

MDG 31 – Feeder Breakers and Crusher Incidents

| Incident Information | Agent of fatality | Events | Recommendations |
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| OPEN CUT MINES | | | |
| 24/10/2007 United States Non-Coal Open-Cut | Other | Assistant Superintendent was struck in the head with a steel bar while trying to free a wedged piece of steel from a crusher. | |
| 15/07/2005 Australia Victoria Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Fatally injured when the fixed jaw liner of a primary crusher fell on him. He was in the crusher trying to leverage a jammed fixed jaw liner while applying hydraulic pressure at the same time. The liner was not supported and dropped off the mounts fatally injuring the maintenance contractor. | |
| 17/06/2005 United States Non-Coal Open-Cut | Other | Victim was fatally injured while removing the toggle plate seat from the pitman on a jaw crusher. | Implement procedures so miners are not exposed to injury when repairing crushers, perform risk assessment and ensure correct insertion of safety pins on side of crusher to prevent movement of pitman. |
| 18/10/2004 Australia South Australia Non-Coal Open-Cut | Other | Miner was crushed | |
| 27/05/2004 United States Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Driver fatally injured when Conveyor support arm broke away from the fixed fastening base on a portable crusher causing Conveyor to swing upwards. | |
| 23/11/2003 United States Non-Coal Open-Cut | Uncontrolled Release of Energy | A company vice president was fatally injured at a crushed stone operation. The victim was using a steel bar to dislodge a blockage in an impact crusher. The bar contacted a moving crusher component causing it to be propelled and strike the victim's neck. | |
| 14/08/2003 New Zealand Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Miner fell into primary crusher feeder bin and suffered head injuries | |
| 14/06/2003 United States Non-Coal Open-Cut | Uncontrolled Release of Energy | A repair crew foreman was fatally injured at a sand and gravel operation. The victim was positioning a wedge bar to secure the upper liner plate in a stationary jaw crusher. Apparently the liner shifted and fell, striking the victim. | Conduct risk assessments identifying hazards and personnel safety. Ensure components and equipment is blocked against hazardous movement. All personnel to be positioned safely at all times. PPE to worn at all times and employees trained. |

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| <p>16/04/2003 United States Non-Coal Open-Cut</p> | <p>Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone)</p> | <p>A oiler was fatally injured attempting to free a hang up when he apparently contacted the moving crusher components causing multiple fractures to his leg. The victim was hospitalized and died on April 20, 2003.</p> | <p>Conduct risk assessments to identify hazards and process involved in protecting personnel. Isolate equipment according to standards prior to commencing work. Ensure the proper equipment is provided and personnel are trained in safe work procedures.</p> |
| <p>29/03/2003 United States Non-Coal Open-Cut</p> | <p>Uncontrolled Release of Energy</p> | <p>A supervisor was fatally injured assisting with preparing a jaw crusher to remove a shim plate. He was positioned on conveyor underneath crusher while two co-workers removed nuts holding clamp bolts. When nuts were removed, the block fell and struck him.</p> | <p>Conduct risk assessments to identify hazards prior to work commencing. Develop safe work procedures that require personnel to be safe from hazards. Train personnel in safe work procedures. Isolate equipment and components prior to work commencing.</p> |
| <p>30/08/2000 United States Non-Coal Open-Cut</p> | <p>Electrocution</p> | <p>A 36-year-old operator with 5 years mining experience was fatally injured at a sand and gravel operation. The victim was welding inside a crusher when he received a fatal electrical shock.</p> | <p>Welding in a combined space to be avoided whenever possible. Job safety analysis to be done prior to commencement of work. Proper personal protective equipment to be worn in accordance with the job being performed. Persons to be properly trained for each task.</p> |
| <p>14/07/1998 United States Non-Coal Open-Cut</p> | <p>Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone)</p> | <p>A dredge operator was fatally injured at a sand and gravel operation. The victim was attempting to clear debris built up at the throat of the crusher. He was caught and drawn into the crusher drive belts. Guards had been removed and were lying nearby.</p> | <p>Guards to be secured in place while machinery is operating. Maintenance not be performed equipment is isolated. Workplaces to be examined once a shift and corrections be initiated by operator. All tasks be planned to minimize exposure to potential hazards.</p> |
| <p>26/05/1998 United States Non-Coal Open-Cut</p> | <p>Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone)</p> | <p>A crusher operator was fatally injured walking toward the crushing plant and came in contact with the rotating drive shaft and coupling that connected crusher to drive unit. He became entangled in the drive shaft and coupling, which were not guarded.</p> | <p>Moving machine parts to be guarded to prevent inadvertent contact. New employees to be indoctrinated in safe work procedures. Examinations of working places to be performed once a shift and corrections be initiated by operator to address safety and health hazards.</p> |
| <p>30/04/1998 United States Non-Coal Open-Cut</p> | <p>Uncontrolled Release of Energy</p> | <p>A crusher operator was killed at a stone quarry. Whilst standing at opening of crusher trying to break rocks the victim either dropped the hammer or the handle broke causing hammer head to be ejected from the crusher and strike him in the face.</p> | <p>Maintenance of machinery should be performed only after the power is off and the machinery is blocked against movement. Personnel should be trained in safe work procedures.</p> |

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| 29/01/1998 United States Non-Coal Open-Cut | Uncontrolled Release of Energy | A labourer was using a hammer to dislodge a rock in a crusher standing on a ladder when hammer was ejected by moving crusher jaw. Hammer struck victim in head and he fell approximately 12ft to ground. He received severe head injuries and died 8 days later. | Equipment to be isolated before performing maintenance. Workers should wear safety belts and lines when a fall hazard exists. Safe access to working areas to be provided. Tool repairs or modifications be in accordance with the manufacturers' recommendations |
| 20/10/1997 United States Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | An owner/operator with 14 years of mining experience was killed at a stone quarry when he fell into the jaw crusher. A safe means of access was not provided around the opening to the crusher, and the chain handrails had been left down. | Before commencing work on equipment, the equipment must be appropriately isolated and locked out in accordance with isolation procedures. Equipment containing hazardous work places must be provided with suitable guarding in accordance with standards. |
| 7/10/1997 United States Non-Coal Open-Cut | Uncontrolled Release of Energy | A supervisor with 36 years of mining experience was killed at a sand and gravel operation. The victim was directing the movement of a portable crusher. He was struck by a 4,000 lb. unsecured barrier plate that fell about 4' from the rear of the crusher. | |
| 8/01/1997 United States Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | A mechanic with approximately 3 years of mining experience was killed at a sand and gravel operation. While performing mechanical repairs on a wash plant blade mill, the mill became energized pulling the victim into it. | Before commencing work on equipment, equipment should be isolated and locked out according to the like procedures. Equipment is to be installed to industry standards and inspected regularly to ensure safety and fit for purpose. |
| 10/05/1996 United States Non-Coal Open-Cut | Fall From Heights | A plant foreman was killed when he fell from an elevated crusher. There were no witnesses to the accident but the victim was found lying on the ground. It's believed he slipped and fell 15ft. A safety harness was not worn, knowing they were available. | Work safe procedures should be implemented and new employees should be trained on these procedures. Safety equipment should be worn when working in hazardous work places. |
| 7/05/1996 United States Non-Coal Open-Cut | Unintended Operation of Equipment | An operator/feedman was killed at a crushed stone quarry while helping to set up two portable crushers. One crusher was in place, when second crusher was backed into place, it crushed employee between two crusher units. Victim died from crushing injuries. | |
| 5/12/1995 United States Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | A welder with nearly four years of mining experience was killed at a limestone quarry. The employee was working on the primary crusher building up hammers when he got caught in the crusher. He died from crushing injuries. | Equipment should be isolated and locked out prior to commencing work. When working in hazardous work places, a buddy should always be on hand in case of an emergency. |
| 13/02/1987 Australia Western Australia Non-Coal Open-Cut | Other | While trying to free a large rock caught in the crusher jaws was struck by a large rock when another load of ore was tipped into the hopper by a loader. | |

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| 16/04/1986 New Zealand Non-Coal Open-Cut | Fall from Heights | Fell to his death from a crusher platform onto concrete | |
| 1981 New Zealand Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Fatally injured when falling into an impactor at the crushing plant while trying to free a blockage while the unit was in motion | |
| 8/12/1972 New Zealand Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Trying to grasp a wire rope over a crusher, the man spilled and fell into the crusher before it had fully stopped and received fatal injuries | |
| 1970 Australia New South Wales Non-Coal Open-Cut | Uncontrolled Release of Energy | The bar he was using to free stone in a crusher operating at a quarry struck him | |
| 1967 Australia New South Wales Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Overbalanced and fell between the frame and revolving driving sheave-flywheel of a jaw crushed which he was adjusting while in motion. | |
| 1964 Australia New South Wales Non-Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Mill he was working in accidentally started and caused him to be crushed. | |
| UNDERGROUND MINES | | | |
| 23/04/1997 United States Coal Open-Cut | Unintended Operation of Equipment | An electrician was fatally injured repairing water sprays on a section belt feeder. Prior to accident, power cable was severed. Victim was inside feeder fixing water sprays when it unexpectedly started and was pulled into a pick breaker. | All Equipment is to be isolated adequately prior to commencing work. |
| 15/09/1994 Australia New South Wales Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | A longwall supervisor was crushed and dismembered due to passing through a Beam Stage Loader (BSL) Crusher. The deceased was removing mesh from a bolt in the headgate when it is likely that he slipped onto the conveyor. | |
| 1/07/1915 Australia Queensland Coal Open-Cut | Fire | Fatally injured when demonstrating a new coal cutting machine and he accidentally ignited a small accumulation of gas and received burns. | |
| 2/05/1913 Australia Queensland Coal Open-Cut | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Fatally injured whilst attempting to jump over a coal cutting machine by placing his foot on the centre plate. While in the act of springing, his head struck the roof and as he fell his leg got cut off by cutting chain. He later died from his injuries. | |

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| UNKNOWN MINES | | | |
| 13/03/1982 New Zealand Unknown Unknown | Contact with Moving or Rotating Plant (Guarding/Access to Danger Zone) | Fell to his death in a crushing plant | |