

SAFETY ALERT



UNSTABLE STRUCTURE CRUSHES WORKMAN

INCIDENT

A contract rigger was going to hook up a crusher main-frame to an overhead crane. The crusher main-frame moved and severely hurt the rigger when he was relocating a lifting chain assembly.

CIRCUMSTANCES

The main-frame was placed on two pieces of wood.

The rigger climbed inside the top of the main-frame to relocate the chain assembly. The edge of the pieces of wood gave way and the main-frame rolled.

The rigger was crushed between the inside of the main-frame and the crane boom and hook.

INVESTIGATION

The main frame was unstable because:

- Its base is much smaller than its height and upper surface area.
- The ground was wet and muddy, and the ground and the two wooden supports were not level.
- Not all the threaded studs at the base of the main-frame were in contact with the wooden supports.

NOTE:

- For some time before the accident, both the injured person and his supervisor had worked more than eleven hours a day.



THE ROLLED-OVER CRUSHER MAIN FRAME

The workman was trapped and injured between the crane boom/hook and the inside of the main-frame upper flange.

Crane boom/hook

Upper flange of main-frame.

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SAFE HANDLING

The crusher main-frame being placed on a new transport/support frame.

RECOMMENDATIONS

- Identify, assess and control risks before and during work which involves handling heavy objects.
- Use a support frame when you handle unstable things which need to be moved regularly, so that you make them more stable.
- Ensure temporary supports are strong enough, level and on a firm base.
- If there is any doubt about how stable an object is, use extra means of support, and do not let personnel enter a position of danger.
- Use documented work processes, at least for repetitive and/or high risk jobs.
- Consider the effect that regular extended work hours may have on employees' safety performance.
- When using contractors, principals should assume a standard of reasonable care, consider and document the contractor's OH&S requirements, decision making, audits and follow-ups, and use an appropriately trained contract supervisor.
- Both principals and contractors should have regard for, and refer to, Australian Standards AS 4801, AS/NZS 4804 and MDG 5003, *Guidelines for Contractor OH&S Safety Management for NSW Mines*, for further information.

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

R Regan
ASSISTANT DIRECTOR SAFETY OPERATIONS