



**DEPARTMENT OF MINES
WESTERN AUSTRALIA**

SIGNIFICANT INCIDENT REPORT NO. 6

SAFE USE OF RADIATION GAUGES

INCIDENT

Recently there have been three significant incidents involving radiation gauges. Fortunately, not one of these incidents has resulted in any radiological threat to health, however the increase in frequency of these incidents and the similarities in their causes are of concern.

CAUSE

Non-observance and/or the inappropriateness of working rules covering the entry of workers into bins. Specifically, the shutters on the radiation gauges were not closed before bin entry.

RECOMMENDATIONS

- (1) that the procedures or working rules covering bin entry be reviewed and, if necessary, updated. Attention must be given to ensuring that the instructions are clear and do not rely on the knowledge and/or presence of a particular person (e.g. the Radiation Safety Officer or Foreman) who may be unavailable when the bin entry occurs;
- (2) that a system of regular inspection of the radiation gauges, warning signs and other associated safety features be instigated. Records of these inspections should be kept; and
- (3) that awareness of the location of the radiation gauges, the potential hazards and the associated safety procedures be improved via safety training and induction sessions.

In addition to the above, consideration should be given to:

- (4) the installation of positive (fail-safe) indicators at the entrances to bins with radiation gauges to show when the shutter is closed; and
- (5) electrical or mechanical interlocks that prevent access when the gauge shutter is open.

For further information reference should be made to the Code of Practice for the Safe Use of Radiation Gauges issued by the National Health and Medical Research Council or by contacting officers of the Radiation Health Branch (Telephone: (09) 389-2260, fax: (09) 381-1423).

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