



CORPORATE PROCEDURE FOR
HAZARDOUS AIRBORNE FIBRE MANAGEMENT
CS-OHS-3

Responsible Officer: Health and Safety Manager

Approved: General Manager Operations

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Issue Date	Nature of Changes
22/5/98	Original Issue
10/5/99	Review and update of entire document
2/12/99	Addition of item 15 on Attachment 6.2
8/8/01	3.1.6 Addition of paragraph b. "The gasket/packingremoval training".
6/6/2003	Modifications made to match changes to the WH&S legislation
29/12/2004	Modifications to include Building and Plant Asbestos Materials and Products Register
24/04/2005	Modifications to Purpose, Scope, Actions, Monitoring and Definitions.
03/05/2005	Changes made to Section 3.1.9, and 3.4 Contract Administrator role

1. Purpose

To provide a procedure for the management and control of asbestos materials, asbestos products and synthetic mineral fibre (SMF) based substances.

To ensure a safe working environment in relation to the use and handling of asbestos and synthetic mineral fibre (SMF) based materials and products at CS Energy locations.

To ensure compliance with the relevant requirements of:

- The Workplace Health and Safety Regulations in regard to Asbestos,
- The Asbestos Advisory Standard,
- The Advisory Standard for Hazardous Substances, and
- NOHSC compliance standards and Codes of Practice.

2. Scope

This procedure applies to CS Energy locations where asbestos materials, asbestos products and or synthetic mineral fibres are present.

This procedure covers all work and processes involving the installation, removal or handling of any material or article comprised wholly or partly of:

- Asbestos,
- Synthetic Mineral Fibres - mineral wool (rockwool and slagwool), glasswool (including superfine glass fibre) and ceramic fibres, by which a SMF dust can be given off.

Where this procedure does not adequately control the exposure risks for particular situations, then additional site-specific procedures are to be developed and included into the job safety and environmental analysis (JSEA), or the project health and safety plan and safe work method statement.

Note: This procedure does not apply to the use of continuous glass filament, which is used as a reinforcing agent in resins. The safe working practices for the use of this material requires a different approach due to the effects associated with the use of materials such as catalysts and resins. Safe work practices are to adhere to the manufacturers recommendations for hazard controls in the relevant Material Safety Data Sheet (MSDS) for that product.

3. Actions

The actions in this procedure are divided into two distinct sections:

- Asbestos materials and products, and
- Synthetic Mineral Fibres

3.1 Asbestos Management

3.1.1 Assets Asbestos Officers

All potential asbestos exposure risks at the sites will be managed in accordance with the Queensland WH&S Regulations and relevant Advisory Standards, compliance standards and National Codes of Practice.

Each site will appoint an Assets Asbestos Officer to:

- implement the recommendations made in the Building and Plant Asbestos Materials and Products report and annual site inspection report,
- ensure the site Building and Plant Asbestos Materials and Products Register is maintained,
- ensure the corporate and site procedures are implemented in accordance with national standards and legislative requirements, and
- to provide the primary point of contact for site related asbestos issues.

3.1.2 Building and Plant Asbestos Materials and Products Register

Each site will have established and maintain a Building and Plant Asbestos Materials and Products Register, recording the specific location, condition and exposure risk of each asbestos area. The accuracy and currency of the Register will be confirmed and updated on an annual basis by conducting site inspections of each asbestos area, or areas where asbestos removal or damage has occurred.

Materials and products on CS Energy sites that could potentially contain asbestos include but are not limited to:

- Thermal insulation (eg lagging, blankets or fire-door packing)
- Gland packing, Gaskets, or Expansion joints
- Brakes / clutches
- Galbestos sheeting
- “Fibro” boards and pipes (eg AC-Sheeting in building products)
- Fireproof textiles products (eg High-Temperature rated gloves, blankets etc)

The Building and Plant Asbestos Materials and Products Register will be made available to all employees upon request and made clear by the competent person/team leader/supervisor to any maintenance personnel or contractor, prior to their commencing work on buildings or items of plant containing asbestos. The competent person/team leader/supervisor must advise workers of the register and if there is asbestos present, or if any other activity may cause exposure to the asbestos situations at the site.

3.1.3 Asbestos Exposure Register

Each site will have established and maintain an Asbestos Exposure Register, to record all persons who have been potentially exposed to airborne asbestos at the site (typically for personnel engaged in asbestos removal activities). The details of individuals’ exposures will be recorded on Form S0268, the Exposure Register updated and the individual notified of the record, in accordance with the method outlined in Attachment 1 - Flowchart for Recording Asbestos Exposure. The completed Forms and Asbestos Exposure Register will be filed and retained for a minimum of 30 yrs; the individuals Forms will be stored with the personnel medical files.

3.1.4 Procurement

The procurement of new or replacement plant and/or components is to prohibit the use of Asbestos Materials and Products in any form. Asbestos materials or products shall not be purchased, supplied, introduced, used or reused on any CS Energy workplace. Asbestos materials or products are not to be sold or given to others.

3.1.5 Asbestos Identification

Products suspected to contain asbestos and requiring identification will be submitted to the Asbestos Officer (or their nominated officer) who will arrange for laboratory analysis (eg; by the appropriately qualified person, site chemist or external asbestos analysis consultant). Only trained persons are to remove samples suspected of containing

asbestos. The sample should be provided in a sealed plastic bag and labelled with the following:

- Date
- Contact name
- Location of sample (detailed description of plant area and/or equipment where sample collected from)
- Description of product type and application (eg insulation blocks, lagging, fibreboard, gasket, pipe etc)
- Where practical a photograph and label should be used to identify the sample location, for future reference.

Samples size should, where practical be a minimum of 100 grams or the size of a matchbox. WHEN IN DOUBT TREAT AS ASBESTOS MATERIAL UNTIL IDENTIFIED AS OTHERWISE.

The results of all samples analysed for asbestos identification will be recorded on the Building and Plant Asbestos Materials and Products Register.

3.1.6 Asbestos Monitoring

Monitoring shall be undertaken on sites where asbestos materials are present to determine asbestos fibre concentrations.

Each site shall undertake air and dust sample monitoring at strategic points - adjacent to areas with asbestos materials or products present - at twelve monthly intervals. Tests results are to be assessed and actions taken to reduce the fibre concentration in the atmosphere or dust to compliance levels – less than 0.01 fibres/mL. The test results are to be forwarded to the site Asbestos Officer and put on the Building and Plant Asbestos Materials and Products Register.

Monitoring must be undertaken and controls implemented for the asbestos removal area if the asbestos fibre concentration exceeds 0.02 fibres/mL. Work must stop if the asbestos fibre concentration in the asbestos removal work areas atmosphere exceeds 0.5 of the concentration stated in the National Exposure Standard for that type of asbestos.

3.1.7 Asbestos Material Labelling and Signage

A labelling system (stickers or metal badges for hot areas) is to be established and maintained on site to enable the visual and legible identification of ALL asbestos materials recorded on the site Building and Plant Asbestos Materials and Products Register. The stickers are to be fixed to the plant/pipe/area (maximum distance of 1.5 metres apart) and are to be maintained in-situ at all times.

The labels/badges are to state:

- ASBESTOS FREE
- CONTAINS ASBESTOS or,
- ASBESTOS INSULATION.

All waste products will be packaged and labelled as asbestos at the point of removal. Materials or products that are not labelled, but could potentially contain asbestos, are to be treated as asbestos until tested and confirmed otherwise.

Labels are to be affixed in a secure manner and checked annually to ensure they are not damaged, missing, obscured or faded.

A sign must be displayed at a prominent place at the entry to the site and at site reception areas stating there is an asbestos building and plant materials and product register and

when and where a person may inspect the register and the contact details for the Site Asbestos Officer.

3.1.8 Asbestos Removal – General

CS Energy's approach is to ensure that appropriate action is taken to remove asbestos materials and products from all sites where work is planned or programmed to occur on the plant or to the building. Forward planning and budget allocations are to be implemented to ensure this approach is attained during the operation and maintenance of the building and plant. Budget planning and allocations are to ensure funding is adequate and available for the future asbestos removal associated with dismantling, demolition, removal, disposal and management of CS Energy buildings and essential plant.

Work practices that are **prohibited** include:

- Work practices in the vicinity of asbestos materials that may disturb or, damage the material, cladding, enclosure, sealant or containment barrier,
- Workers using a power tool to clean an asbestos product,
- Workers using a high pressure water process to clean an asbestos product or to clean up debris from an asbestos product,
- Workers using compressed air to clean an asbestos product or a surface where debris from an asbestos product is present.

Workers working in proximity to asbestos materials (where there is a likelihood they may come into contact with the material) are to:

- wear personal protective equipment appropriate for the work being performed,
- wear a particulate respirator (P2), and
- disposable coveralls as a precautionary measure.

This requirement is to be included in the JSEA and risk assessment for the works.

A CS Energy Permit to Work (PTW) must be obtained prior to the removal of asbestos products or materials associated with plant or buildings. All asbestos removal work must be registered/checked with the Site Asbestos Officer using Form S1817. This will restrict access to plant or buildings that are listed in the register as containing asbestos products.

3.1.9 Asbestos Removal - Major Work

For all major asbestos removal, the CS Energy Contract Administrator shall ensure that a Workplace Health and Safety Plan and "work method statement" are prepared by the holder of a Business Certificate for the prescribed activity of asbestos removal prior to commencing the work.

All major asbestos removal (including asbestos materials and products) will be performed under the direction of an Asbestos Removalist with a Business Certificate and the removal work supervised by a Competent Person (for Asbestos Removal). The work practices to be applied are to comply with:

- the Workplace Health and Safety Regulations - Asbestos,
- the "Asbestos" Advisory Standard, compliance standard and
- the National Occupational Health and Safety Commission (NOHSC) "Asbestos Code of Practice".

Before asbestos removal commences, a Form S1817 "Registration of Asbestos Removal Form" is to be obtained from the site Asbestos Officer. The Form is to be attached to the Workplace Health and Safety Plan, Work Method Statement or Job Safety and Environment Analysis (JSEA) and procedures developed for the specific job. The

Workplace Health and Safety Plan/Work Method Statement/JSEA and procedures are to include as a minimum:

- the establishment of clearly defined, signed and barricaded zones for asbestos removal,
- that the H&S Plan/WMS/JSEA is to be discussed with the workers involved and they understand and are able to comply,
- a signature, certificate number, ABN and be dated by the holder of the Certificate for Asbestos Removal,
- induction records for the general industry induction and work method statement induction,
- how the work will be supervised,
- regular work area inspections by the site supervisor or competent person using the “Asbestos Removal Job In Progress Checklist Form S ----“
- arrangements for training the workers involved in the work,
- the way the work is performed, the specific control measures to be used, how they will be implemented and how their effectiveness is to be monitored and reviewed,
- any circumstances at the workplace that will, or are likely to effect the way the work is performed
- clean areas and dirty areas,
- changing and decontamination facilities,
- exhaust extraction and HEPA filter system,
- spray equipment, vacuum cleaning equipment, cutting tools,
- general hygiene and health requirements,
- that personal air sampling monitors may be worn by workers within the encapsulated work area to ensure/check that the removal process has adequate features to minimise exposure to asbestos,
- the specific methods of removal, containment and disposal;
- the types of personal protective equipment to be worn; and
- the requirements for an air monitoring program to ensure that controls have been adequate
- the results of any sample testing, air monitoring results and its location/date/contact name.

After the asbestos removal is complete the Competent Person (for major asbestos removal) is to:

- complete Form S1817 “Registration of Asbestos Removal Form,
- issue the completed form to the CS Energy site Asbestos Officer.

This form is a documented asbestos removal certificate, to confirm the asbestos removal areas have been cleaned of any contamination or debris and that all asbestos has been removed from the site.

3.1.10 Asbestos Removal – Minor Work

For minor asbestos removal work (e.g. gasket removal, valve packing, asbestos cement sheeting, and “glove bag” removal work) the removal is to be conducted by persons who

are familiar with the appropriate methods as outlined below and have successfully completed the asbestos training module.

CS Energy Contract Administrators and supervisory personnel are to ensure workers are familiar with the appropriate methods and trained prior to performing the work.

The Work Method Statement or Job Safety and Environmental Analysis (JSEA) for minor asbestos work is to include the following steps:

- a. The presence of asbestos is to be confirmed by reference to the Building and Plant Asbestos Material and Products Register or by obtaining identification via laboratory analysis of the sample,
- b. Obtain a Form S1817 from the Asbestos Officer prior to commencement,
- c. The person removing the gasket/valve packing must have attended formal minor asbestos removal training,
- d. The JSEA/Work Method Statement is discussed with the workers involved and they understand and are able to comply,
- e. Identify the removal area and set up signs to isolate the area with yellow and black asbestos barricade tape "Warning – Asbestos Dust Hazard" and Warning tags,
- f. Ensure regular site inspections are conducted using the Form S 1872 "Asbestos Removal Job in Progress Checklist".
- g. Put on respirator (refer 3.3) and rubber gloves and disposable overalls - fibre release is to be anticipated.
- h. Spread plastic sheet under job so as to contain any dropped material.
- i. Saturate gasket or product with penetrating fluid or water using airless spray device.
- j. Remove gasket or product using hand scraper only and place into a labelled asbestos bag. Bags shall be labelled, "Caution – asbestos. Avoid creating dust. Serious inhalation health hazard". **Under no circumstances are powered tools or grinding equipment to be used.**
- k. When asbestos has been removed, wipe surfaces and tools down with damp cloth and where necessary vacuum the area with a HEPA fitted vacuum cleaner to ensure that no asbestos product remains.
- l. Plastic sheet, wiping cloth, overall, gloves and respirator (including filters) and vacuum cleaning bag and filter are to be placed into asbestos bag and double tied.
- m. When area is clean, remove ropes and dispose of asbestos bag in approved 'asbestos waste' bin.
- n. Apply asbestos warning or asbestos free stickers or badges as appropriate to the pipe or area.
- o. Notify the site Asbestos Officer that the removal has been completed and provide Form S1817 so that the Asbestos Materials and Products Register can be updated.

3.1.11 Disposal

All asbestos based materials and products removed from site shall be disposed of to a licensed waste depot (Local Authority) in the approved manner. All disposals shall be recorded (date, quantity, disposal contract etc) in an appropriate register (eg within the sites waste management plans for disposal of regulated wastes).

Where any buildings or essential plant are disposed of (offered for sale or lease, dismantled or demolished) and contain asbestos materials or products, the new owner/buyer is to be given a copy of the asbestos report and register relevant to the building or item of plant.

3.1.12 Inspection

All asbestos materials and products are to be inspected by an appropriately qualified person:

- a. prior to work commencing in the immediate area,
- b. after minor or major works are performed, and
- c. on an annual basis.

The results of these inspections are to be recorded on the S1817 Form, be issued to the site Asbestos Officer and retained with the Building and Plant Asbestos Material and Product Register. The results of the inspections and register are to be readily available to all interested parties.

The period between annual inspections shall be determined by the condition and location of the asbestos materials and products as outlined in the Register.

3.1.13 Asbestos spills/contamination

Where suspected spills or damage has occurred to asbestos material, lagging, sealants, covers etc. the following is to be implemented:

- The site emergency contact number is to be used to report the location of the potential contamination as well as following the requirements of the CS Energy Incident Management Procedure CS-IM-1,
- Asbestos trained workers are to respond (they are to wear suitable respiratory protection, gloves and disposable coveralls), assess the risks associated with the spill and secure the affected area, plant or equipment using asbestos warning tape and signs,
- Ensure any exhaust extraction, air conditioning systems, fans, wind sources are controlled to prevent further spread of the contamination,
- The areas below and adjacent or above are secured to prevent materials dropping or passing into those areas – (attention is to be paid to ledges, tops of ducts/pipes, cracks in the floor, folds in the cladding, crevices and material in the grid mesh flooring),
- Use surface soaking sprays to wet down the material and obtain a bagged sample of the suspect material, or
- Use plastic sheeting and adhesive tape to seal or encapsulate the affected area or plant,
- Use materials such as plastic drop sheets, bunding material and or suitable adsorbent material to contain the water spray and run off,
- Clean up the affected areas using suitable tools (soft brushes, mops, dust pans etc.) and if necessary vacuum using HEPA filters,
- Apply sealant or repairs to the damaged areas to prevent further contamination,
- Inspect the work to ensure all suspect materials have been removed,
- All contaminated articles and clothing are to be bagged in suitable asbestos disposal bags and be disposed off as asbestos waste,

- Set up an air monitor in the work area to monitor airborne fibre concentrations and secure the work area until the results are obtained,
- Send the sample off for testing and determine if it contains asbestos,
- Undertake further asbestos removal work to make the area safe using a safe work method statement and an asbestos removalist,
- Provide details of the material sample results and monitoring results to the workers involved that may have been exposed,
- Undertake medical assessments of the workers involved that may have been exposed and provide copies of the assessments to the workers.
- Have the workers who were potentially exposed to uncontrolled asbestos fibres complete a Form 0268 – Asbestos Exposure Questionnaire,
- Maintain records of the incident reporting, investigation and health assessments with the Asbestos Exposure Register

3.2 Synthetic Mineral Fibres (SMF)

3.2.1 The Application and Removal of SMF Materials

The application and removal of SMF shall be conducted in accordance with the requirements for hazardous substances as specified in the Queensland WH&S Regulations and 'Hazardous Substances Advisory Standard', the Glasswool and Rockwool Industry Code of Practice and the NOHSC National Code of Practice for the Safe Use of Synthetic Mineral Fibres

- a. Packaging and transport of materials shall be done so as to minimise the release of fibres and or dust.
- b. All packages will be clearly labelled to identify the presence of SMF contained within the package.
- c. SMF shall be stored inside appropriately sealed packages and located in a secure, clean and low traffic area. Partially used lots shall be resealed for storage.
- d. Where possible, SMF material should be ordered in a form and shape that requires a minimum of cutting and handling on site.
- e. Work practices must comply with the manufacturers recommendations in the relevant Material Safety Data Sheet (MSDS) for hazard control and must minimise the release of, and exposure to, fibres and/or dust.
- f. All installed SMF material will be appropriately encapsulated, enclosed and/or sealed as far as is practical to minimise the release of airborne fibres into the workplace atmosphere. The integrity of this containment will be maintained for the duration of its application.
- g. Correct tools must be used for the task. Where required, manual tools should be used to trim or cut SMF materials. If power tools are used, these should be fitted with exhaust extraction at the point of dust generation, or other effective local exhaust ventilation supplied.
- h. SMF dust shall be minimised by dampening or wetting of the material where practical during removal or handling.
- i. Cleaning shall be by industrial vacuum cleaner (with HEPA filtration), but wet mopping and wiping is acceptable if vacuuming is not workable.

- j. Removed SMF materials are to be placed directly into sealed (industrial strength) plastic bags and/or covered disposal bins and disposed of as an industrial waste. (It should not be confused with asbestos through the use of "Asbestos" labelled bags.) Where cross-contamination occurs and SMF cannot be distinguished from asbestos, the material will be treated as asbestos, unless otherwise confirmed by laboratory analysis.
- k. Work areas where SMF has been handled or the material has been exposed to the workplace, are to be cleaned regularly to remove any build up of fibres and/or dust. Visible waste material should be removed promptly to avoid being trampled and spread about.
- l. At the completion of the removal and/or installation process the worksite must be made free of debris and visible waste material and thoroughly cleaned by either vacuuming or washing.
- m. For SMF applications where there is likely to be exposure to fibres, airborne monitoring will be conducted to confirm that exposures do not exceed recommended exposure limits (<0.5 f/ml or < 2mg/m³ inspirable dust).

3.2.2 Personal Hygiene

Adequate washing facilities shall be available, on site, to wash and treat both eye and skin irritation.

General hand washing facilities shall be available.

Amenity rooms shall be kept free of any fibres and/or dust as far as is workable.

3.3 Personal Protective Equipment

3.3.1 Minor Work

For all minor asbestos or SMF jobs, information on the relevant MSDS for hazard control must be adhered to (eg. particular respiratory protection devices may be required). The minimum requirement is for an approved disposable particulate respirator or half face respirator fitted with particulate cartridges (with P2 filtration) to be worn. The level of protection (filtration) may be increased where a greater risk of exposure has been identified. Employees who are not clean-shaven should use a Full-Face respirator or Positive Air Purifying Respirator (PAPR) (with P2 filtration).

3.3.2 Major Work

For all major asbestos removal work, any person directly engaged in asbestos removal or cleaning-up inside an 'asbestos removal area' will wear appropriate respiratory equipment in accordance with Table 3 of the NOHCS Code of Practice.

3.3.3 Inspection/Preparation Work

All other work involving inspection or preparation work (where there is less exposure risk) will be required to wear as a minimum an approved disposable particulate respirator or half face respirator fitted with particulate cartridges (with P2 filtration). The level of protection (filtration) may be increased where a greater risk of exposure has been identified or determined by the Certified Removalist.

3.3.4 PPE – General Issues

Employees are to be trained in the correct use of respiratory protection and other forms of personal protective equipment.

- Respirators shall be correctly fitted, maintained in good condition and kept in clean storage when not in use.

- Replaceable filters, cartridges and disposable respirators shall be replaced regularly, in accordance with guidelines issued by the manufacturer.
- All respirators shall comply with the provisions of Australian Standards AS1715 and AS 1716.
- Safety goggles or face shields can be worn to avoid eye irritation or injury, especially when performing overhead work.
- Skin irritation can be minimised by the use of gloves and loose fitting long garments.
- Disposable coveralls as issued are to be worn if fibre release is expected during the work. These disposable garments should be disposed of in the plastic bags with the other wastes associated with the job.

3.4 Education and Training

People who work with asbestos and SMF shall be provided with adequate information, instruction and training on:

- The corporate and site-specific procedures/work method statements/JSEAs for the safe handling and disposal of Asbestos and SMF.
- The general industry induction and work method statement induction,
- Health risks information relating to asbestos & SMF handling and or exposure.
- The importance of controlling the creation of fibrous dust in the atmosphere to the lowest workable levels.
- The probable exposure levels associated with the type of job.
- How safe work practices, such as control measures, respiratory protective equipment and protective clothing can be used effectively, and their limitations.
- The role and significance of air monitoring.
- Employer and worker responsibilities and legislative requirements.

3.5 Responsibilities

Site Manager shall ensure that for the site:

- Resources are allocated to implement this procedure
- Workers are made available for training in asbestos awareness and for asbestos removal work.
- A Business Certificate is maintained for the site where CS Energy workers conduct major asbestos removal.
- The Plant and Building Asbestos Material and Products Register is maintained for the site.
- The Asbestos Exposure Register is maintained for the site.

Team Leader/Supervisory Personnel shall ensure where asbestos work is to be carried out that:

- Those involved attend an asbestos training session
- The site Asbestos Officer is informed of any asbestos work and a Form S1817 is obtained prior to work commencing
- Legislative requirements and appropriate procedures are complied with.

- On completion of the job that all products are labelled as “ASBESTOS FREE” or “CONTAINS ASBESTOS”.
- Report immediately to their supervisor any perceived asbestos risk.
- Forward the completed Form S1817 to the site Asbestos Officer at the completion of the work.

Contract Administrator at each CS Energy worksite shall:

- Ensure adequate resources are allocated for asbestos and synthetic mineral fibre (SMF) works,
- Ensure the site Asbestos Officer and Health and Safety Adviser is advised of any asbestos and SMF works.
- Ensure that contractors and workers involved in asbestos works are advised of the CS Energy Corporate and Site procedures, the site Building and Plant Asbestos Materials and Products Register and Forms S1817 and S0268,
- Ensure contractors JSEAs, work method statements and asbestos removal plans are in accordance with the CS Energy corporate and site procedures,
- Ensure all workers involved in major and minor asbestos removal works are trained,
- Monitor contract requirements for all major asbestos removal projects to ensure compliance with CS Energy procedures, codes of practice, national standards and Legislative requirements,
- Liaise with the Site Health and Safety Adviser and site Asbestos Officer on asbestos and SMF works.

Site Health and Safety Adviser is responsible to:

- Advise on asbestos issues, site controls and actions,
- Liaise with site Competent Person, Workplace Health & Safety Officer, Safety Representatives and Committee members,
- Conduct audits on all major asbestos removal major works using Form S 1872 “Asbestos Removal - Job in Progress Checklist”

Asbestos Officer at each CS Energy worksite shall:

- Action requirements outlined in the Asbestos Report and Register,
- Ensure that the Forms S1817 and S0268 are completed correctly, recorded, entered into the registers and archived,
- Update the Building and Plant Asbestos Materials and Products Register
- Update the Asbestos Exposure Register,
- Ensure that a hard copy of the Building and Plant Asbestos Materials and Products Register is current, issued, available and accessible by each occupier and anyone entering the site to perform work
- Ensure contractors, employers or others who propose to dismantle any part of a building or essential plant, carry out work involving a part of the building or essential plant are given relevant details from the register or a copy of the register,
- Ensure that a copy of the Register is given to the buyer of a building or essential plant,

- Ensure where a person is exposed to asbestos that Attachment 6.1 is followed.

Competent Person at each asbestos removal worksite shall:

- Develop, review and approve asbestos work health and safety plans, site procedures, work method statements, and JSEAs,
- Supervise and consult with workers on all major asbestos removal works,
- Ensure all workers involved in major and minor asbestos removal works are trained
- Ensure compliance with all Legislative requirements on all major asbestos removal projects
- Carry out asbestos job audits on all major jobs using Attachment 6.2 “Job in Progress Checklist”
- Conduct asbestos removal work safety inspections regularly,
- Update Asbestos Register

Chemist/Asbestos Tester at each CS Energy worksite shall:

- Be responsible for organising the testing of products for asbestos content.

Workers are responsible for:

- Ensuring that no asbestos is removed without prior notification to their team leader, supervisor, contract administrator or the site Asbestos Officer.
- Complying with the plans, procedures, work method statements or JSEAs developed for the work.
- Advising their supervisor of any changes to the work being done or the work environment,
- Being consulted on the development of site procedures, work method statements or JSEAs,
- Notifying their supervisor immediately where a person detects or is exposed to asbestos or an associated spill or containment breach. The supervisor shall advise actions to ensure the situation is rendered safe and initiate appropriate measures to control and/or eliminate the hazard.
- Completing S268 Asbestos Exposure Questionnaire following a possible exposure to asbestos.

4.0 Definitions

Appropriately Qualified Person – means the person who possesses the qualifications and experience necessary to find asbestos materials in a building.

Asbestos - the fibrous form of the mineral silicates belonging to the serpentine and amphibole groups of rock forming minerals and includes:

- Actinolite, amosite (brown asbestos), anthophyllite, chrysotile (white asbestos), crocidolite (blue asbestos), tremolite, and
- Any mixture containing 1 or more of the minerals mentioned above.

Asbestos Fibre – means a fibre of asbestos having –

- A diameter of less than 3 um, and

- A length of more than 5 um, and
- A length to diameter ratio of more than 3:1.

Asbestos Material – Those specific asbestos products defined as any ‘installed thermal or acoustic insulation materials comprising or containing asbestos’. The definition does not include all asbestos products, some of which are not specifically used for insulation purposes, such as Asbestos Cement (A-C) Sheeting.

Asbestos Officer - a nominated person at each CS Energy worksite, who has:

- specific training and knowledge in the area of hazardous fibres and their management,
- asset and plant maintenance knowledge and authority, and
- been nominated by the Site Manager to be responsible for the maintenance of the Plant and Building Asbestos Material and Product Register and the Exposure Register.

Asbestos Product – anything that contains asbestos (eg. ac sheeting, galbestos etc.).

Asbestos Removalist – means an employer whose business or undertaking includes asbestos removal work, or a self-employed persons whose work involves asbestos removal work,

Asbestos Removal Area – means an area where an asbestos removalist is doing, or proposes to do, asbestos removal work,

Asbestos Removal Site – means an area immediately outside a containment barrier for an asbestos removal area,

Asbestos Removal Work – means work to remove asbestos materials other than work to remove asbestos materials that is done entirely in a containment device

Business Certificate – is a certificate to perform the prescribed activity of Asbestos Removal

Competent Person (for Asbestos Removal) – a person who has received specific training for asbestos removal by a Registered Training Organisation (RTO) and is working under the direction of a Certificated Asbestos Removalist. The Competent Person may be directly engaged with the work or may be supervising the asbestos removal. (Note In lieu of the requirement to be trained by an RTO, a person who holds a current Certificate for the prescribed occupation of Asbestos Removalist, issued prior to February 2002 under previous legislation, may also be a Competent Person (up to Feb 2007).

Certificated Asbestos Removalist – a business that has been authorised and holds a current certificate to carry out asbestos removal work from Workplace Health & Safety.

Ceramic Fibres - are amorphous, glassy, predominantly alumino-silicate materials which are created from molten masses of either alumina and silica or naturally occurring kaolin clays. Australian materials are only made from alumina and silica melts.

Containment Barrier – means a barrier, erected around an asbestos removal area,

Containment Device – means a device that is used for removal of asbestos materials, and when in use, prevents the release of airborne asbestos fibres outside the device,

Contract Administrator – is the CS Energy person in charge of a contract, contractor or workgroup.

Essential Plant – includes_ air conditioning plant, boilers, cooling towers, escalators, lifts and piping.

Exposure Standard - means an airborne concentration of a particular substance in the workers breathing zone, exposure to which, according to current knowledge, should not cause adverse health effects nor cause undue discomfort to nearly all workers.

Glass fibre - (SMF) may be reinforcing filament, glasswool or superfine glassfibre.

Glasswool - (SMF) is a fibrous product formed by either blowing or spinning a molten mass of glass. The resultant fibres are subsequently collected as an entangled matt of fibrous product.

Major Asbestos Removal - is a job that involves the erection of containment barriers, the removal of any quantity in excess of 2 kg of 'Asbestos Material' and large quantities (in excess of one glove bag capacity or 1 m² of Asbestos Product (eg A-C Sheeting).

Minor Asbestos Job - is a job that involves the removal of only small quantities of asbestos products and up to 2 kg quantity of asbestos (insulation) material.

Material Safety Data Sheets - (MSDS) are documents that describe the properties and uses of a substance, that is, identity, chemical and physical properties, health hazard information, precautions for use and safe handling information.

Mineral Wool - (SMF) is a fibrous product manufactured by the process of blowing or spinning from a molten mass of raw material. The resultant fibres are subsequently collected as an entangled matt of fibrous product. Mineral wool may be either slagwool or rockwool, depending upon the raw material from which it is produced.

Reinforcing Filament - (SMF) is an extruded filament usually having a relatively large diameter, greater than 6 micrometres, and a very narrow range of diameter distribution. It is typically formed from a glass melt.

Rockwool - (SMF) is a fibrous product manufactured by a process of blowing or spinning from a molten mass of rock. In Australia it is usually basalt.

Slagwool - (SMF) is a fibrous product manufactured by a process of blowing or spinning from a molten mass of metallurgical furnace slag.

SMF - means Synthetic Mineral Fibres.

Superfine Glassfibre - (SMF) is an extremely fine fibre with a diameter less than 1 micrometre, usually made of glass for specialist applications.

Team Leader/Supervisor - is the person in charge of a workgroup or team.

5.0 Reference Documentation

- AS 1715 Selection, Use and Maintenance of Respiratory Protective Devices.
- AS 1716 Respiratory Protective Devices National Occupational Health and Safety Commission's Code of Practice "Asbestos".
- "Asbestos Advisory Standard" - Queensland Workplace Health and Safety.
- National Occupational Health and Safety Commission - Technical Report on Synthetic Mineral Fibres and Guidance Note on the Membrane Filter Method for the Estimation of Airborne Synthetic Mineral Fibres. 1989.
- National Occupational Health and Safety Commission - Synthetic Mineral Fibres National Standard and National Code of Practice. 1990.
- Queensland Workplace Health and Safety Act 1995.
- Worksafe Australia: "Asbestos - Code of Practice for the Safe Removal of Asbestos [NOHSC 2002; 1988]; Guide to the Control of Asbestos Hazards in Buildings and

Structures [NOHSC 3002; 1988], Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust [NOHSC 3003; 1988]”

- Workplace Health and Safety Regulation & Hazardous Substance Advisory Standard 2003.
- Glasswool and Rockwool Industry Code of Practice 2000
- S0268 Asbestos Exposure Questionnaire
- S1817 Asbestos Removal Work Form
- S1872 Asbestos Removal Job in Progress Checklist Form

6.0 Attachments

6.1 Flowchart For Recording Asbestos Exposure

