

Dust pollution

Over the decades, industrialisation has significantly improved our lives, shaping the society we live in today. Economic growth has been the single most important goal for economies across the world, enabling much of the development we see today. However, in our pursuit for this much needed growth, we have to take care to counteract the resulting adverse effects that come with industrialisation. Pollution in its many forms has increased, with dust pollution being among the various challenges.

While dust pollution has always been a naturally occurring phenomenon since the beginning of time, the fast-paced economic activities have seen dust levels rise to sometimes unacceptable levels. Studies have shown a steady change in the composition of the atmosphere overtime. The dust generated from some industrial processes contains contaminants such as heavy metals and asbestos which significantly alter our air quality.

Many industries emit excessively high levels of dust during their processes. Industries such as mining, agriculture and construction emit high levels of particulate matter. Processes such as sandblasting, tunnelling, rock drilling, jack-hammering and power-tool -grinding and materials like bricks, cement, rocks and stone emit excessive amounts of dust.

Naturally, exposure to dust is high for people working in industries that emit high levels of dust as well as those residing in surrounding areas. Unfortunately, the effects of dust pollution are not only limited to work exposure as dust escapes into the atmosphere where weather conditions assist in its movements, exposing many to this hazard. As such, it is important that caution is taken to protect everyone against this through diligent health and safety practices. Excessive exposure to dust has the potential to lead to health problems such as asthma, silicosis, and pulmonary diseases.

This potential damage is not only limited to humans, but can also affect our environment. Dust deposited on the ground may cause changes to soil properties and affect plant life. The concentration of dust in the atmosphere also interferes with all other natural processes meant to regulate atmospheric temperatures.

According to the Minister of Labour, for us to succeed in eliminating the threat of dust, four things need to be in place. These are:

- Regular enforcement systems that will focus on the prevention of exposure and have a management system approach.
- Concentrate on knowledge development, management and dissemination systems and tools, including awareness raising and training and education at all levels.
- Apply effective inspection and health surveillance systems and tools.
- Implement preventative health and safety measures, including technical and administrative controls and the application of Occupational Health and Safety management systems.

World-wide, considerable progress has been made towards reducing the amount of dust that escapes into the atmosphere. Dust management is a critical part of sustainable development and cannot be taken lightly. Dust control remains a moving target for most countries, with its severity highly dependent on the level of development.