

# SAFETY ALERT



## BREATHING APPARATUS CAN GET CONTAMINATED

### INCIDENT

Compressed air breathing apparatus (CABA), when stored underground may become contaminated with pathogenic mould fungus. This can produce toxins that can contribute to lung disease and contain potential carcinogens. In a recent incident a component of CABA, which was stored underground in a coal mine was found to contain mould fungus.

### CIRCUMSTANCES

The introduction of the *Coal Mines (Underground) Regulation 1999* required sufficient escape equipment to be provided to allow a safe way out from the mine through conditions of reduced visibility or possible irrespirable or irritant atmosphere. As a result, many mines introduced as part of their escape management plan, CABA apparatus in conjunction with fill stations positioned at strategic locations. However, insufficient attention might have been placed on the environmental storage required to protect it from fungal contamination. These circumstances may also apply where open-cut mines, quarries and underground metalliferous mines have purchased CABA apparatus for rescue or fire-fighting purposes.

### INVESTIGATION

A component of compressed air breathing apparatus (CABA) which had been stored underground in a coal mine as part of the mine's emergency escape system was submitted to the Department for examination. The item was apparently contaminated by mould fungus and was sent to the Institute of Clinical Pathology and Medical Research where the fungus was identified. Medical staff from Coal Services Australia have advised that this fungus produces toxins that may cause diarrhoea, asthma and pneumonia, and toxins that are considered potential human carcinogens.

### RECOMMENDATIONS

1. Examine all CABA and ancillary equipment including fill stations at mines to ensure they are free from fungal contamination
2. Remove and isolate any affected apparatus from service until an appropriate course of action can be determined.
3. Ensure replacement units are safe for use and stored in such a manner that they remain in that condition.
4. Develop a proven decontamination, storage, maintenance and inspection process with the equipment supplier. Such a process must demonstrate that the units do not suffer any abnormal detriment to their function or wearability.

A handwritten signature in black ink, appearing to read 'R Regan'.

R Regan  
ASSISTANT DIRECTOR SAFETY OPERATIONS