

## ASBESTOS

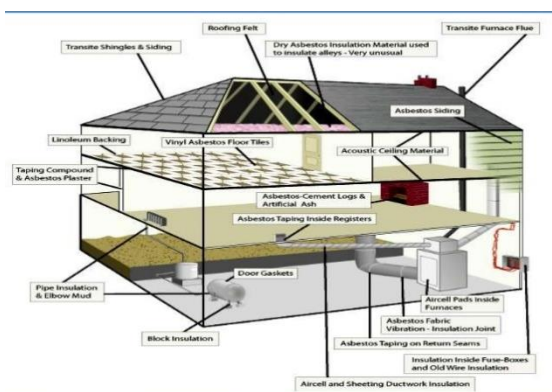
### Factsheet

#### 1. What is asbestos and why do I need to know about it?

Asbestos is a naturally occurring fibrous material that, due to its fire protection and thermal insulation properties, has been extensively used in many buildings at Eskom Business Units. Regardless of its excellent properties, asbestos is a very serious hazard to health and environment and causes many thousands of deaths every year, globally.

#### 2. Where do I find asbestos?

Eskom power stations historically used asbestos and asbestos containing materials for lagging and insulation purposes. Asbestos can be found in heat insulating material (lagging) placed around boilers, steam pipes or seals and packing's as well as in asbestos ropes around boiler doors. More commonly, it is often found in a mixture with cement, in buildings. Examples will be in roof tiles, facia boards, gutters, pipes, ceiling boards, insulation boards, sprayed coatings and many other products, commonly referred to as Asbestos Containing Material (ACM). A number of buildings in Business Units are built with asbestos cement panels.



#### 3. What is the Health and Environmental Impacts?

Being a persistent organic pollutant it is listed under the Rotterdam convention as an Appendix A chemical. The inhalation of these regulated asbestos fibres causes serious lung diseases, including asbestosis, cancer of the lungs and mesothelioma. These diseases usually become apparent only some years after exposure to asbestos, and sometimes until forty (40) or more years after the first exposure. Asbestos is a risk to health when the fibres are dispersed in the air and inhaled into the lungs. When asbestos is contained and locked in within another material and the fibres are not able to be released into the air, the risk to health is minimal. Asbestos can also be introduced into water, soil and atmosphere through pollution. This could result in the accumulation of asbestos fibres in soil carried by the asbestos fibre polluted water.

#### 4. How can I dispose asbestos?

Asbestos or asbestos containing material must be disposed in accordance with section 20 of the Asbestos regulation of 2001 and the National Waste Act 59 of 2008. Asbestos Waste containing material are classified as Hazardous and must be disposed of in registered Class A landfill designated in accordance with 3(1) and (2) of the National Norms and Standards for Disposal of Waste to Landfill. The requirements for transport and disposal must be adhered to at all times. As water is used as a wetting agent during the asbestos removal process, water quality must be managed by means of water channelling and filtration systems. Measures must be in place to ensure that no asbestos fibres will enter any water system during work processes and that no spillage will occur during transport and disposal of asbestos waste material.

## 5. How do I recognise asbestos material?

Asbestos in buildings is present in either loose, friable form (such as loose insulation material) or, more often, hidden within another material (such as asbestos cement products). Fibres might be visible in the friable form but are seldom seen in asbestos-cement and similar products. In both cases it is not possible to identify asbestos with certainty by visual examination alone and laboratory analysis is often required. Your Occupational Hygiene Practitioner and trained Asbestos Assessors at your Business Unit (BU) will be able to assist you in the identification of potential raw asbestos or asbestos containing material.

## 6. What are the Asbestos prohibited activities?

*The Asbestos Regulations GNR 341 of 2008 prohibit the:*

- Use of high-speed equipment on asbestos cement products/material.
- Processing, packaging, repackaging or manufacturing of any asbestos or asbestos-containing product.
- Import or export of any asbestos or asbestos-containing product, unless importation is purely for transit through South Africa. A person transporting asbestos or asbestos containing materials through South Africa must register with the DEA and provide certain information annually.
- Import of any asbestos-containing waste material, other than from a member of the South African Development Community for the sole purpose of safe disposal locally, subject to submitting certain information annually.

## 7. Who may be in danger?

Any person that performs work on asbestos or ACM, and any person without the required PPE (Personal Protective Equipment) that happens to be in the vicinity of such work and / or is exposed to airborne asbestos fibres, is in danger. Particularly at risk are people in the plant and buildings containing non-controlled asbestos and ACM and include those involved in maintenance and construction work

## 8. How is Eskom managing asbestos?

Eskom developed an Asbestos Standard, 32-303 "Requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles, aligned to the Asbestos Regulations of 2002, as promulgated under the OHS Act 85 of 1993", to ensure effective management of asbestos and asbestos-containing materials. Asbestos Health Risk Assessments, surveys and labelling must be done, with an inventory template (240-47175987) of asbestos and asbestos containing materials to be maintained and kept by the owner. Asbestos Work Plan(s) to be developed by the owner and approved by an Approved Asbestos Inspection Authorities (AIA) for asbestos work to be done, under controlled conditions by an Approved Asbestos Contractor to ensure that during the work, no person is exposed to levels above the set standard. Asbestos Surveys and monitoring must be conducted by an Approved Asbestos AIA.

*"If one is not sure if a particular material is, or does contain asbestos, it shall be handled as if it is asbestos material until such a time that it is confirmed as not containing asbestos material".*

**9. Eskom’s commitment to phasing out of Asbestos?**

Since the mid 1970-s, Eskom started the phasing out of asbestos in our plant and included the removal of asbestos lagging material in most of our plant. This initiative was one of the first to phase out asbestos in the country. Eskom’s strategy is to phase out asbestos as soon as possible but not later than November 2033. All owners of sites where asbestos containing material and equipment is present, are required to have a formal plan, aligned to the inventory, on the phasing out of asbestos. This include that where there is an immediate risk of asbestos fibres becoming airborne, the asbestos material should be removed under controlled conditions and replaced by non-asbestos containing material, or as part of normal maintenance.

**10. What can I do if I have asbestos or Asbestos Containing Materials at my Business Unit?**

All asbestos and asbestos containing material (ACM) shall be identified and recorded on an inventory by the employer, in line with the Asbestos Inventory template (240-47175987). The purpose of an inventory is to establish exact locations for asbestos or asbestos containing materials on site, to reflect the assessment results of the condition of the material, and to provide supporting information for an asbestos phase-out plan, e.g. quantity, labelling, risk status, removal status, etc. All asbestos waste materials shall only be disposed-off on sites specifically designated for this purpose and in such a manner that it does not cause a hazard onsite or outside the concerned site.

**11. Where can I view asbestos Management documents?**



- To view the Eskom Waste Standard, 32-245 [click here](#)
- To view the Eskom Asbestos Standard, 32-303 [click here](#)
- To view the Waste Management and Reporting Procedure, 32-249 [click here](#)
- To view the Asbestos Inventory Template, 240 – 47175987 [click here](#)

**For more information:**

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