M&C-M Procedure

PRO-3.4-0000-0-02
M&C-M Asbestos Management Procedure

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Purpose

The purpose of this procedure is to provide instruction and guidance on the safe management of asbestos in ANZ MC&M in support of bp's goals of 'no accidents, no harm to people and no damage to the environment'. This procedure, combined with a sites asbestos register, serves as the sites asbestos management plan as defined by OH&S legislation. This procedure relates to OMS sub element 3.4.

This procedure specifically details the requirements of the following documents:

Group Guide; GG 3.4-0012 Asbestos Risk Management

Relevant OMS element(s)

OMS 3.4 Health and Industrial Hygiene

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To review changes, refer to the 'This procedure was prepared with reference to relevant legislation/regulations including but not limited to, relevant Acts, Regulations, Australian Standards and industry codes and practices.

Details of current legislation/regulations can be provided by the HSSE Team on request.
Version Summary' at the end of this document.

1. Scope

The requirement specified in this procedure applies equally to bp employees, contractors and visitors engaged in the ANZ M&C-M businesses.

Specific sites, areas and activities may have more detailed OMS requirements and where these exist the requirements will be specified in local procedures, safe work instructions, manuals, handbooks or specific standards.

2. Methodology

2.1. Prohibited Use and Activities

No asbestos materials will be used, re-used or brought onto bp sites. New or second-hand plant, equipment or consumables shall not contain asbestos.
The following activities must not occur on existing ACM:

- Using high pressure water spray
- Using compressed air
- Using power tools
- Using brooms (on dust)
- Abrasive hand tools

2.2. Identification of all existing Asbestos Containing Materials (ACM)

Site managers (or person appointed by the Business) are responsible for identifying all ACM on sites containing building or plant constructed prior to 2004 (Australia) and 2000 (New Zealand).

The purchase of new premises, building or plant constructed prior to 2004 (Australia) and 2000 (New Zealand) will be preceded by an assessment of ACM content. If credible site ACM information is not available, then bp will arrange for an ACM survey by a competent person. bp Remedial Management Team recommend assessment of soils where asbestos use is suspected (e.g. in fill material on a site when doing due diligence investigations).

If buildings or plant are required to be refurbished or demolished, an additional asbestos identification survey is required for previously inaccessible areas and is advisable for items previously assumed to contain asbestos (see Section 5.9).

The identification of ACM will be conducted by a competent person who has appropriate training and experience (as determined by the HSSE Team).

Where there is a realistic possibility of ACM being present but it cannot practically be verified one way or the other then the structure or plant will be assumed to contain ACM until proven otherwise.

The ultimate proof of the presence or absence of ACM will be by analysis of a bulk sample taken by a competent person by a laboratory accredited by NATA (IANZ in New Zealand) for the identification of asbestos.

2.3. Risk assessment of ACM items

All ACM items (including assumed asbestos) must be risk assessed as soon as possible after they are identified or when changes in the condition of known ACM are observed. The purpose of the risk assessment is to determine the appropriate action for the ACM item (see 5.8 Risk Control). The risk assessment must be conducted under the supervision of a competent person (as determined by the HSSE team).
The level of risk assessment is dependent on the extent of the work and who is conducting it. The recommended procedure for assessing risk is contained in Annex B.

Post the risk assessment of ACM items, actions should be entered into IRIS and completed in a timely manner.

2.4. The Site Asbestos Register

An asbestos register will be prepared for bp sites found to contain ACM. The register shall list all known or assumed ACM items. As a minimum, the register shall include:

- Date of creation of the register and date of review
- Exact location, photo (when practicable), type of asbestos, description of material form, condition of material
- Assessment of risk resulting from the ACM
- Recommended action

The recommended format for site asbestos registers is contained in Annex A.
A soft copy of the site asbestos register should be kept on site.

The site asbestos register shall be updated as soon as possible when new ACM items are located, items are removed or when changes in the condition of ACM are observed. Note that items which have been removed should not be deleted from the register, merely marked as being removed with the removal date.

The site asbestos register shall be available to all workers, contractors, site franchisees or tenants and emergency services personnel. This can be either hard or soft copy. Refer to 5.13 Record Keeping.

Note: An asbestos register is not required to be prepared when the workplace is a building that was constructed after the 31 December 2003 in Australia and 31 December 2000 in New Zealand, or if no ACM has been identified.

2.5. Review of site Asbestos Register

The site asbestos register shall be reviewed every year and arranged by the business. The review may only be conducted by someone who has completed Asbestos Awareness Training. The purpose of the review is to ensure the accuracy of the register and identify any changes in condition of existing ACM items since the last review.

HSSE should be consulted where any significant change is detected to determine whether the ACM risk assessment and recommended action requires updating.

If an item of ACM is found to have been removed or disturbed since the last review without updating the site asbestos register, the register shall be updated, and an IRIS incident report shall be raised.

The updated register shall replace the previous version of the asbestos register as the site asbestos register. The previous version shall be maintained on file. Refer to Annex A for the recommended format of the review.

2.6. Labelling and Signage

Labelling of all identified and assumed ACM shall be undertaken. If it is not reasonably practicable to label asbestos directly, a prominent warning sign must be posted in its immediate vicinity. HSSE may be consulted to advise on the positioning and number of labels or signs required. Annex C displays labels required for use on bp sites.

Pipeline Flanges that may contain in situ asbestos gaskets must be labelled (refer Annex D for further detail).

2.7. Risk Assessment of work that may disturb ACM

Asbestos risk relates to the likelihood of inhalation of asbestos fibres. Exposure of all workers must be maintained below the Occupational Exposure Standard for asbestos (0.1 f/ml). Usually, ACM will present very little risk unless it is disturbed during work activities.

The likelihood of disturbing asbestos shall be considered when completing JSAs, work permits, and risk assessments for any work which may disturb asbestos. At a minimum, the asbestos register should be consulted when planning all non-routine work. Any work that will disturb asbestos will require a Risk Assessment.
Consideration of risk from disturbance of ACM shall occur as part of routine planning for engineering and asset management projects, with particular attention to the planning process prior to demolition, building renovation or ground disturbance works (see also Section 2.9 Demolition, Removal and Disposal).

The Control of Work team or HSSE can provide guidance on risk assessment of work that may disturb ACM, including the need for air monitoring.

2.8. Risk Control

The primary objective of asbestos risk control is to prevent the inhalation of asbestos fibres. This will be achieved by:

- The removal whenever reasonably practicable of ACM under strictly controlled conditions by trained, competent and licensed personnel.
- Enclosing, containing, sealing or encapsulating asbestos.
- Identifying all known or suspected ACM on the site asbestos register and with labels or signage.
- Avoiding disturbance of low risk ACM with regular review of its condition.
- Providing asbestos awareness training.
- Providing appropriate PPE for work where exposure risk cannot be adequately controlled by the above measures.

HSSE can provide guidance on the selection, maintenance and use of risk control measures.

2.9. Demolition, Removal and Disposal

Removal of ACM must be conducted by a licensed asbestos removalist. The exception to this is the removal of non-friable asbestos gaskets, which may be removed following the methodology in Annex D, or the removal of bonded asbestos contamination from soil where there is no friable asbestos and the bonded asbestos content is less than regulatory limits (refer Annex E).

The following requirements must be met for all asbestos removal jobs:

- A HITRA High Impact Task Risk Assessment must be undertaken.
- Removal must comply with local regulatory requirements and those contained in the How to Safely Remove Asbestos Code of Practice published by Safe Work Australia.
- The removalist must be appropriately licensed for the type of removal
- Class A license (also known as an unrestricted license) allows for the removal of any amount or quantity of asbestos (including friable and non- friable asbestos).

- Class B license (also known as a restricted license) allows for the removal of any amount of non-friable asbestos
- A control plan must be prepared by the removalist and provided to the person responsible for managing asbestos removal
    - For friable asbestos removal projects, the control plan must be approved by the person responsible for managing asbestos removal.
    - This does not apply for removal of gaskets or bonded asbestos in soil if the methodologies in Annex D and Annex E are followed.
- Air monitoring must be carried out by an independent licensed asbestos assessor of the removalist during removal of all friable asbestos and is recommended if the area is more than 10m2 of non-friable asbestos.
- A clearance certificate must be obtained for all friable asbestos removal and removal of nonfriable asbestos greater than 10m2. The certificate must be issued by a person independent from the asbestos removalist.
    - For friable asbestos removal the Clearance Certificate must be issued by a licensed asbestos assessor
    - Only upon receipt of the Clearance Certificate may the asbestos removal area be reoccupied for normal work
- The person responsible for managing asbestos removal must have completed asbestos awareness training.
- Barricades and signage must be in place during removal to ensure normal operating personnel may not enter the asbestos removal area until removal is complete.
- Where asbestos is required to be removed from a site, the asbestos must be removed in accordance with EPA and local legislated requirements, including the engagement of EPA licensed carriers/vehicles and disposal at controlled landfills.
- The site asbestos register must be updated following removal.

Sites or structures to be demolished or significantly refurbished often contain previously inaccessible areas that may contain ACM not previously identified. A hazardous materials survey or audit must be completed prior to demolition.

2.10. Emergency Plans

If there is an emergency, such as a fire, explosion or natural disaster in premises that contain asbestos, asbestos could be released. Even if it is not released, the fact that it is in the premises could affect how the emergency can be safely handled. Site emergency-response plans shall cover these possibilities.

2.11. Health Surveillance

Health surveillance will be triggered if there is a risk of exposure occurring or having occurred at or above the occupational exposure standard. When health surveillance is required, monitoring and reporting will be coordinated by HSSE. A record of the Health Surveillance results and reasons for initiating health surveillance (e.g. personal exposure monitoring results) must

be maintained in the worker's medical file. The worker must be notified of the results of Health Surveillance and any other exposure information (e.g. exposure monitoring results). In some States, the regulator must also be notified.

2.12. Training

Asbestos awareness training is covered in the online training module "Top Priority: HSSE at bp" accessed via My Talent & Learning shall be provided to the following people:

- bp employees and permanent contractors who regularly work at sites containing ACM
- Managers and supervisors of such workers,
- Workers in safety critical roles at sites containing asbestos
- bp Persons responsible for managing asbestos removal or demolition of structures containing asbestos
- bp employees and permanent contractors who may be required to remove asbestos gaskets or bonded asbestos contamination in soil
- Staff responsible for purchasing new premises and/or plant and equipment.

Training must be refreshed every 3 years.

Note: Australian Retail site staff access Asbestos Awareness training via Retail LMS system.

If a bp site contains ACM then inductees to the site shall be informed of that fact and how the asbestos register is to be used prior to carrying out work that may disturb ACM.

2.13. Record Keeping

Records will be kept of the following items in accordance with PRO-4.3-0000-0-01 ANZ Records Management Procedure.

The following records must be maintained by the business:

- a site asbestos register
- previous versions of the site asbestos register (including reviews)
- risk assessments performed for work that may disturb asbestos
- employee asbestos awareness training records
- laboratory analysis results or consultant reports for bulk material or soil samples

The following records must be maintained by the person responsible for managing asbestos removal:

- records of asbestos removalist contractor credentials and asbestos removal control plans
- clearance certificates following removal
- air monitoring results
- waste disposal and transport records

The following records must be maintained by HSSE:

- results of health surveillance and reasons for initiating health surveillance
- notifications provided to workers and the regulators

3. Roles and Responsibilities

The roles and responsibilities associated with this procedure are listed in the following table.

Table 1: Roles and Responsibilities

Purchasers of new premises/plant/equipment	• Before the purchase of new premises constructed prior to 2004 (Australia) and 2000 (New Zealand), conduct an assessment of ACM content and risk factors. • Ensure new or second-hand plant or equipment to be purchased does not contain asbestos.
Business	• Ensure ACM is not used, re-used or brought onto sites • Ensure all ACM in buildings, plant and equipment constructed prior to 2004 (Australia) and 2000 (New Zealand), is identified and risk assessed by a competent person • Ensure requirements relating to the development, review and updating of an Asbestos Register are met • Raise an incident report if an item of ACM is found to have been removed or disturbed since the last review without updating the site asbestos register

	• Ensure risk assessments are undertaken when work occurs where there is a risk of disturbance of ACM • Implement any risk control measures determined by a risk assessment and monitor their effectiveness • Ensure labelling and signage requirements of this procedure are met

	• Identify workers required to be trained by this procedure and ensure they are trained • Ensure all workers including contractors who may work on or near asbestos are given access to the site asbestos register • Inform any site franchisees or tenants of the presence and location of ACM by providing a copy of the asbestos register • Maintain records as required by this procedure
bp Person responsible for managing asbestos removal	• Complete asbestos awareness training. • Ensure asbestos removal complies with local regulatory requirements and those contained in the How to Safely Remove Asbestos Code of Practice published by Safe Work Australia. • Only use licensed asbestos removalists for removal of any ACM except non-friable gaskets or bonded asbestos debris in soil. Refer to Annex D - & Annex E - for safe removal of these materials. • Obtain an Asbestos Removal Control Plan from the asbestos removalist for removal of greater than 10m2 bonded asbestos or any size of friable asbestos. • Obtain a clearance certificate from an independent licensed asbestos assessor for all friable asbestos removal and removal of non-friable asbestos greater than 10m2 before allowing workers to reoccupy the area for normal work. • Ensure barricades and signage are in place during removal so that normal operating personnel may not enter the asbestos removal area until removal is complete. • Ensure all asbestos waste is removed from sites in accordance with EPA and local legislated requirements, including the engagement of EPA licensed carriers/vehicles and disposal at controlled landfills. • Maintain records as required by this procedure.
HSSE Team, Control of Work Lead and (Supported by Regional IH Director and External Expertise)	• Provide advice to the business regarding ACM identification, risk assessment and risk control measures (including labelling and signage). • Maintain a register of preferred suppliers for the provision of Asbestos risk management services.

	• Provide advice to the business and undertaking any actions required to meet specific legislative requirements relating to license / registration / notification requirements to the local Authority for Asbestos management, removal or disposal. • Provide advice to the business on how to meet asbestos requirements relating to Emergency Management and assisting in the facilitation of these requirements.
	• Determine whether someone is a "competent person" as per the requirements of this procedure. • Determine the health surveillance monitoring and reporting requirements for relevant workers. • Maintain a record of the Health Surveillance results and reasons for initiating health surveillance in the worker's medical file. • Notify the worker of the results of Health Surveillance and any other related exposure information (eg. exposure monitoring results). • Inform the regulator when required of health surveillance and exposure information. • The role of HSSE team can be supported by external expertise to support the process.
Remedial Management Project Manager	• Advise on local legislative requirements relating to demolition of asbestos containing plant or structures and requirements relating to the management and disposal of asbestos-contaminated soil
Workers	• Follow the directions of this procedure, the Site Manager and risk assessments. • Undertake asbestos awareness training when required by this procedure. • When undertaking gasket removal, follow the work instructions in Annex D • When undertaking removal of bonded asbestos in soil, follow the methodology in Annex E

4. Terms, Definitions and Abbreviations

Table 2: Terms, Definitions and Abbreviations

ACM	Asbestos Containing Material - any material or thing that, as part of its design, contains asbestos
ANZ MS&L	Australia and New Zealand (ANZ) Marketing, Supply & Logistics (MS&L) business.

Asbestos	The asbestos form varieties of mineral silicates belonging to the serpentine or amphibole groups of rock- forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos.
Asbestos Removal Control Plan	A document which identifies the control measures which will be implemented to ensure workers and other persons are not at risk when asbestos removal work is being conducted.
Bonded asbestos	See non-friable asbestos
Bulk sampling	The taking of samples of material suspected of containing asbestos
Clearance Certificate	A certificate issued following a clearance inspection enabling an asbestos removal area to be reoccupied for normal use or other work activities
Competent Person	Someone who because of relevant qualifications and experience would be recognised by government authorities or professional bodies as competent to carry out particular work
Friable Asbestos	Material 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
IANZ	International Accreditation New Zealand
Licensed Asbestos Assessor	A person who holds an asbestos assessor license
Licensed Asbestos Removalist	A person conducting a business or undertaking who is licensed under the WHS Regulations to carry out class A or class B asbestos removal work.
NATA	The National Association of Testing Authorities
Non-friable asbestos	Material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.
Occupational Exposure Standard	Airborne concentration of a chemical substance which, according to current knowledge, should neither impair the health of nor cause undue discomfort to nearly all workers. In the case of asbestos, this is a concentration of 0.1 f/ml averaged over 8 hours.

5. Verification Processes associate with this Procedure

Self-Verification of OMS sub-element 3.4 should be included in a Self-Verification Programme. Refer to PRO-8.2-0001-0-01 MS&L Self Verification Procedure for further details to developing self-verification protocols.

6. Associated Documents

The following associated documents:

- Have been referenced in this procedure.
- Should be considered in understanding and applying the instructions provided in this procedure.

Table 1: Required References

Document Name	Document No	Document Location
Group Guide: Asbestos Risk Management	GG 3.4-0012	OMS Library
ANZ Records Management Procedure	PRO-4.3-0000-0-01	Controlled Document Register
MS&L Control of Work Procedure	PRO-4.5-0001-0-01	Controlled Document Register
How to Manage and Control Asbestos in the Workplace	Code of Practice February 2016	Safe Work Australia
How to Safely Remove Asbestos	Code of Practice April 2016	Safe Work Australia
Management and Removal of Asbestos	Approved Code of Practice Amended December 2016	Health and Safety at Work - New Zealand
MS&L Self Verification Procedure	PRO-8.2-0001-0-01	Controlled Document Register

7. External References

This procedure was prepared with reference to relevant legislation/regulations including but not limited to, relevant Acts, Regulations, Australian Standards and industry codes and practices.

Details of current legislation/regulations can be provided by the HSSE Team on request.

8. Version Summary

Table 2: Document Version Summary

Version	Prepared by	Description of Change	Date	MoC
1	A. Connolly / R. Bond	Document created	24 Mar 10	
2	A. Connolly / R. Bond	Minor update post-consultation	05 Jul 10	
3	A. Connolly	Minor update to better define responsibilities. Postconsultation with Truckstop Manager.	11 Oct 10	

4	A. Connolly	Realigned revision summary. Draft removed.	01 Apr 11	
5	A Bennett	Significant changes to entire document including accountabilities, register, training, demolition, removal and disposal, risk control, risk assessment, labelling, record keeping. New sections on review of register, health surveillance, emergency plans, risk assessment of ACM. Gasket removal and labelling guidance moved to appendices.	10 Jul 12	
6	Jess Mathers	Procedure moved to new template and document number changed to reflect OMS. Previously known as PR-PD-053.	16 Jun 14	
7	Andrew Bennett	Purpose updated to clarify that the procedure and the register forms the site asbestos management plan. New process for managing asbestos contaminated soil (Appendix 5). Updated 5.9 including clarification of demolition requirements, reference to soil appendix, requirement to conduct Level 2 risk assessment. Significant revision to Appendix 4 to include more informative content and also gasket labelling requirements. Additional role for Remediation Management Project Manager. Other minor changes.	15 Jul 14	10191
8	David Venour	Updated to reflect current organisational structure. Moved to current template.	15 May 18	11434
9	Joan Coyle	Updated to reflect retirement of GRP 3.4-0002 and release of GG 3.4-0012.	16 Jan 19	11501
10	Deta Sasanawati	Procedure moved to new template	19 Feb 2025	#45

9. Disclaimer

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Annex A - Recommended Asbestos Register Template

SITE ASBESTOS REGISTER FOR [site name]……[address]……

Original survey date: / / Original survey participants:…… Page:

Review date: / / Review participants:……

Review Comments	Asbestos Detected?	Sample #	Photo #	Location	Material Description	Condition	Risk Evaluation	Recommended Action

Analysis Certificates: (insert embedded or scanned certificate or link to the certificate)

Annex B - Recommended Asbestos Qualitative Risk Assessment Criteria

Exposure frequency of worker proximity to asbestos material:

Descriptor	Typically.....	Score
<1/month	Where people are rarely present	1
1/month	Periodic maintenance, oiling, cleaning, etc.	2
1/week	Weekly surveillance checks	3
1/day	Regular inspection, condition checking	4
>1/day	Continuous regular operator access	5

Probability of measurable fibre disturbance into the air, given the nature of the hazard and the employee actions:

Descriptor	Typically.....	Score
Unexpected	Task very unlikely to generate dust, low energy contact (regular non-extreme weather effects)	0.1
Very Low	Incidental infrequent abrasion/impact	1
Medium	**Annex C - Minor mechanical disturbance unavoidable, hand drilling, small scale breakage, small quantity of asbestos material involved**	20
High	Release of airborne fibres inevitable, dusty task, power tools used directly on asbestos materials, significant breakage of asbestos materials, large quantity of asbestos material involved	100

Friability of asbestos material:

Descriptor	Typically.....	Score
Non-Friable	Fibres firmly bound in matrix cannot be release by hand pressure	1
Friable	Fibres loosely bound in matrix can be release by hand pressure	10

Risk Score = Exposure x Probability x Friability

Risk Score	Risk
0-1	Very Low
1-5	Low
5-50	Medium
50-1000	High
1000-5000	Very High

Annex D - Recommended labels for ACM

Asbestos gaskets were a common material used during the installation of bp pipelines and equipment over the previous decades. Compressed Asbestos Fibre (CAF) gaskets contain between 25-85% asbestos which can pose considerable health risks to those persons involved in their removal if inappropriate removal methods are used. This guidance provides background knowledge and information to FVC workers for the development of JSAs or Work Instructions for the disturbance and removal of CAF gaskets.

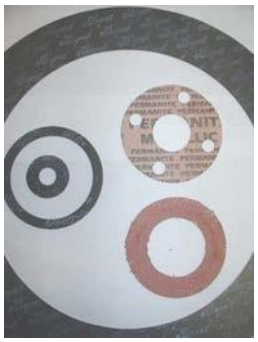
Asbestos gasket information

It is practically impossible to confidently distinguish compressed asbestos fibre gaskets from compressed fibre gaskets by visual inspection alone. The appearance of asbestos containing gaskets varies in terms of shape, size, texture and colour. The shapes of the gaskets may be round, square, rectangle and with holes drilled for the different class of flange or with no holes at all. The size of the gaskets varies from small, medium, large or even metres in diameter.

The colour of the gasket alone cannot be relied upon to indicate whether it contains asbestos or not unless the Manufacturer identification number is on it and the details can be verified. The asbestos may be incorporated in spiral wound gaskets or be made of a woven string/tape configuration.

Similar products such as stuffing box and valve packing and seals, if suspect, should be treated as asbestos especially if original packing is in an 'old' component such as a valve. Old gaskets in storerooms should be treated as suspicious and must not be installed if they don't have the manufactures details marked on the gasket to confirm they are asbestos-free.

The use of asbestos gaskets reduced from the mid-1980s and was finally banned on 31 December
2003. However, unused asbestos gaskets have been located in storerooms of bp sites as late as 2014 so it cannot be assumed that plant or equipment newer than 2003 do not contain asbestos gaskets.
If in doubt, it is recommended that the gasket be treated as containing asbestos.









Asbestos register requirement

If asbestos gaskets are known or strongly suspected to be contained within a facility (i.e. because asbestos gaskets have been found previously or because the facility contains plant older than 2004 where the original gaskets have not been replaced) then a single line item must be added to the asbestos register to ensure workers are informed of the potential for asbestos gaskets to be present.

An example is shown below.

Not accessible during review. No labelling observed	Possible asbestos	No sample taken	-	Flanges throughout site	Fibrous gaskets	Not accessed	Low but depends on handling methods and presence of	Suspect or unknown gasket flanges should be identified and labelled with caution labels

Asbestos gasket labelling requirements

It is not usually possible to sample in situ gaskets in a facility for asbestos to confirm conclusively whether a gasket contains or does not contain asbestos. If asbestos gaskets are known or strongly suspected to be contained within a facility (i.e. because asbestos gaskets have been found previously or because the facility contains plant older than 2004 where the original gaskets have not been replaced) then all flanges where it cannot be proven the in situ gasket does not contain asbestos must be labelled with an asbestos warning label (Appendix 3). Means of proving that an in situ gasket does not contain asbestos include:

- Sampling (if possible)
- Plant or equipment is known to have been opened in recent years and a non- asbestos gasket
- has been installed
- Plant or equipment was constructed post 2003 and records exist showing non- asbestos gaskets were used in construction
- The gasket can be visually confirmed to be non-asbestos (e.g. if made of rubber or cork)

Asbestos gasket removal requirements

When preparing a Work Permit or Work Instruction for this task the following information must be considered:

- Unless a gasket can be proved to be non-asbestos, the gasket is to be assumed as asbestos
- All employees and contractors involved in asbestos gasket removal must have completed asbestos awareness training (or an equivalent training).
- Only hand tools (not power tools or compressed air) are to be used to remove asbestos gaskets when performed by a non-licensed person. A licensed removalist must be engaged if powered tools or compressed air must be used.
- Transport and disposal documentation should be kept for future traceability.

Asbestos gasket removal methodology

The below information is a basic introduction to the process required to remove an asbestos gasket. Where there are any concerns regarding the ability of bp workers to complete this task a licensed professional should be contacted to remove the gasket safely.

1. Risk Assessment: identify the requirements of the task and all associated hazards and controls needed. Where any doubt exists, gaskets must be assumed to be asbestos.
2. Work Permit: complete a work permit stating the hazard controls and requirements needed to complete the task safely. Identify the trained personnel to be involved in the task and their role and responsibilities. A Level 2 Task Risk Assessment must be completed for all asbestos removal.
3. Prepare the work area: isolate the work area including the removal of persons not critical to completing the task.
4. PPE: wear a P2 grade dust mask and suitable gloves. Light, fibre impermeable disposable overalls should be worn if there is doubt about the integrity of the gasket.
5. Remove gasket: saturate the gasket with penetrating oil and allow it to absorb. Suitable oils include CRC® or Maxsolve ®. Remove the gasket using hand tools (non-powered) only - repeat the application of penetrating oil if the gasket remains stuck. Stop the operation if the gasket is going to require power tools to remove and contact a licensed professional to complete the task.
6. Any part of the work area potentially contaminated with asbestos fibres must be decontaminated using wet wipes (damp rags). Any potentially contaminated tools, equipment, PPE or clothing must be similarly decontaminated or disposed of as asbestos waste.
7. Disposal: asbestos products and used PPE is to be placed in a double-sealed bag of 200 µm thickness or drum and appropriately labelled as “Asbestos Waste”. The waste is to be removed by a licensed asbestos removalist.

Annex E - Management of asbestos contaminated soil

Asbestos contamination of soil may occur in a variety of situations including:

- Sites that contain or previously contained buildings or structures containing asbestos that have been damaged or improperly demolished.
- Former waste disposal or dumping sites
- Land with fill or foundation material of unknown composition or origin
- Land with disused asbestos containing services such as pipes, pits or trenches



Examples of asbestos contamination of soil

Process to be followed if soil is suspected to contain asbestos

1. Immediately suspend any soil disturbance works following discovery of suspected asbestos containing material
2. Either assume the material contains asbestos or arrange for the material to be analysed by a NATA accredited laboratory for asbestos. HSSE or a member of the Remediation Management Team can assist.
3. Update the site asbestos register with known information as soon as possible following discovery or upon confirmation from sample analysis.
4. If any excavation work or soil disturbance work involving the contaminated soil is required, contact Remediation Management who will organise an assessment of asbestos contamination according to the National Environmental Protection Measure (NEPM).
5. If the level of contamination is below the NEPM criteria for bonded and friable asbestos, all visible asbestos in the top 10cm of soil must be removed before commencing excavation or soil disturbance workers. All workers involved in removal must be trained in asbestos awareness
6. (Section 5.12 or equivalent training) and must follow the methodology below. A HITRA High Impact Task risk assessment must be carried out prior to removal.
7. If it is not practicable to remove discrete ACM from topsoil, then consideration should be given to topsoil removal at a depth that has no visible contamination or asbestos debris. This need would be determined following further advice from Remediation Management and HSSE.
8. The asbestos register must be updated with any removal details. Even if the debris has been removed, the register line item must remain on the register to ensure others are warned about the potential for soil to contain asbestos.
9. If the level of contamination (Step 5) is above the NEPM criteria for bonded or friable asbestos Remediation Management will advise on remediation or soil disposal requirements.

Methodology for removing less than 10m2 bonded asbestos from soil contaminated with bonded asbestos

1. Complete a work permit stating the risk controls and requirements needed to complete the task safely. Identify the trained personnel to be involved in the task and their role and responsibilities.
2. A HITRA High Impact Task Risk Assessment must be completed for all asbestos removal jobs.
3. Clearly identify and demarcate the work area where the asbestos removal work is being performed and prevent access to this area by unauthorized personnel.
4. Notify relevant personnel including site managers, supervisors, workers and other personnel, as necessary.
5. Follow the recommendations / guidance of the licenced asbestos removalist.
6. Ensure records are kept in accordance with Section 5.13 Record Keeping
7. Ensure waste disposal in in accordance with Section 5.9 Demolition, Removal and Disposal

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