 2005 Asbestos Management Code of Practice

5. Managing in Situ Asbestos Containing Materials

5.1 General

The management of in situ asbestos is important to ensure asbestos containing materials are not damaged or deteriorated to such an extent where City of Gold Coast workers, visitors, tenants or volunteers are unnecessarily exposed to airborne asbestos fibres.

The requirements of the worker induction and asbestos permit to work system will aid in the management of in situ asbestos. It is also the policy of the City of Gold Coast to incorporate safe work asbestos management into operational and construction works to ensure any asbestos on, or in, City of Gold Coast workplaces is dealt with in the appropriate manner.

5.2 Record Keeping

Any City of Gold Coast employee who authorises asbestos removal work shall maintain detailed records of all activities relating to asbestos works which have been undertaken at its workplaces. On completion of any asbestos works, all records shall be forwarded to both Facilities Management Unit and the Asset Custodian.

The records kept should include:

- Copies of all asbestos survey/audit reports, including updates and amendments
- Copies of all asbestos 'Permit to Work' documents
- Site induction records pertaining to the notification of contractors about the presence of asbestos on site
- Records pertaining to informing City of Gold Coast employees, both direct and in-direct, about the presence of asbestos on site, and that these employees have been appropriately trained in safe work procedures and practices
- Asbestos removal records shall be supplied to Facilities Management Unit ,i.e., clearance certificates, air monitoring results or safe work method statement (less than 10m2) of any asbestos abatement works performed on site
- Facilities Management require the asbestos removal records to update the SAP workplace history and meet legislative and legal record keeping requirements.
- Clearance certificates indicating that areas are safe to reoccupy after asbestos removal works. All clearance certificates are to include:
  - Airborne fibre monitoring results.
  - Previous versions of the Asbestos Register.
  - Refer to Asbestos Management Code of Practice for other inclusions.
  - Exactly itemise asbestos removal items as per the SAP asbestos register line items for clarity of legal information.

Note: Where practicable, the above documentation will be attached to the asbestos register. All asbestos related records and documents are to be retained for a period of 40 years.

5.3 Warning Signs and Labelling

The use of warning signs and labels to indicate the presence of ACM's is one of many recognised management control measures. City of Gold Coast have implemented and continue to maintain and improve on a system of warning signs and labelling installations throughout City of Gold Coast workplaces, to clearly identify and provide warning of the presence of asbestos material. Such a system is designed to reduce the risk of inadvertent damage to the ACM (which may cause the release of asbestos fibres into the airborne environment) by the actions of personnel.

The extent of all labelling will be balanced with the level of risk presented by the ACM against the level of public concern associated with such signage when determining labelling requirements.

5.3.1 Warning Signs

All City of Gold Coast workplaces which are known or suspected to contain ACM shall have a warning signage located in a prominent place in the building such as front door, within entrance lobby, at a reception desk or in an area where tradespersons report to prior to commencing any building or maintenance works.

The warning sign shall be clearly visible and shall conform to AS 1319:1994 Safety Signs for the Occupational Environment.

An example of the standard City of Gold Coast warning sign is illustrated below.

WARNING

Before commencing any work at this site please contact City of Gold Coast.

Asset Custodian Name on: (07) 55XX XXXX

In addition, some examples of generic warning signs are shown below.

5.3.2 Labelling

In addition to warning signs, when a risk assessment has identified that the ACM may be disturbed or there is a potential health risk, the ACM shall be labelled to warn of the presence of asbestos. The location of the label will be consistent with the location of the ACM as outlined by information in the Asbestos Register.

All labels shall comply with the labelling elements of the Globally Harmonized System of Classification and Labelling of chemicals (GHS) 3rd Edition Annex 1 Allocation of Label Elements and AS 1319.The following labelling standards shall be observed at City of Gold Coast to identify ACM.

Asbestos Electrical Boards and Components

Standard black and yellow “Asbestos” stickers shall be fixed onto or adjacent to the asbestos electrical boards and components, and in locations discussed above (for tradespeople).

Labels or signs fixed adjacent to the ACM shall direct personnel to the location of the ACM with appropriate wording.

The Workplace Health and Safety Queensland Factsheet 'Identifying and Recording Asbestos in the Workplace 2009' provide the following advice for the labelling of ACM:

Labelling Non-Friable Asbestos

Labelling is not required for every individual piece of non-friable asbestos containing material if other control measures are in place and followed properly. However, owners of workplaces with non-friable asbestos containing material must ensure that people who carry out work on the non-friable material (e.g. painters, plumbers and other trades persons) are made aware of its presence via induction program, site asbestos register or asbestos mapping system and adhere to the permit to work system.

Labelling Friable Asbestos

Consideration should be given to the risk associated with the asbestos containing material and the likelihood of people being exposed to airborne fibres if it is disturbed. If it is not practical to label friable asbestos, such as lagging, a prominent warning sign must be posted in its immediate vicinity.

Friable asbestos containing material that has been covered by a sealant or is otherwise sealed from exposure to the atmosphere should be labelled so as to alert people to its existence.

Only a competent person will determine the number and positions of the labels required and these will be consistent with the location of the ACM as outlined by the data within the asbestos register.

The definition of a competent person in the current asbestos legislation is *"a person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of the specific work."*

City of Gold Coast has determined for the installation of warning signs and labelling of non-friable ACM, that City of Gold Coast employees may undertake, once deemed competent. In order to be deemed competent, the person must:

- Attend an asbestos awareness presentation provided by an Occupational Hygienist or view/attend a relevant City of Gold Coast training package; which includes content covering the following:
  - Asbestos Terminology
  - Legislation and Guidelines
  - Common Asbestos Situations
  - Identification of Asbestos
  - Risk Assessment
  - Implementation of Control Measures
  - Management of Asbestos

In addition, qualifications, skills or experience in the following areas may assist in deeming a person competent:

- Tertiary qualifications in OHS or Occupational Hygiene.
- Significant experience in the asbestos management industry.

The installation of signage and labelling for all friable ACM must be conducted by an Occupational Hygienist or an experienced asbestos management consultant who is deemed competent to conduct such work.

Examples of Labels are shown below:

Note:

The examples of the Warning Signs and Labels provide only an indication of the words that may be used to alert persons to the presence of ACM and asbestos hazards. The wording is not mandatory. Other Warning Signs and Labels may be used, provided they meet the requirements of AS 1319.

Labels for internal or external usage must be weather proof and self-adhesive.

6. Working with Asbestos – Procedures & Instructions

6.1 Work Requirements

Any work planned on City of Gold Coast ACM workplaces are subject to validation through the Asbestos Register to determine the presence or otherwise of asbestos. Where it is deemed appropriate that the asbestos is to be abated or removed as part of the building work, all such work shall be conducted in accordance with the legislative requirements as they relate to asbestos removal as well as the sections following in this document.

Note: Every City of Gold Coast SAP maintenance work order docket will include an asbestos notification (*asbestos yes/asbestos no*) to indicate whether asbestos containing materials are present at the intended work site. An electronic link between the SAP asbestos register and the maintenance work order system will ensure the asbestos 'status' of the nominated site is recorded on the maintenance work order docket.

To ensure the proper management of asbestos all building work is to be undertaken in accordance with the process as shown in:

- Appendix C Typical Building Work Approval Process within City of Gold Coast.

6.2 Work Practices

Prior to commencing any works on City of Gold Coast workplaces built prior to 1 January 1990, such as demolition, refurbishment or maintenance, the asbestos register for the site must be consulted to determine if any asbestos containing materials are present which are at risk of being disturbed. If it is documented asbestos containing materials are present in the area and may be impacted upon by the proposed works, an appropriately licensed asbestos removal contractor will remove all asbestos under controlled conditions, prior to the commencement of any building works.

If an asbestos register is not available for the workplace in question, an asbestos survey shall be conducted prior to the commencement of any works and all suspect materials identified presumed to contain asbestos until sampled and analysed to confirm the presence or non-presence of asbestos fibres. All survey data shall be incorporated into the asbestos database and updated on the completion of any remediation 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 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 City of Gold Coast to determine what control methods are required.

6.3 Maintenance and Service Work

Some routine maintenance and service works are likely to impact on ACM from time to time. Situations where this can occur will be identified through the City of Gold Coast asbestos Permit to Work system in consultation with the asbestos register. Any maintenance and service activities that are likely to impact on ACM shall be undertaken by a suitably licensed asbestos contractor in accordance with all relevant legislation, codes of practice and City of Gold Coast procedures.

These activities are only to be performed under controlled conditions to prevent the distribution of airborne asbestos fibres. The Workplace Health and Safety Queensland Code of Practice How to Manage and Control Asbestos in the Workplace 2011 details safe working practices to be followed for the conduct of these maintenance activities to ensure any fibre release is minimised or contained and shall be followed accordingly.

The contractor shall develop and issue safe working procedures and safe work method statements to the City of Gold Coast representative for review and approval prior to the commencement of any works.

6.4 Identification of Suspect Materials

Where suspect materials are identified at a site, City of Gold Coast shall engage a suitably competent person to visit the site, inspect the suspect material, take samples where required, record all relevant information and send samples to suitably NATA accredited laboratory for analysis. The laboratory will then perform analysis and provide results to the relevant City of Gold Coast representative who will be responsible for coordinating the updating of the asbestos register to include the new information.

When a sample is taken, the following relevant information must be completed/collected and entered into the City of Gold Coast asbestos database.

- Assessment Date
- Floor
- Room No./Name
- Location
- Application
- Material Type
- Unique Sample Number/ID
- Quantity
- Condition
- Risk Rating
- Recommended Control
- Photograph Reference
- Additional Comments (if applicable)
- Original Certificate of Analysis Document to be Supplied (if applicable)

6.5 Permit to Work

Contractors removing or working with (i.e. undertaking maintenance activities, construction or demolition) asbestos containing materials at City of Gold Coast workplaces will utilise the Work Approval Process within City of Gold Coast to be issued by the relevant Asset Custodian to the authorised Recipient.

To ensure the proper management of asbestos all building work is to be undertaken in accordance with the process as shown in:

- Appendix C Typical Building Work Approval Process within City of Gold Coast.

Before a Permit to Work is issued where the works will impact on or disturb asbestos-containing products, individuals will be required to review the City of Gold Coast Asbestos Register. Where practicable, contractors shall be made aware of the requirements of the City of Gold Coast AMP prior to tendering, to ensure they allow for such requirements when quoting.

The Permit to Work will define the scope, location and the performers of the work and specify the precautions and the conditions under which the permit holder is authorised to conduct the work. The Permit to Work specifically authorises works to commence. Further, the Permit to Work will document what asbestos containing materials are to be removed, encapsulated or otherwise protected, prior to the contracted maintenance or building works proceeding. Before being issued with a permit to work where the works will impact on or disturb asbestos-containing products:

- 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 Queensland Work Health and Safety Act 2011 and the Queensland Work Health and Safety Regulation 2011. 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 hold an A Class licence in asbestos removal and they are working under the direct supervision of a competent person as defined by the Queensland Work Health and Safety Regulation 2011 for the supervision of the prescribed activity that is work to remove friable asbestos containing material.
- Any business conducting Class A asbestos removal work will need a new Class A asbestos removal licence in order to continue operating from 1 January 2014. This must have a unique license number, an expiry date and issued by WHSQ. Please note the nominated A Class supervisor must be listed on the license. Any other person onsite as a supervisor not stated on the license is not authorised to perform the work.
- Workers carrying out asbestos removal work for a Class A asbestos removal licence holder must hold a certificate for the unit of competency for the type of asbestos removal work being carried out as detailed below.
  - CPCCDE3015A Remove friable asbestos. All removal workers onsite must have this certificate. Issued by an RTO. The RTO's registration number and course number/name must be quoted on certificate.
  - CPCCBC4051A Supervise asbestos removal. All nominated supervisors onsite must have this certificate and also be nominated on the removal license. The RTO's registration number and course number/name must be quoted on certificate.
- Workers engaged in the removal of greater than 10m2 of non-friable asbestos will not be issued with a permit to work unless every individual holds a Class B asbestos removal licence.
- A permit to work will not be issued unless evidence of written notice to the regulator at least five days before the removalist commences licensed asbestos removal work is provided in accordance with Regulation 466 of the Queensland Work Health and Safety Regulation 2011 and Section 3.6 of the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011.
- An Asbestos Removal Control Plan must be developed for all works involving working with or removing asbestos. In addition for all friable works or non-friable works where a Principal Contractor has been appointed, a Work Method Statement must also be developed.

When a project involves a team of more than one worker, the person in charge of the team will be issued with a Permit to Work form. They will be responsible to ensure that their workers are aware of their responsibilities.

When work is completed, the permit shall be signed and returned to the Principal Contractor/ City of Gold Coast representative.

The Principal Contractor/ City of Gold Coast representative shall be advised immediately of any incidents of non-compliance with this document or the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011.

All works must have a SWMS completed regardless of the works having a principle contractor.

6.6 Asbestos Removal

It is the aim of the City of Gold Coast to keep personal exposure to asbestos as low as reasonably achievable. Precautions will be taken to remove any risk to health and safety arising from airborne asbestos fibres during asbestos removal works.

A detailed and site specific work scope will be developed prior to the removal of asbestos containing materials from City of Gold Coast workplaces. The removal of asbestos containing materials shall only be performed by licensed asbestos removalist, in accordance with Queensland Work Health and Safety legislation. For minor asbestos removal of less than 10m2 a class B asbestos removal license is still required.

An Asbestos Removal Control Plan (ARCP) must be developed by the nominated asbestos removal contractor for all works involving the removal of asbestos. The contents of an ARCP are set out in Section 3.5 of the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011.

All proposed licensed asbestos removal works must be notified to the regulator in writing (using Form 65) at least five days before the commencement of licensed asbestos removal work, in accordance with Regulation 466 of the Queensland Work Health and Safety Regulation 2011 and Section 3.6 of the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011.

The removal of friable asbestos containing 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.

The requirements of the preparation works prior to the removal of asbestos materials and techniques used for the actual removal works will be dependent on the types of materials being removed and their location. It is crucial that a detailed and site specific work scope and asbestos removal control plan are developed prior to any works commencing in accordance with the above legislation.

All asbestos removal works are to be performed in accordance with the following:

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011
- The Code of Practice: How to Safely Remove Asbestos
- The Code of Practice: How to Manage and Control Asbestos in the Workplace
- Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibre, 2nd Edition [NOHSC:3003(2005)].

City of Gold Coast requires all asbestos removal works to be undertaken by a licensed Asbestos Removal Contractor. Licensing requirements are as follows:

- Friable asbestos must be removed by an A Class licensed asbestos removal contractor
- Non-Friable asbestos (including non-friable material under 10 square metres) must be removed by an A class or B Class asbestos removal contractor.

Additional information on Asbestos Removal - Standard Work Practices can be found in Appendix G of this AMP.

6.7 Project Supervision

Prior to the removal of any friable asbestos, an appropriately qualified competent person such as a Consultant Occupational Hygienist, with experience in asbestos abatement works, shall be engaged at the cost of the

project to work independently of the asbestos removal contractor. Depending on the nature of the work, City of Gold Coast may also engage a competent person to oversee the removal of certain non-friable asbestos. 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:

- Inspection of the integrity of the containment prior to commencement of asbestos removal works
- Inspection of the asbestos removalist's equipment, including decontamination and negative air units, water filtration systems, vacuum equipment, personal protective equipment (PPE) etc.
- Assessment of the asbestos removalist's work methods, use and maintenance of PPE and decontamination procedures
- Clearance visual inspection of the work area after the removal of asbestos to ensure the asbestos has been removed to a satisfactory standard
- Asbestos fibre air monitoring in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibre [NOHSC: 3003 (2005)], during asbestos removal works and as clearance air monitoring after the removal of asbestos, but before dismantling of the containment.

6.8 Control Monitoring

Control (static) asbestos air monitoring will be carried out by a NATA Accredited Consultant Occupational Hygienist licensed in line with requirements of Part 8.10, Division 2 of the Work Health and Safety Regulation 2011.

As part of City of Gold Coast commitment to health and safety, industry best practice will be used for the development of airborne fibre monitoring programs. An airborne fibre monitoring program will be developed in the following circumstances:

- During all asbestos removal works (friable and non-friable).
- Where some typical maintenance and service tasks are being conducted that have the potential to disturb ACM, and there is a need to assess the adequacy of controls.
- Where information regarding background fibre levels is required in areas that are assessed as being high risk (due to condition / nature of the asbestos material) to persons working in the vicinity of the ACM and immediate treatment / removal / encapsulation is not possible.

Air monitoring requirements will vary, depending on the types of ACM being removed, the location and position of the ACM, the need for and use of enclosures and whether the removal work is within a building or outside. All monitoring plans are to be developed by a licensed asbestos assessor or competent person, who is independent from the person responsible for the removal work.

No asbestos removal work is to take place until the air monitoring has commenced.

Additional information on asbestos air monitoring is provided in Appendix F.

6.9 Clearance Inspections and Certificates for the Resumption of Normal Activities

Before an area can be re-occupied post asbestos removal, a clearance inspection shall be performed. The clearance inspection shall be undertaken by a licensed asbestos assessor who is independent from the person responsible for the asbestos removal work (i.e. the asbestos removal contractor) and a clearance certificate shall be obtained.

Clearance airborne fibre monitoring is a mandatory requirement for all friable asbestos removal works. The requirement for clearance airborne fibre monitoring for the removal of non-friable asbestos shall be determined by a competent person based on a risk assessment, prior to the commencement of works.

The complete removal of all ACM shall be verified with a written clearance certificate which shall include details of a satisfactory clearance inspection conducted by the independent licensed asbestos assessor. The clearance certificate shall be issued prior to re-occupation of the area. If clearance air monitoring has been conducted, the results of the clearance monitoring shall be included as part of the clearance certificate as well.

The format of all clearance certificates shall be issued in accordance and be compliant with current asbestos legislation and related codes of practice. The clearance certificate shall itemise each ACM situation/material removed with the description as listed within the City of Gold Coast asbestos register.

The removal of asbestos containing materials shall only be performed by licensed asbestos removalist, in accordance with Queensland Work Health and Safety legislation or for less than 10m2 ACM removed by a competent trained asbestos removalist (a SWMS is still required to be completed).

A clearance certificate (and air monitoring results if applicable) or SWMS must be obtained and issued for all asbestos removal work completed on City of Gold Coast workplaces. This asbestos record document must be provided to the Asset Custodian and Facilities Management, at the same time, so the council central SAP asbestos register or spatial mapping system is updated.

6.10 Disposal of Asbestos Products

All asbestos waste shall be disposed of at an approved landfill disposal site by licensed contractors, and in accordance with, the requirements of Queensland Environmental Legislation and the National Occupational Health and Safety Commissions Asbestos Codes of Practice. Asbestos shall not be stored for extended periods on City of Gold Coast property.

All asbestos waste shall be double bagged or double wrapped prior to its removal from site, using 200 μm thick polyethylene bags or plastic sheeting. Asbestos waste shall be bagged/wrapped once at the workface and a second time away from the workface but prior to leaving the removal area enclosure. It is recommended that a bag (LDPE type), 0.2mm thickness, maximum bag size of 1200 mm (length) x 900 mm (width) be used. Bags contents shall be wet before sealing and must not exceed 25 kg in weight (Refer Waste Management Fact sheet Ispot 23709919.

Alternatively, other approved containers may be used. In the case of non-friable materials such as asbestos cement, such materials can be placed into a plastic double lined industrial waste bin or like container.

Each bag or container shall be labelled on its outermost surface, with the following warning statement or a similar statement to alert people to the asbestos hazard:

CAUTION – ASBESTOS WASTE

AVOID CREATING DUST

SERIOUS INHALATION HEALTH HAZARD

Transport and final disposal of asbestos waste material shall be carried out in a manner that will prevent the liberation of asbestos dust to the atmosphere. All asbestos waste material shall be buried at an approved landfill site and in a manner approved by the local and state authorities.

To achieve "final completion" of an asbestos removal project, City of Gold Coast requires verification that the asbestos waste has been transported and disposed of in accordance with State legislative requirements. A copy of the DERM Waste Tracking document is the required documentation for disposal, and a copy of the necessary license for carrying out this removal and disposal is the required documentation for transportation.

6.11 Inspection, Measuring and Test Equipment

All measuring equipment used in providing a service will be calibrated according to its operating manual. Calibrations will be performed at intervals required by NATA or other accrediting organisations. An external calibration database will be maintained. Periodic reports will be taken from the database to show the calibration status of the equipment.

A calibration label will be fixed to each piece of equipment showing its calibration status. Statistical Control Measurements will be undertaken in the course of long term monitoring projects.

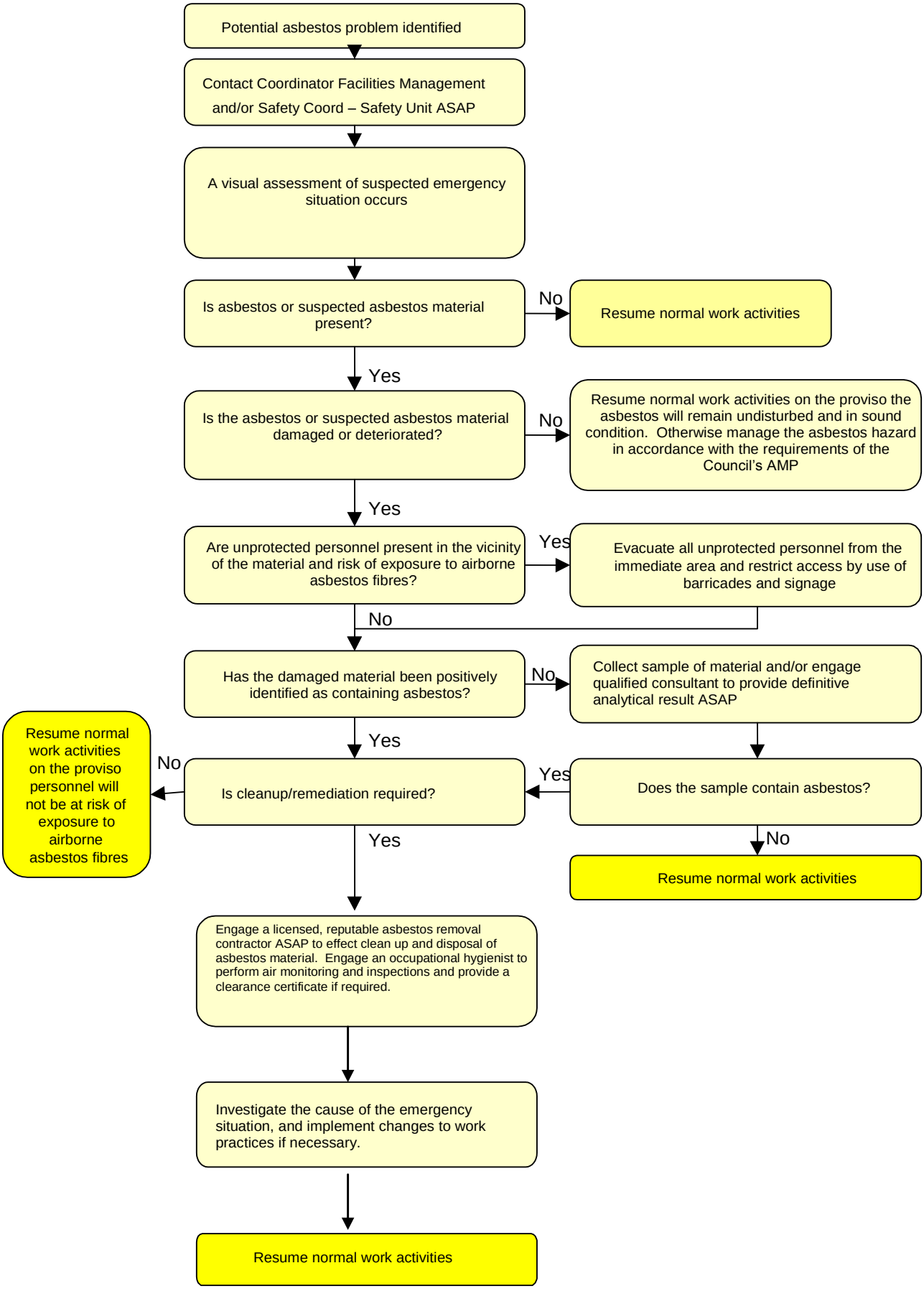
7. Asbestos Incident Response and Management

Any situation where asbestos is suspected shall be managed using the precautionary approach of assumption of presence.

An emergency situation is most likely to entail such a scenario where asbestos present on site have been inadvertently disturbed through actions of City of Gold Coast employees, maintenance personnel, contractors, visitors, or damaged by severe weather conditions (e.g. hail damage to a corrugated asbestos cement roof). Where such damage has occurred, the Coordinator Facilities Management and/or the Safety Coordinator – Safety Unit shall be notified immediately.

The asbestos incident response and management process is shown in Figure 14-1. Following the positive identification of asbestos in a work area and where personnel may have been exposed to airborne fibres, the City of Gold Coast incident notification, reporting and investigation procedure shall be implemented.

Figure 8.1
Emergency Response Flow Chart



8. Training/Consultation

8.1 Asbestos Awareness Training

City of Gold Coast personnel should not normally be involved with asbestos abatement work. Licensed, reputable asbestos removal contractors should preferably undertake all asbestos removal work. At present a B class asbestos removal license is required for the removal of bonded asbestos containing materials such as asbestos cement sheeting.

However, in some cases, City of Gold Coast may engage an A class asbestos removalist for removal of such bonded materials, to ensure the appropriate removal methods are adopted, and the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011 is complied with.

Where asbestos-related work is undertaken by City of Gold Coast 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. Qld Workplace Health and Safety web site also provides helpful assistance for emergency works and asbestos management.

City of Gold Coast personnel (typically maintenance 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 induction training normally provided by ES & GCW. If further training is required please contact OS FMU for assistance). Such training shall include the following:

- Overview of asbestos-related Commonwealth and State acts and regulations, standards and codes of practice.
- Information on the presence of asbestos in City of Gold Coast premises, including the types of asbestos and typical locations where asbestos may be encountered. Information should be provided on the differences between friable and non-friable products.
- Identification of ACM.
- Information on the health risks associated with asbestos.
- Highlighting the need to avoid disturbing in situ asbestos.
- Information on the labelling system for asbestos adopted by the City of Gold Coast.
- Nature of operations which could result in asbestos exposure.
- Preventative and control measures.
- Procedures to be followed in the event damaged or disturbed asbestos are identified or unknown products suspected of containing asbestos are encountered, including the relevant point of contact within the Building Maintenance.
- Airborne Asbestos Monitoring Program.
- Responses to airborne asbestos fibre releases.
- Individual responsibilities in relation to asbestos management.
- This AMP and the procedures implemented at the site to protect employees from exposure to asbestos, including work practices, housekeeping, emergency responses and personal protective equipment.

An important element of the information provided will be on the responsibilities of management and employees in relation to asbestos matters, and the health hazards that may result if these responsibilities are neglected.

Training records will be maintained for each City of Gold Coast employee in accordance with City of Gold Coast training, awareness and competence processes. All records are held on the City of Gold Coast.

8.2 Contractor Induction/Familiarisation

Contractors will be provided with an appropriate level of asbestos awareness training during the City of Gold Coast induction process to ensure that they are aware of the requirements of this AMP, and the location of any

ACM that may impact upon their work. Site inductions are provided by ES & GCW representative and will include, where necessary, a copy of the relevant section(s) of the City of Gold Coast asbestos register or spatial mapping system information, asbestos management procedures and personal protective requirements. The induction shall also emphasise worker responsibilities in relation to asbestos matters and the health hazards that may result if these responsibilities are neglected.

8.3 Residential/Commercial Tenant Communications

- As part of the tenancy information package, all City of Gold Coast tenants will be provided with an Tenant Asbestos Fact Sheet, which will provide the following information:
  - What is asbestos? Background information
  - Awareness of the potential health risks of asbestos
  - Typical locations of asbestos containing materials within domestic premises (including photographs)
  - 'Do's and Don'ts' relating to DIY or maintenance works
  - Contact details of the relevant City of Gold Coast representative and reporting procedures
- Where available, a copy of the current ACM register shall be kept on the premises for the tenant's information.
- City of Gold Coast will inform the tenants of the premises of the nature of any asbestos related works to be undertaken and the reasons for the necessary control measures and precautions.

8.4 References

- Queensland Work Health and Safety Act 2011.
- Queensland Work Health and Safety Regulation 2011.
- Queensland Environmental Protection Act 1994.
- Queensland Environmental Protection Regulation 2008.
- Queensland Environmental Protection and Other Legislation Amendment Act (No.2) 2008.
- Environmental Protection (Waste Management) Regulation 2000.
- Workplace Health and Safety Queensland Code of Practice How to Manage and Control Asbestos in the Workplace 2011.
- Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011.
- Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC: 2003 (2005)].
- National Occupational Health and Safety Commission (NOHSC) (2005), Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)]".
- Model Regulations for the Control of Workplace Hazardous Substances [NOHSC:1005(1994)].
- Guidelines for Health Surveillance [NOHSC:7039(1995)].
- The State of Queensland (Department of Justice and Attorney-General, Workplace Health and Safety Queensland Guidance Notes/Factsheets, for:
  - Identifying and recording asbestos in the workplace: 2009.
  - Low density asbestos fibre board: 2010.
  - Asbestos flooring 2008.
  - Air monitoring when removing asbestos: 2008.
  - Clearance inspections for asbestos work areas: 2008.
- AS 1319-1994 Safety Signs in the Occupational Environment.
- AS/NZS 1715-2009 Selection, Use and Maintenance of Respiratory Protection Devices.
- AS/NZS 1716-2003 Respiratory Protection Devices.

- AS/NZS 60335.2.69:2003 Household and Similar Electrical Appliances – Safety – Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use.
- AS 4260-1997 High Efficiency Particulate Air (HEPA) Filters – Classification, Construction and Performance.

National Exposure standards are sourced from:

- Hazardous Substances Information System (HSIS) at: http://hsis.ascc.gov.au/SearchES.aspx

8.5 City of Gold Coast Referenced Documents

- Division Work, Health & Safety Act 2011
- Queensland Asbestos Management & Removal Code of Practices

9. Glossary of Terms

Accredited Laboratory	A testing laboratory accredited by NATA (National Association of Testing Authorities), Australia.
Air Monitoring	Airborne asbestos sampling to assist in assessing exposure and the effectiveness of control measures. This includes exposure monitoring, clearance monitoring and control monitoring.
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.
AMP	Asbestos Management Plan
Asbestos	The asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals including the following: • Actinolite, grunerite or amosite (brown asbestos), anthophylite, crocidolite (blue asbestos), chrysotile (white asbestos), tremolite, and; • A mixture that contains one or more of the above mentioned minerals.
Asbestos Containing Material (ACM)	Any material or thing that, as part of its design, contains asbestos.
Asbestos Register	A register recording the type, condition and location of all asbestos and asbestos containing materials and the date the ACM was identified.
Asbestos Removal Control Plan	A site specific document to be prepared by the removal contractor based on the information in the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011.
Asbestos Work Area	The immediate area in which work on ACM is taking place. The boundaries off the work area shall be determined by a risk assessment.
Asbestos Removal Work	Work involving the removal of asbestos or ACM. Class A asbestos removal work or Class B asbestos removal work as outlined in Part 8.10 of the Queensland Work Health and Safety Regulation 2011.
Asset Custodian	Refer Corporate Asset Management Asset Custodian Policy.
Clearance Inspection	An inspection carried out by a licensed asbestos assessor, 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 shall include a visual inspection, and may also include clearance monitoring and/or settled dust sampling.
Clearance Monitoring	Air monitoring using static or positional samples to measure the level of airborne asbestos 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.

Competent Person	For the purposes of an asbestos clearance inspection: A person who has acquired through training, qualification or experience the knowledge and skills of relevant asbestos removal industry practice and holds: • A certification in relation to the specified VET course for asbestos assessor work; or • A tertiary qualification in occupational health and safety, occupational hygiene, science, building, construction or environmental health For any other case: A person who has acquired through training, qualification or experience the knowledge and skills to carry out the specified task.
Control Level	The airborne concentration of a particular substance which, 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
Control Monitoring	Air monitoring using static or positional samples 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.
Exposure Monitoring	Air monitoring to determine a person's likely exposure to a hazardous substance. Results from exposure monitoring may be compared to the national exposure standard (NES)
Friable asbestos material	Material that that is in a powder form or that can be crumbled, pulverised or reduced to a powder by hand pressure when dry, and contains asbestos.
CITY OF GOLD COAST	Council
Hazard	Any matter, thing, process, or practice that may cause death, injury, illness or disease.
Licensed Asbestos Assessor	A person who holds an asbestos assessor licence.
Licensed Asbestos Removalist	A person conducting a business or undertaking who is licensed under the Queensland Work Health and Safety Regulation 2011 to carry out class A or class B asbestos removal work.
NAD	No Asbestos Detected
National Exposure Standard (NES)	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. The NES for all forms of asbestos is 0.1 fibre/mL of air, measured using the membrane filter method.
NOHSC	National Occupational Health & Safety Commission, now known as the Australian Safety & Compensation Council (ASCC).
Non-friable asbestos material	Material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.
Permit Authority	A person who is trained and authorised to issue permits. The permit authority is primarily responsible for defining work precautions and conditions and ensuring that they are carried out to establish a safe working environment for the work party.

Permit Holder	A person who is trained and authorised to receive a permit to work. The permit holder is primarily responsible for controlling the work, ensuring compliance with the work conditions, and maintaining a sake working environment.
Permit to Work	A document that defines the scope, location and performers of the work as well as specifying the precautions and the conditions under which the permit holder is authorised to conduct the work. The Permit to Work specifically authorises work to commence. Directorates may have a specific alternative permit to work than mentioned in Appendix A.
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.
Person in charge of area	The person in charge of the building or area affected by the asbestos removal.
Risk	Means the likelihood of a hazard causing harm to a person. Note: In this instance, *risk relates to illness or disease arising from exposure to airborne asbestos fibres.*
Workplace	A workplace is a place where work is carried out for a business or undertaking and includes any place where a worker goes, or is likely to be, while at work.

Appendix A Permit to Work

Permit to Work (Example)

City of Gold Coast

Building/maintenance work in areas known to contain asbestos is prohibited, unless a permit to work has been issued to the personnel involved. This permit to work is issued to the nominated recipient for the specific occasion stipulated below:

- Work Permit No.: .....
- Date of issue: .....
- This Permit is issued to:.....
- This Permit is valid up to:.....
- Asbestos Licence Number:.....
- Organisation: .....
- Contact Telephone Number:.....
- Location of Works:.....
- Description of Works: .....
- Duration of Works:.....

Asbestos-containing products have been used in various locations throughout City of Gold Coast properties. Before approval is granted to proceed with work, confirm the following:

1.	Has the existing Asbestos Register been examined?	YES/NO
2.	Has the area where the intended works are to be performed been examined with the Asset Custodian?	YES/NO
3.	Are asbestos containing products present in the work area?	YES/NO
4.	Will the works impact on or disturb the asbestos-containing products?	YES/NO
5.	If YES to question 4 above, are the appropriate asbestos work procedures as outlined in the Gold Coast City Council Asbestos Management Plan documented and understood?	YES/NO
6.	Are Council personnel or the general public at risk of exposure to airborne asbestos?	YES/NO
7.	Is it necessary to evacuate the area prior to work commencing?	YES/NO

Asbestos is not to be disturbed without the issue of a Permit to Work. All works are to be performed in accordance with the special requirements or work procedures outlined in the City of Gold Coast Asbestos Management Plan or specific Directorate Safe Work Instruction or Safe Work Method Statement. If any unknown products, or materials suspected of containing asbestos are encountered, work is to cease immediately and the Asset Custodian notified. If an Asbestos Consultancy Service is required then OS FMU to be notified, 07-55817826.

I have read and understood the requirements and procedures described in the City of Gold Coast Asbestos Management Plan and this permit to work:

_____ _____

Signature of Recipient Allocated Council Officer

Tick if Applicable

- ☐ Division of Workplace Health and Safety holder of business certificate for a prescribed activity in asbestos removal work required
- ☐ Competent person to supervise all asbestos removal works
- ☐ Asbestos Removal Control Plan to be prepared and approved prior to works commencing
- ☐ Site representative to be present whilst work is being carried out
- ☐ 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
- ☐ No power tools allowed
- ☐ No high-pressure water or compressed air tools/equipment allowed
- ☐ 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
- ☐ Clearance visual inspection by independent third party required

Directorate Safety Officer or allocated Project Council Officer to sign acknowledgement if required to be in attendance

_____

Appendix B Background Information and Health Risks

Asbestos: Background Information and Health Risks – General Information

1. Background

Asbestos is the generic term for a group of naturally occurring mineral fibres with high tensile strength, flexibility, and resistance to thermal, chemical and electrical conditions. The most significant types include chrysotile, crocidolite and amosite (white, blue and brown or grey asbestos respectively).

Asbestos fibres enter the body by the inhalation and/or ingestion of airborne particles that can become embedded in tissues of the respiratory or digestive systems. International agencies and national authorities now recognise asbestos to be a human carcinogen. This designation was based on an observation of an increased incidence of lung cancer, mesotheliomas and gastrointestinal cancer in occupationally exposed workers, being consistent across investigators and study populations. Information from animal studies on the inhalation of fibres support these findings, although evidence for carcinogenicity via ingestion is limited.

In recognition of the above-mentioned issues, every effort should be made to eliminate the use of asbestos materials in buildings.

2. Use of Asbestos Materials

Asbestos was used extensively in structures such as buildings, processing plants, ships, trains and motor vehicles in the 1950s, 1960s and 1970s. In the construction industry, asbestos is found in installed materials such as shingles, floor tiles, cement pipe and sheet, roofing felts, pipe and boiler insulation, lagging around hot water and steam pipes, ceiling tiles, fire resistant dry wall, and acoustical materials. The use of sprayed asbestos is currently banned in all states, and crocidolite and amosite have been declared customs prohibited imports. Other uses of asbestos include; heat resistant textiles, insulation inside fire doors, insulation around heater banks in air-conditioning duct work, laboratory equipment such as autoclaves, ovens and incubators, special filters for industrial chemicals, friction materials in clutch and brake pads, lift brake shoes, electrical cable sheaths, old electrical switchboards, gaskets, paints, and protective paper. Small quantities of asbestos may also be found mixed with a wide variety of substances, the presence of which is not always obvious. Some of these compounds include; magnesite, calcium silicate, diatomaceous earths, tale, clay, chalk, sand, cement, paper, pitch, rubber and a wide range of resins.

3. Risk Factors

Today, very few asbestos containing materials are currently being installed. Consequently, most worker exposures now occur during the removal of asbestos and the renovation and maintenance of buildings and structures containing asbestos. Particularly, in the course of dust forming operations such as handling, sawing, sanding, grinding, drilling, turning or similar operations.

Significant health risks may arise from the inhalation of airborne asbestos fibres, and their passage into the lungs. Fibres that measure less than 3 microns wide and greater than 5 microns long are referred to as respirable fibres and may enter the deepest part of the lung. Larger fibres are deposited in the nose and major airways and are cleared by normal physiological processes.

The inhalation of high concentrations of asbestos has been associated with the condition asbestosis, a progressive scarring of lung tissue. The two main forms of asbestos-related cancer (lung cancer and mesothelioma) are generally associated with exposure to potentially carcinogenic fibres below 3 micrometers in diameter and greater than 5 micrometers in length.

The risk of cancer increases as fibres diameter decreases and with increased exposure to asbestos. Cigarette smoking greatly increases the risk of lung cancer in people heavily exposed to asbestos, but has no known association with mesothelioma. Crocidolite and amosite have the most potent documented effects in producing the highly malignant mesothelioma tumour.

The primary objective in any asbestos management plan is to eliminate, where possible, exposure to airborne asbestos fibres, or as a minimum, ensure workers are not exposed to fibre concentrations greater than the National Occupational Health and Safety Commission's occupational exposure standards for asbestos. It should be noted, that in situations where asbestos has been incorporated into a stable matrix and airborne dust is not generated, the asbestos-related health risk is negligible.

4. Asbestos Cement Materials

Asbestos cement materials were commonplace building materials prior to 1986.

The material consists of asbestos fibres bound in a cement matrix and the degree of fibre release depends on the condition of the material.

The main health risk with asbestos cement materials is from maintenance or similar activity where the material is worked upon (mechanical energy applied) resulting in airborne dust.

It is necessary to have in place safe systems of work when working upon asbestos cement materials.

5. Vinyl Floor Coverings

With vinyl floor coverings, asbestos may be present in any of the following:

- The vinyl body of the tile or sheet
- A fibrous backing under the tile or sheet
- A fibrous adhesive used to fix the tile

Asbestos contained in the vinyl body of the tile or sheet is held in a stable matrix. The very low rate of deterioration does not normally create airborne fibre levels considered to pose a significant health risk. A health risk may arise when asbestos fibres are released due to maintenance work possibly involving the use of metal brush mechanical floor scrubbers (although this is not proven), or when the flooring is friable due to age.

Asbestos backing is sometimes used to line the back of vinyl sheeting. This product poses a negligible risk providing it is not disturbed or worked upon, i.e. abraded, scuffed or handled. Any of these actions may release measurable levels of asbestos fibres into the airborne environment.

6. Air Conditioning Heater Bank Millboard Insulation

Air conditioning duct heater banks may be internally lined with asbestos millboard.

The risk from exposure to airborne asbestos fibres through the air conditioning system is dependent upon its condition and friability.

7. Asbestos Containing Electrical Backing Boards

These products (i.e. 'Zelemite' or 'Ausbestos') pose a negligible health risk providing they are not disturbed or worked upon, i.e. cut, sawn, drilled or sanded. Any of these actions may release measurable levels of asbestos fibres into the airborne environment.

8. Asbestos Impregnated Resinous Membranes

The asbestos fibre in weatherproofing membranes is generally well bound into the resinous matrix of the material and unable to release itself into the airborne environment. This product does not pose a significant risk to health providing it is not disturbed or worked upon, i.e. drilled, sanded or burnt. Any of these actions may release measurable levels of asbestos fibres into the airborne environment.

Appendix C Typical Building Work Approval Process within Council of the City of Gold Coast

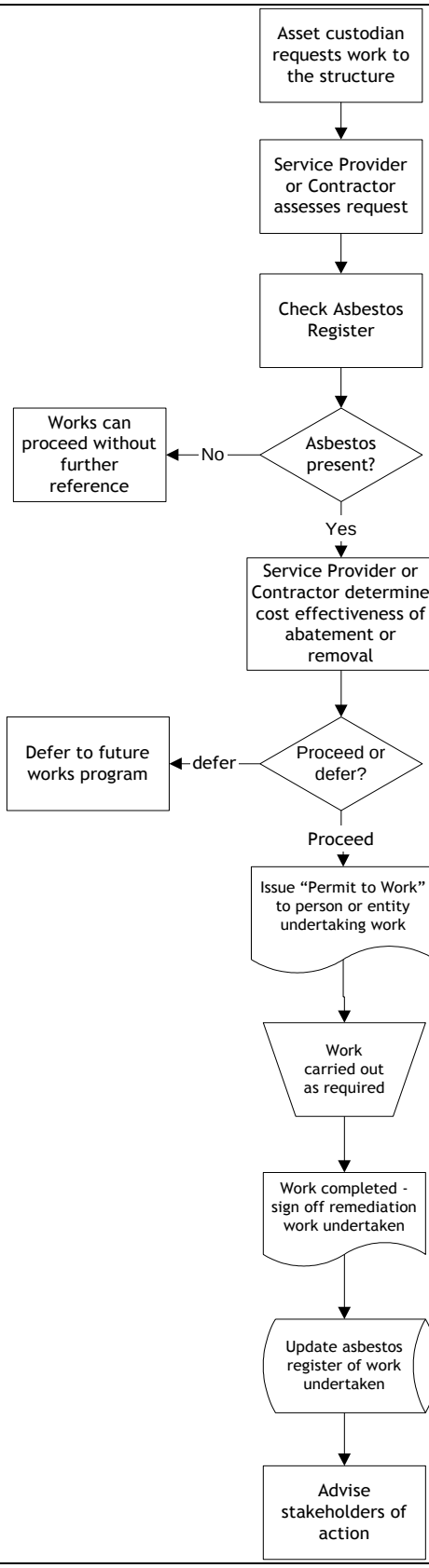
Asbestos: Asset Custodian will ensure compliance with the Queensland Government Work Health & Safety Act 2011, City of Gold Coast AMP and the Asbestos Codes of Practice for Asbestos Management and Asbestos Removal. This AMP information is obtained from the above legislated supplied information.

1. Asbestos Management Code of Practice;

http://www.deir.qld.gov.au/workplace/subjects/asbestos/registers-and-management-plans/index.htm

2. Asbestos Removal Code of Practice;

http://www.deir.qld.gov.au/workplace/subjects/asbestos/removal/index.htm

What	Who	How
	Asset custodian Service Provider Service Provider Service Provider Service Provider Asset Custodian or Service Provider Service Provider Service Provider Service Provider Coordinator Facilities Management Service Provider	Asset Custodians budget to undertake maintenance or construction work including asbestos abatement, as required. This work includes asbestos abatement which is to be considered in the longer term plans for the building to determine the cost benefit of repairs / replacement. All requests for "work" on a Council owned building must be made through the designated Service Provider. The Service Provider will check the Asbestos Register to determine the presence of asbestos. If asbestos is present then all parties must be notified of the extent and location of asbestos prior to the commencement of any work. Work can proceed without further reference to asbestos and in accordance with adopted procedures for building works. The request is analysed to determine cost effectiveness of removing asbestos as part of future works or as part of a specific project. A decision is made whether or not to proceed with the work having consideration for the future works schedules or as part of the custodian's request. The person/s or entity undertaking the work must have a "Permit to Work" issued before commencing to ensure risks are managed appropriately. Work will be carried out by appropriately qualified personnel according to Regulations and proper safety precautions taken to prevent the spread of asbestos in the workplace. At the completion of work a representative of the person/s undertaking the work will sign off to indicate the extent of asbestos remaining, if any. The notification (see Appendix D) will then be forwarded to the Coordinator Facilities Management to update the Asbestos Register. Details of abatement work are entered to the Register. If all asbestos has been removed then the site can be "closed off" with no further action required. If asbestos remains the re-inspection date is to be scheduled. Advise the asset custodian of status.

Appendix D Notification of Completion of Works

Asbestos Register Site SAP ID

……

Nature of Work Undertaken:

☐ Full Removal of Asbestos

☐ Partial Removal of Asbestos – Describe Extent of Works Undertaken

☐ Attach copy of clearance certificate or if less than 10m2 a copy of the safe work method statement as required by Asbestos Management Code of Practice ***(note: SAP asbestos register cannot be amended unless this documentation is supplied)***. Asbestos items removed description to match the description in the City of Gold Coast SAP asbestos register

☐ If applicable, attach air monitoring recorded results as required by the Asbestos Management Code of Practice

☐ Attach copy of City of Gold Coast asbestos register with line items highlighted that have been removed

_____ _____

Asset Custodian Representative or Engineering Project Officer name Date

[To be returned to the Coordinator Facilities Management]

Appendix E Refer to Corporate Asset Management (CAM) Asset Custodian Policy

1. CAM Definitions and Terms;

http://gcccintranet/Directorates/OfficeOfTheCEO/CAM/Documents/TRACKS-29067817.DOC.DRF

2. Asset Custodian Policy (Infrastructure and Land);

http://gcccintranet/Directorates/OfficeOfTheCEO/CorpPlanPerfomance/Policies/Documents/Asset%20Custodianship%20Policy%20(Infrastructure%20and%20Land).pdf

Appendix F Air Borne Asbestos Fibre Monitoring

Asbestos Monitoring Methodology

All airborne fibre monitoring and analysis for asbestos will be conducted in accordance with the "Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibre" [NOHSC: 3003 (2005)] and the Workplace Health and Safety Queensland Code of Practice How to Safely Remove Asbestos 2011. All monitoring will be undertaken by a laboratory registered and accredited by NATA.

Air sampling and filter analysis will only be carried out by the NATA accredited laboratory.

Definitions

Exposure Monitoring: Occupational monitoring samples are those samples taken within the worker breathing zone and give results that are indicative of the workers exposure under representative working conditions. As they represent actual personal exposure, the results of such sampling can be directly compared with occupational exposure standards.

Control Monitoring: Control monitoring samples are static samples taken as an indication of the effectiveness of the process control techniques and are not representative of occupation exposure for workers.

Exposure Monitoring – Personal Exposure Limits (National Exposure Standard)

The National Exposure Standards (NES) is defined as the 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. Exposure standards do not represent fine lines between safe or unsafe exposure, but are set to protect 'nearly all workers'.

The risk associated with asbestos relates to the inhalation of airborne asbestos fibres. These fibres may be liberated by disturbance of the ACM.

The exposure standard sets out the time weighted average (TWA) fibre concentration of the air breathed by the worker throughout a working shift, as calculated from one or more measurements taken over a sampling period of not less than four hours using the Membrane Filter Method, and considered representative of a workers activities.

The TWA airborne concentrations for asbestos shall not exceed the exposure standard of:

- Chrysotile 0.1 fibres per millilitre
- Crocidolite 0.1 fibres per millilitre
- Amosite 0.1 fibres per millilitre
- Other forms of asbestos 0.1 fibres per millilitre
- Any mixture of these, or where the composition is unknown 0.1 fibres per millilitre

Exposure Standards are reviewed from time to time and are available in a searchable database known as the Hazardous Substances Information System (HSIS). This database can be found on the ASCC website at: http://hsis.ascc.gov.au/SearchES.aspx and should be consulted with reference to the Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)], and applicable Queensland Legislation.

It should be noted that exposure limits are only to be applied to personal exposure samples collected in the breathing zone of workers. Caution should be exercised when using them to make comparisons against static or fixed point samples.

Control Monitoring – Air Monitoring for Asbestos Removal Projects

In most cases personal exposure monitoring is not conducted as the risks to all asbestos removal workers should already have been assessed and effective respiratory protection etc., should already be provided. During asbestos removal projects at City of Gold Coast workplaces, control monitoring is to be performed to assess the adequacy of the exposure controls applied to the project.

Control samplers should generally be placed in the middle of the removal area, away from areas where there may be poor air mixing (e.g. close to walls, corners or large objects) or fast air movements (e.g. in front of air-conditioning inlets or exhausts).

If an enclosure is used, air monitoring should occur:

- Prior to any work (background monitoring)
- At least daily at the boundary of the asbestos work area
- As part of preliminary clearance monitoring, following a satisfactory visual inspection
- During dismantling of the enclosure
- As part of the final clearance inspection

If an enclosure and a decontamination unit are used, air quality shall be monitored at the following locations:

- The clean side of the decontamination unit
- The change area
- The lunch room (where applicable)
- The laundry
- The surroundings of the asbestos work area including in the vicinity of the negative air exhaust (where possible)

Monitoring data will include:

1. Exact location of static monitors including distinctive features of the workplace
2. Names and job titles of workers, location of work
3. Potential sources of asbestos emissions or exposure
4. Information of the particular process and control measures
5. Date and time of samplings
6. Name of person conducting the sampling and analysis

Control (static) air sampling shall be carried out by a NATA accredited laboratory engaged by City of Gold Coast, and is a means to ensure that the procedure used to remove ACM adequately contains any fibre generated within the removal zone.

‘Control levels’ that indicate the need (if any) for the review of control measures, are applicable to any asbestos removal project and are detailed in the following Table F.1.

Table F.1 Control Levels and Required Actions

Action level	Control	Action
Less than 0.01 fibre/ml	No new control measures are necessary	Continue with existing control measures
At 0.01fibres/ml or more than 0.01 fibres/ml but less than or equal to 0.02 fibres/ml	Review	Review control measures
	Investigate	Investigate the cause
	Implement	Implement controls to eliminate or minimise exposure and prevent further release
More than 0.02 fibres/ml	Stop removal work	Stop removal work
	Notify regulator	Notify the relevant regulator by phone followed by fax or written statement that work has ceased and the results of the air monitoring
	Investigate the cause	Conduct a thorough visual inspection of the enclosure (if used) and associated equipment in consultation with all workers involved with the removal work
	Implement controls to eliminate or minimise exposure and prevent further release	Extend the isolated/barricaded area round the removal area/enclosure as far as reasonably practicable (until fibre levels are at or below 0.0 fibres/ml, wet wipe and vacuum the surrounding area, seal any identified leaks (e.g. with expandable foam or tape) and smoke test the enclosure until it is satisfactorily sealed.
	Do not recommence removal work until further air monitoring is conducted	Do not recommence until fibre levels are at or below 0.01 fibres/ml

Appendix G Asbestos Removal – Standard Work Practice

Barricades

The asbestos work area shall be clearly defined to and warn persons that asbestos work is being carried out (e.g. through the placement of barriers and signs or other warning devices), and ensure that non-essential people do not enter.

All barriers and warning signs shall remain in place until a clearance to re-occupy has been granted by a licenced asbestos assessor.

Potential entry points to the asbestos work area shall be signposted or labelled in accordance with AS1319-1994 Safety Signs for the Occupational Environment. These signs should be weatherproof, constructed of light-weight material and adequately secured.

Barrier tape may be used as a barrier to define an asbestos work area for some types of asbestos work of short duration. If a sign is not feasible, tape with the words 'asbestos hazard' along its length can be used instead to communicate the hazard.

In determining the distance between barriers and the asbestos work area the risk assessment should take account of:

- Whether the ACM are friable or non-friable
- Activity around the asbestos work area (other workers, visitors, the public, etc.)
- The work methods used
- Any existing barriers (walls, doors, etc.)
- The amount of work to be done
- The type of barrier used (e.g. boarding or tape)

Tools and Equipment

Tools and equipment to be used for asbestos removal jobs are to minimise the generation of airborne asbestos fibres. High-speed abrasive power or pneumatic tools such as angle grinders, sanders, saws and high speed drills shall never be used. Hand tools are preferred over power tools.

At the end of the removal work, all tools shall be:

- Decontaminated (i.e. fully dismantled and cleaned under controlled conditions as described in the Code)
- Placed in sealed containers (and used only for asbestos removal work)
- Disposed of as asbestos waste

Vacuum cleaners used for asbestos cleaning shall comply with:

- AS/NZS 60335.2.69:2003 Household and Similar Electrical Appliances – Safety – Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use and AS 4260-1997 High Efficiency Particulate Air Filters (HEPA) – Classification, Construction and Performance.

Personal Protective Equipment

The risk assessment will determine the need for, and appropriate types and levels of, PPE for any task to be undertaken, including respiratory protection equipment. It is important that personal clothing does not become contaminated with asbestos fibres.

All respiratory protection equipment shall meet the requirements of AS/NZS 1716-2003 Respiratory Protective Devices and all respirators shall be worn in accordance with the manufacturer's instructions. The selection use and maintenance of respiratory protective equipment for work involving ACM, shall be in accordance with AS/NZS 1715-2009 Selection, Use and Maintenance of Respiratory Protective Devices.

In general, the selection of suitable respiratory protective equipment depends on the nature of the asbestos work, the probable maximum concentrations of asbestos fibres that would be encountered in this work, and any personal characteristics of the wearer that may affect the facial fit of the respirator (e.g. facial hair and glasses).

The minimum PPE requirements for any work on ACM include:

- Disposable coveralls (Type 5 EN ISO13982-1 2004/Type 6 EN13034 2006)
- Glasses/goggles, and
- Class P1 or P2 respiratory protection.

Personal decontamination must be undertaken each time workers leave the asbestos work area and at the completion of the asbestos maintenance or service work. Personal decontamination should be done within the asbestos work area where re-contamination cannot occur.

Respiratory protective equipment should be used until all contaminated disposable coveralls and clothing has been vacuum cleaned and/or removed and bagged for disposal, and personal washing has been completed.

Non disposable PPE is to be cleaned daily following any work on ACM and stored appropriately in sealed containers.

Disposable PPE (including gloves, coveralls and dust masks) are to be disposed of as asbestos contaminated waste in a suitable receptacle.

All persons issued with PPE shall be instructed in the use of the personal protective equipment and it shall be ensured that the PPE is used. The areas where PPE is required shall be clearly defined with warning signs erected showing the need to wear the personal protective equipment in the work area.

Appendix H Example Asbestos Register

Refer to City of Gold Coast SAP Asbestos Register

CITY OF GOLDCOAST.

For more information

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