



Fatality #6 - March 28, 2005
Electrical - TX - Limestone (C&B)
Capitol Aggregates LTD - Fairland Quarry

METAL/NONMETAL MINE FATALITY -On March 28, 2005, a 49-year-old contractor electrician was fatally injured at a surface stone operation. The victim was performing repairs inside an electrical box when he contacted an energized component.



Best Practices

Before YOU work on an electrical circuit:

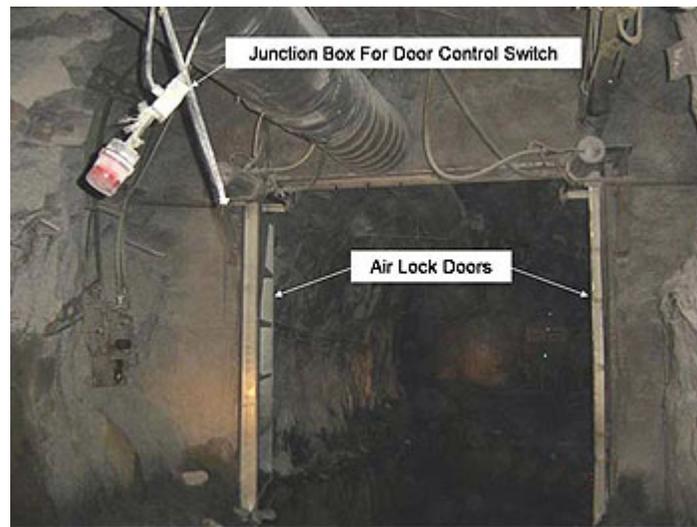
- Positively determine which circuit is to be worked on.
- Disconnect power from the circuit.
- Lock out and tag out the circuit with YOUR lock.
- Test the circuit for voltage using properly rated test equipment.
- Ground the circuit.

This is the 6th fatality reported in calendar year 2005 in the metal and nonmetal mining industries. As of this date in 2004, there were 7 fatalities reported in these industries. This is the 1st fatality classified as electrical in 2005. There were no electrical fatalities in the same period in 2004.



Fatality #10 - April 28, 2005
Machinery - MT - Platinum Group Ore
Stillwater Mining Company - Stillwater Mine

METAL/NONMETAL MINE FATALITY - On April 28, 2005, a 52-year-old electrician leadman, with 30 years mining experience, was fatally injured at an underground platinum operation. The victim was last known to be working on a door control switch located approximately 15 feet from a set of air lock doors. A co-worker, returning to the area, found him caught between the closed doors.



Best Practices

- Conduct a Risk Assessment and communicate before beginning a task, to evaluate the work procedures, identify all possible hazards, and ensure steps are taken to safely perform the task. Establish procedures to safely complete repair tasks.
- When working near air lock doors, block them and bleed off any stored energy to prevent hazardous movement.
- Ensure that miners are not positioned in areas where they are exposed to hazards resulting from a sudden release of energy.
- Before working on equipment, disconnect power from the circuit, lock out, and tag out the circuit.

This is the 10th fatality reported in calendar year 2005 in the metal and nonmetal mining industries. As of this date in 2004, there were 8 fatalities reported in these industries. This is the 4th fatality classified as Machinery in 2005. There were 3 Machinery fatalities during the same period in 2004.



Fatality #12 - May 23, 2005
Electrical - NV - Gold Ore
Placer Turquoise Ridge, Inc. - Turquoise Ridge Mine

METAL/NONMETAL MINE FATALITY - On May 23, 2005, a 48 year-old electrical foreman, with 15 years mining experience, was fatally injured on the surface of an underground gold operation. The victim was working near an energized high voltage conductor when apparently an arc flash occurred.



Best Practices

Before YOU work on an electrical circuit:

- Positively determine which circuit is to be worked on.
- Identify the disconnecting device and de-energize power from the circuit.
- Utilize proper PPE including high voltage gloves.
- Lock out and tag out the circuit with YOUR lock.
- Test the circuit for voltage using properly rated test equipment.
- Ground all phase conductors to the equipment grounding conductor with a jumper.

This is the 12th fatality reported in calendar year 2005 in the metal and nonmetal mining industries. As of this date in 2004, there were 8 fatalities reported in these industries. This is the 2nd fatality classified as Electrical in 2005. There were no Electrical fatalities during the same period in 2004.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #14 - June 17, 2005
Machinery - WA - Sand & Gravel
Cadman (Rock) Inc. - Sky River Pit

METAL/NONMETAL MINE FATALITY - On June 17, 2005, a 32-year-old equipment operator/mechanic with 5 years mining experience was fatally injured at a sand and gravel operation. The victim was removing toggle seat wedge bolts so that the broken pitman toggle seat could be replaced. The safety pins, provided by the manufacturer, had not been installed nor had other steps been taken to block/secure this component against hazardous motion. The pitman assembly shifted and pinned the victim against the crusher framework.



Best Practices

- Ensure that miners receive task training prior to allowing them to perform maintenance or repair on machinery or equipment.
- Discuss the work procedures, including all possible hazards (Risk Assessment) and ensure the manufacturer's recommendations are followed for all repair work.
- Before working on equipment, lock out the power and block equipment components against all possible motion/movement resulting from a sudden release of energy.
- If potential hazards or prescribed procedures are unclear, DO NOT proceed until all safety concerns are adequately resolved.

This is the 14th fatality reported in calendar year 2005 in Metal and Nonmetal mining. As of this date in 2004, there were 12 fatalities reported in these industries. This is the 5th fatality classified as Machinery in 2005. There were 4 Machinery fatalities in the same period in 2004.



Fatality #20 - August 1, 2005
Powered Haulage - CO - Construction Sand and Gravel
Commercial Rock Products - Wash Plant #1

METAL/NONMETAL MINE FATALITY - On August 1, 2005, a 30-year old laborer, with eight weeks mining experience, was fatally injured at a sand and gravel operation. The victim was using a shovel to remove clay that had built up on a return idler nearest to the head pulley when he was caught by the conveyor belt.



Best Practices

- Stop, Look, Analyze, and Manage (SLAM) each task.
- Ensure that persons assigned to clean conveyor belts have received training regarding the hazards and understand safe work procedures.
- Lock out belt conveyor power switches and tag them before you work on a conveyor belt.
- Never clean pulleys or idlers manually while conveyor belts are in motion.

This is the 20th fatality reported in calendar year 2005 in Metal and Nonmetal mining. As of this date in 2004, there were 15 fatalities reported in these industries. This is the 9th fatality classified as Powered Haulage in 2005. There were 3 Powered Haulage fatalities in the same period in 2004.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #5 - April 4, 2006
Powered Haulage - Michigan - Construction Sand & Gravel
Aggregate Industries, Inc. - Milliken Plant

METAL/NONMETAL MINE FATALITY - On April 4, 2006, a 23-year-old laborer, with one month mining experience, was fatally injured at a sand and gravel operation. The victim had entered the area under the crusher and traveled near the back side of the discharge conveyor tail pulley. His clothing became entangled in the rotating tail pulley.



Best Practices

- Establish policies that ensure employees are trained on required procedures to safely remove spillage near moving conveyor belts.
- Establish policies that ensure employees are trained on required procedures to safely remove spillage near moving conveyor belts.
- Before assigning miners to clean up spillage, have them identify hazards and demonstrate how they would safely complete the tasks.
- Stop, Look, Analyze, Manage (SLAM)
- Ensure that conveyor belts are deenergized and blocked against motion before positioning yourself near the drive, head, tail, and take-up pulleys.

This is the 5th fatality reported in calendar year 2006 in the metal and nonmetal mining industries. As of this date in 2005, there were 9 fatalities reported in these industries. This is the 1st Powered Haulage fatality in 2006. There were two Powered Haulage fatalities in the same period in 2005.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #10 - May 19, 2006
Electrical - Louisiana - Sand & Gravel
Kinder Sand Company LLC - Kinder Plant

METAL/NONMETAL MINE FATALITY - On May 19, 2006, a 77-year-old contractor electrician, with 58 years experience, was fatally injured at a construction sand and gravel operation. The victim was checking an electrical motor, contacted an energized conductor, and was electrocuted.



Best Practices

Before YOU perform electrical work:

- Positively determine which circuit is to be worked on and identify the disconnecting device.
- De-energize power from the circuit and place **YOUR** lock on the switch.
- Utilize proper Personal Protective Equipment, including rated electrical gloves.
- Test the circuit for voltage using properly rated test equipment.
- Ground all phase conductors to the equipment grounding conductor with a jumper.
- When troubleshooting, use extreme caution if you are using temporary connections or wiring.

This is the 10th fatality reported in calendar year 2006 in the metal and nonmetal mining industries. As of this date in 2005, there were 10 fatalities reported in these industries. This is the 2nd Electrical fatality in 2006. There was one Electrical fatality in the same period in 2005.

The information provided in this notice is based on preliminary data **ONLY** and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #15 - June 21, 2006
Electrical - Washington - Construction Sand & Gravel
Hard Rock Inc. - Gardiner Pit

METAL/NONMETAL MINE FATALITY - On June 21, 2006, a 75-year-old contractor electrician, with 50 years experience, was fatally injured at a sand and gravel operation. The victim contacted energized conductors while installing an electrical circuit. The building subsequently caught fire and burned before the primary circuit could be deenergized.



Best Practices

Before YOU perform electrical work:

- Positively determine which circuit is to be worked on and identify the disconnecting device.
- De-energize power from the circuit and place YOUR lock on the switch.
- Utilize proper Personal Protective Equipment, including rated electrical gloves.
- Test the circuit for voltage using properly rated test equipment.
- Ground all phase conductors to the equipment grounding conductor with a jumper.
-

This is the 15th fatality reported in calendar year 2006 in the metal and nonmetal mining industries. As of this date in 2005, there were 15 fatalities reported in these industries. This is the 3rd Electrical fatality in 2006. There were two Electrical fatalities in the same period in 2005.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #33 - September 14, 2007
(Chargeback - Victim Died 07/07/2008)
Electrical - Arizona - Copper Ore (NEC)
Freeport-Mcmoran Safford Inc. - Freeport-Mcmoran Safford Inc.

METAL/NONMETAL MINE FATALITY - On September 14, 2007, a 46 year-old contractor assistant electrical superintendent with 20 years experience was injured at a surface copper operation. The victim was checking a 4160 VAC switch gear, contacted an energized component, and received an electrical shock. He was hospitalized and later transferred to an extended care facility where he died on July 7, 2008.



Best Practices

Before YOU perform electrical work:

- Positively identify the circuit on which work is to be conducted and the corresponding disconnecting device.
- De-energize power from the circuit and place YOUR lock and tag on the switch.
- Ground all phase conductors to the equipment grounding medium with grounding equipment that is properly rated.
- Verify that the circuit is de-energized by testing the circuit for voltage using properly rated test equipment.
- Utilize properly rated Personal Protective Equipment including Arc Flash Protection such as a hood, gloves, shirt, and pants.

This is the 33rd fatality reported in calendar year 2007 in the metal and nonmetal mining industries. As of this date in 2006, there were 26 fatalities reported in these industries. This is the first Electrical fatality in 2007. There were 5 Electrical fatalities in the same period in 2006.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #25 - September 20, 2007
Powered Haulage - Alaska - Sand & Gravel (Construction)
Wilder Construction Company - Conrock North Pit

METAL/NONMETAL MINE FATALITY - On September 20, 2007, a 49 year-old laborer with 32 years experience (2 days at the mine) was fatally injured at a sand and gravel operation. The victim went behind a guard, used a wooden handle shovel to clean under a conveyor belt take-up pulley, and was entangled in the pulley.



Best Practices

- Establish policies to ensure employees are trained to safely remove spillage near moving conveyor belts.
- Before assigning miners to clean up spillage, have them identify hazards and demonstrate how they would safely complete the tasks. Stop, Look, Analyze, Manage (SLAM)
- Deenergize and block conveyor belts against motion before working near the drive, head, tail, and take-up pulleys.

This is the 25th fatality reported in calendar year 2007 in the metal and nonmetal mining industries. As of this date in 2006, there were 20 fatalities reported in these industries. This is the 7th Powered Haulage fatality in 2007. There were 7 Powered Haulage fatalities in the same period in 2006.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #9 – May 22, 2008
Slip/Fall of Person - Texas - Stone (Crushed and Broken)
Connors Crushed Stone - Greenwade Mine

METAL/NONMETAL MINE FATALITY - On May 22, 2008, a 46 year-old equipment operator with 15 weeks experience was fatally injured at a surface crushed stone operation. He had been dumping rock into a portable crusher using an excavator when the feeder portion of the crusher apparently clogged. The victim remotely shut off the feeder but left the crusher and discharge belt running. He climbed onto the feeder to check it and fell into the crusher.



Best Practices

- SLAM Risks (Stop, Look, Analyze, and Manage). Establish and discuss safe work procedures. Identify and control all hazards. Ensure the job is done safely.
- De-energize and lock out all components of portable crushers before performing work even if the task is brief.
- Guard or shield crushers to protect persons against flying or falling materials.
- Train all persons to recognize fall hazards.

This is the 9th fatality reported in calendar year 2008 in the metal and nonmetal mining industries. As of this date in 2007, there were 11 fatalities reported in these industries. This is the 2nd Fall of Person fatality in 2008. There was one Fall of Person fatality in the same period in 2007.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #13 – August 15, 2008
Electrical - Arizona - Copper Ore NEC
Asarco LLC - Ray

METAL/NONMETAL MINE FATALITY - On August 15, 2008, a 41 year-old apprentice electrician with 14 years mining experience was fatally injured at a copper mine. The victim was working on a 480-Volt floodlight at the tailings booster station when he contacted energized electrical wiring supplying power to the light.



Best Practices

- De-energize power from the circuit and lock out/tag the switch.
- Verify that the circuit is de-energized by testing the circuit for voltage using properly rated test equipment.
- Closely supervise and monitor persons with limited electrical experience.
- Establish and follow safe work procedures when working with less experienced miners.

This is the 13th fatality reported in calendar year 2008 in the metal and nonmetal mining industries. As of this date in 2007, there were 20 fatalities reported in these industries. This is the 2nd Electrical fatality in 2008. There were no Electrical fatalities in the same period in 2007.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #4 - April 7, 2009

**Electrical - Iowa - Construction Sand and Gravel
Hallett Materials - North Des Moines Plant**

METAL/NONMETAL MINE FATALITY - On April 7, 2009, a 36 - year old supervisor with 15 years of experience was fatally injured at a sand and gravel dredging operation. The victim was attempting to connect the 4160 volt cable for the dredge to load side terminals in the electrical panel when he came into contact with energized 4160 volt line side terminals.



Best Practices

Before YOU perform electrical work:

- Be trained and knowledgeable in the task.
- Be trained on all the electrical test and safety equipment necessary to safely test and ground the circuit being worked on.
- Use properly rated Personal Protective Equipment including Arc Flash Protection such as a hood, gloves, shirt, and pants.
- Positively identify the circuit on which work is to be conducted.
- De-energize power and ensure that the circuit is visibly open.
- Place YOUR lock and tag on the disconnecting device.
- Verify the circuit is de-energized by testing for voltage using properly rated test equipment.
- Ensure all electrical components in the cabinet are de-energized.
- Ground ALL phase conductors to the equipment grounding medium with grounding equipment that is properly rated.

This is the 4th fatality reported in calendar year 2009 in the metal and nonmetal mining industries. As of this date in 2008, there were 5 fatalities reported in these industries. This is the 1st Electrical fatality in 2009. There were no Electrical fatalities in the same period in 2008.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #8 - May 1, 2009

Machinery - Texas - Construction Sand and Gravel

Santana Dredging Corporation - Santana Dredging Corporation

METAL/NONMETAL MINE FATALITY - On May 1, 2009, a 59-year old dredge operator with 3 years of experience was fatally injured at a dredging operation. The victim was trying to manually guide the wire cable onto one of two positioning winches on the dredge when he became entangled in it.



Best Practices

- Conduct a complete pre-operational inspection of equipment that includes checking winches and cables.
- Install new winch cables to reel in the same direction as the old cable.
- Inspect winches to confirm proper reeling of the cable.
- Assign two persons to perform maintenance tasks on dredges.
- Block equipment against hazardous motion before performing maintenance tasks.
- Label valve bank levers to indicate direction of movement.
- Do not wear loose clothing when working near moving machine parts.

This is the 8th fatality reported in calendar year 2009 in the metal and nonmetal mining industries. As of this date in 2008, there were 7 fatalities reported in these industries. This is the 3rd Machinery fatality in 2009. There were 2 Machinery fatalities in the same period in 2008.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #7 - May 24, 2010

Machinery - Oklahoma - Limestone, Crushed and Broken

U.S. Lime Company - St. Clair - U.S. Lime Company-St. Clair

METAL/NONMETAL MINE FATALITY - On May 24, 2010, a 61-year-old maintenance foreman with 32 years of experience was fatally injured at a crushed stone operation. The victim entered a vertical roller mill without locking out the electrical power switch. The mill was started with the victim in the mill.



Best Practices

- Always follow established lock-out and tag-out procedures.
- Never rely on others to place your lock on electrical power switches.
- Always post warning notices at the power switches.
- Never enter machinery without ensuring the energy source is locked out.
- Always test to ensure power is off after locking out.
- Maintain power switch lock out mechanisms to function properly.

This is the 7th fatality reported in calendar year 2010 in the metal and nonmetal mining industries. As of this date in 2009, there were 10 fatalities reported in these industries. This is the 2nd Machinery fatality in 2010. There were 3 Machinery fatalities in the same period in 2009.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #16 - October 10, 2010
Electrical - Oklahoma - Dimension Stone
Martin Marietta Materials, Inc. – Snyder

METAL/NONMETAL MINE FATALITY – On October 10, 2010, a 42 year- old contract electrician with 4 years of experience was seriously injured at a granite operation. The victim and two co-workers were installing ground fault indicator lights in a circuit breaker enclosure when an arc flash occurred. The circuit breaker enclosure contained a bottom feed circuit breaker. All three workers were hospitalized and the victim died on October 12, 2010.



Before YOU perform electrical work:

- Be trained on all the electrical tests and safety equipment necessary to safely test and ground the circuit being worked on.
- Conduct a risk assessment.
- Use properly rated Personal Protective Equipment (PPE) including Arc Flash Protection such as a hood, gloves, shirt, and pants.
- Positively identify the circuit on which work is to be conducted.
- De-energize power and ensure that the circuit is visibly open.
- Place YOUR lock and tag on the disconnecting device.
- Verify the circuit is de-energized by testing for voltage using properly rated test equipment.
- Ensure ALL electrical components in the enclosure are de-energized.
- Ground ALL phase conductors to the equipment grounding medium with grounding equipment that is properly rated.
- Install warning labels on the terminal covers of bottom feed circuit breakers stating the "Bottom terminal lugs remain energized when the circuit breaker is open."

This is the 16th fatality reported in calendar year 2010 in the metal and nonmetal mining industries. As of this date in 2009, there were 16 fatalities reported in these industries. This is the 1st Electrical fatality in 2010. There was 1 Electrical fatality in the same period in 2009.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #18 - October 16, 2010
Powered Haulage - Kansas - Limestone, Crushed and Broken
N R Hamm Quarry Inc - Plant #80013

METAL/NONMETAL MINE FATALITY - On October 16, 2010, a 52 year- old haul truck driver with 5 years of experience died at a crushed stone operation. He was using an air-powered hammer/chisel to clean hardened material on a belt conveyor tail pulley. The victim was positioned on top of the return side of the belt conveyor, facing the tail pulley, when the belt conveyor was energized, entangling him in the tail pulley.



Best Practices

- Deenergize and block belt conveyors against motion before working near a drive, head, tail, and take-up pulleys.
- Lock-out/tag-out all energy sources to belt conveyors before working on them.
- Establish policies and procedures for conducting specific tasks on belt conveyors.
- Ensure that persons are task trained and understand the hazards associated with the work being performed.
- Maintain communications with all persons performing the task. Before re-starting belt conveyors, ensure that all persons are clear.

This is the 18th fatality reported in calendar year 2010 in the metal and nonmetal mining industries. As of this date in 2009, there were 16 fatalities reported in these industries. This is the 4th Powered Haulage fatality in 2010. There were 5 Powered Haulage fatalities in the same period in 2009.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #22 - December 17, 2010
Powered Haulage - Maryland - Crushed, Broken Limestone NEC
S W Barrick & Sons - S W Barrick & Sons

METAL/NONMETAL MINE FATALITY - On December 17, 2010, a 35 year- old truck driver with 11 weeks of experience died at a crushed stone operation. The victim was standing on a belt conveyor, working inside a chute, when the belt conveyor started. He was pulled out of the chute and conveyed under two other chutes located on the same belt conveyor. After the belt conveyor was shut down, the victim was found under a third chute.



Best Practices

- Establish safe work procedures before conducting specific tasks on belt conveyors and ensure that the safe work procedures are followed.
- Train persons to recognize the hazards of working near belt conveyors.
- Deenergize and block belt conveyors against motion before working near a chute, drive, head, tail, and take-up pulleys.
- Lock-out/tag-out all energy sources to belt conveyors before working on them.
- Sound audible warnings or alarms prior to starting belt conveyors.
- Maintain communications with all persons performing the task. Before re-starting belt conveyors, ensure that all persons are clear.

This is the 21st fatality reported in calendar year 2010 in the metal and nonmetal mining industries. As of this date in 2009, there were 16 fatalities reported in these industries. This is the 7th Powered Haulage fatality in 2010. There were 5 Powered Haulage fatalities in the same period in 2009.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #3 - February 24, 2011
(Deemed Chargeable 4/11/2011)
Powered Haulage - Utah – Construction Sand and Gravel
Bolinder Resources LLC - Crushing and Sampling Unit

METAL/NONMETAL MINE FATALITY - On February 24, 2011, a 56 year- old equipment operator with 10 years of experience was killed at a sand and gravel operation. He was cleaning a tramp metal magnet on a belt conveyor when it started.



Best Practices

- Establish policies and procedures for conducting specific tasks on belt conveyors.
- Ensure that persons are task trained and understand the hazards associated with the work being performed.
- Deenergize and block belt conveyors against motion before working near a drive, head, tail, take-up pulleys, and magnets.
- Lock-out/tag-out all power sources before working on belt conveyors.
- Maintain communications with all persons performing the task. Before starting belt conveyors, ensure that all persons are clear.
- Provide and maintain a safe means of access to all working places.
- Sound an audible alarm if the entire length of the belt conveyor is not visible from the starting switch.

This is the 3rd fatality reported in calendar year 2011 in the metal and nonmetal mining industries. As of this date in 2010, there were 2 fatalities reported in these industries. This is the 1st Powered Haulage fatality in 2011. There was 1 Powered Haulage fatality in the same period in 2010.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #9 - September 13, 2011
Electrical - Washington – Construction Sand and Gravel
DeAtley Crushing Co - Plant #1

METAL/NONMETAL MINE FATALITY -On September 13, 2011, a 38 year-old miner with 3 years of experience was killed at a portable sand and gravel operation. The victim opened the 480 volt feeder box at the motor control center and started to remove the leads when he received a fatal shock.



Best Practices

- Be trained on all the electrical tests and safety equipment necessary to safely test and ground the circuit being worked on.
- Conduct a risk assessment.
- Use properly rated Personal Protective Equipment (PPE) including Arc Flash Protection such as a hood, gloves, shirt, and pants.
- Positively identify the circuit on which work is to be conducted.
- De-energize power and ensure that the circuit is visibly open.
- Place YOUR lock and tag on the disconnecting device.
- Verify the circuit is de-energized by testing for voltage using properly rated test equipment.
- Ensure ALL electrical components in the enclosure are de-energized.
- Ground ALL phase conductors to the equipment grounding medium with grounding equipment that is properly rated.

This is the 9th fatality reported in calendar year 2011 in the metal and nonmetal mining industries. As of this date in 2010, there were 14 fatalities reported in these industries. This is the 1st Electrical fatality in 2011. There were no Electrical fatalities in the same period in 2010.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #13 - November 7, 2011
Machinery - Construction Sand and Gravel
Anderson Sand & Gravel - Anderson Sand & Gravel

METAL/NONMETAL MINE FATALITY - On November 7, 2011, an 82 year-old owner/crusher operator with 27 years of experience was killed at a surface crushed stone operation. The victim was attempting to dislodge material from the vibrating feed hopper when he slipped or fell into the operating jaw crusher.



Best Practices

- Establish policies and procedures for safely clearing plugged material in a feed hopper. Evaluate design modifications or use auxiliary equipment to reduce the risks associated with clearing an obstruction.
- Ensure that persons are task trained and understand the hazards associated with the work being performed.
- Deenergize and Lock-out/tag-out all power sources before working on crushers.
- Provide and maintain a safe means of access to all working places.

This is the 13th fatality reported in calendar year 2011 in the metal and nonmetal mining industries. As of this date in 2010, there were 18 fatalities reported in these industries. This is the 2nd Machinery fatality in 2011. There were 2 Machinery fatalities in the same period in 2010.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #16 - December 15, 2011
Machinery - Pennsylvania - Crushed, Broken Stone NEC
Damascus 535 Crushing - Damascus 535 Crushing

METAL/NONMETAL MINE FATALITY - On December 15, 2011, a 22 year-old laborer with 3 months of experience was killed at a surface stone operation. The victim, who was last seen on a control tower, fell into an operating jaw crusher.



Best Practices

- Always use fall protection when working where a fall hazard exists.
- Establish policies and procedures for safely clearing plugged material in a jaw crusher.
- Ensure that persons are task trained and understand the hazards associated with the work being performed.
- Deenergize and Lock-out/tag-out all power sources before working on crushers.
- Do not place yourself in a position that will expose you to hazards.
- Monitor personnel routinely to determine that safe work procedures are followed.

This is the 16th fatality reported in calendar year 2011 in the metal and nonmetal mining industries. As of this date in 2010, there were 30 fatalities reported in these industries. This is the 4th Powered Haulage fatality in 2011. There were 3 Machinery fatalities in the same period in 2010.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #10 - July 26, 2012

**Powered Haulage - Montana - Construction Sand and Gravel
Strata Corporation - Portable Crushing Plant #1**

METAL/NONMETAL MINE FATALITY - On July 26, 2012, a 49-year old equipment operator with 18 weeks of mining experience was killed at a portable crushing operation. He was standing on the discharge end of a 150-foot stacker belt conveyor, greasing the head pulley, when a coworker started the conveyor. The victim fell off the conveyor approximately 50 feet to the ground below.



Best Practices

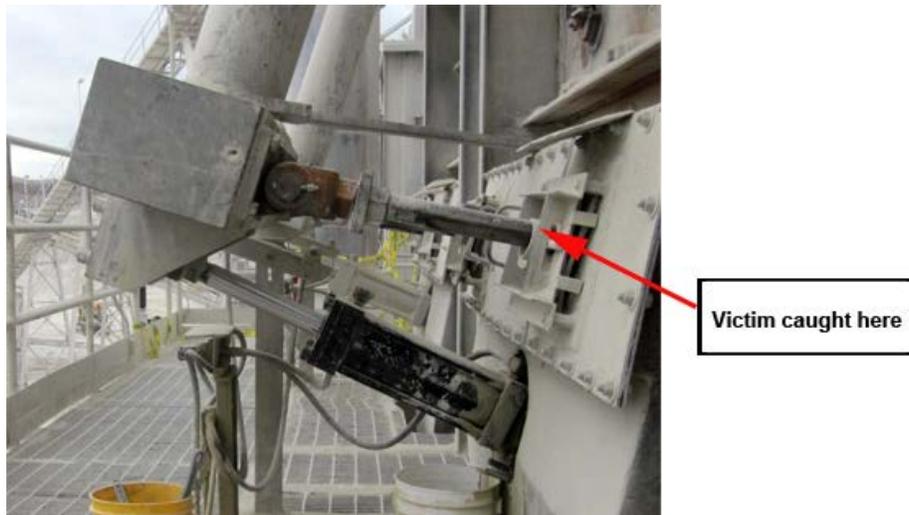
- Provide and maintain a safe means of access to all working places.
- Establish policies and procedures for conducting specific tasks on belt conveyors.
- Ensure that persons are task trained and understand the hazards associated with the work being performed.
- Deenergize and Lock-out/tag-out all power sources before working on belt conveyors.
- Block belt conveyors against motion before working near a drive, head, tail, and take-up pulleys.
- Maintain communications with all persons performing the task. Before starting belt conveyors, ensure that all persons are clear.
- Sound an audible alarm prior to start up, if the entire length of the belt conveyor is not visible from the starting switch.
- Clearly label all switches on equipment and provide training to persons who operate and work in the vicinity of equipment.

This is the 10th fatality reported in calendar year 2012 in the metal and nonmetal mining industries. As of this date in 2011, there were 6 fatalities reported in these industries. This is the 5th Powered Haulage fatality in 2012. There was 1 Powered Haulage fatality in the same period in 2011.



Fatality #2 - January 21, 2013
Machinery – Nevada – Lime
Lhoist North America of Arizona Inc. – Apex Quarry and Plant

METAL/NONMETAL MINE FATALITY - On January 21, 2013, a 54-year old mechanic with 6 years of experience was killed at a lime operation. The victim went to a kiln pre-heat deck to repair a leaking hydraulic cylinder that activates a pusher arm on the kiln. He was caught between the corner of the angle iron and the plate connecting the push rods.



Best Practices

- Establish and discuss safe work procedures. Identify and control all hazards associated with the work to be performed along with the methods to properly protect persons.
- Always follow the equipment manufacturer's recommended maintenance procedures when conducting repairs to machinery.
- Task train all persons to recognize all potential hazardous conditions and understand safe job procedures to eliminate all hazards before beginning work.
- Before working on or near equipment, ensure that the equipment power circuits are locked out/tagged out and that the equipment is blocked against hazardous motion.
- Require all persons to be positioned to prevent them from being exposed to any hazards. Monitor personnel to ensure safe work procedures, including lock out/tag out and safe work positioning, are followed.
- Ensure guarding is in place to cover potential pinch points and moving parts in areas routinely accessed by personnel.

This is the 2nd fatality reported in calendar year 2013 in the metal and nonmetal mining industries. As of this date in 2012, there were 0 fatalities reported in these industries. This is the 1st Machinery fatality in 2013. There were 0 Fall of Highwall fatalities in the same period in 2012.



Fatality #6 - April 27, 2013
Powered Haulage – Texas – Gypsum
Allied Custom Gypsum - ACG #1 Shamrock

METAL/NONMETAL MINE FATALITY - On April 27, 2013, a 58-year old mechanic with 2 years of experience was killed at a surface gypsum operation. The victim was clearing a blockage on a mobile track-mounted crusher when he became entangled in the discharge conveyor.



Best Practices

- Establish policies and procedures for conducting specific tasks on belt conveyors.
- Before beginning any work, ensure that persons are task trained and understand the hazards associated with the work to be performed.
- Do not perform work on a belt conveyor until the power is off, locked, and tagged, and machinery components are blocked against motion.
- Provide emergency stop mechanisms at the control panel(s) and at ground level where maintenance or repair work is performed.
- Provide appropriate controls to protect any person working near a stalled conveyor from unexpected motion.
- Maintain communications with all persons performing the task. Before starting belt conveyors, ensure that all persons are clear.

This is the 6th fatality reported in calendar year 2013 in the metal and nonmetal mining industries. As of this date in 2012, there were 5 fatalities reported in these industries. This is the 1st Powered Haulage fatality in 2013. There was 1 Powered Haulage fatality in the same period in 2012.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



Fatality #18 - November 18, 2013
(Victim Died November 22, 2013)
Electrical – Kentucky – Crushed, Broken Limestone NEC
Pine Bluff Sand & Gravel Company - Cumberland River Quarry

METAL/NONMETAL MINE FATALITY - On November 18, 2013, a 33-year old contract electrician foreman with 14 years of experience was injured at a crushed stone mine. The victim was working in a 480-volt electrical enclosure, pulling cable for a new pump that was being installed, when he contacted energized conductors. He was transported to a hospital where he died on November 22, 2013.



Best Practices

- Ensure that persons are trained on all electrical tests and safety equipment necessary to safely test and ground the circuit where work is to be performed.
- Positively identify the circuit on which work is to be conducted.
- De-energize power and ensure that the circuit is visibly open for circuits being worked on and circuits near the work area.
- Lock and Tag! Place YOUR lock and tag on the disconnecting device.
- Use properly rated Personal Protective Equipment (PPE) including Arc Flash Protection such as a hood, gloves, shirt, and pants.
- Ensure ALL electrical components in the enclosure are de-energized by testing for voltage using properly rated test equipment.
- Install warning labels on the terminal covers of bottom feed circuit breakers warning that "Bottom terminal lugs remain energized when the circuit breaker is open."

This is the 18th fatality reported in calendar year 2013 in metal and nonmetal mining. As of this date in 2012, there were 16 fatalities reported in metal and nonmetal mining. This is the 1st Electrical fatality in 2013. There were 0 Electrical fatalities in the same period in 2012.



Fatality #1 - February 1, 2014
Powered Haulage – Utah - Iron Ore
CML Metals - Comstock / Mountain Lion

METAL/NONMETAL MINE FATALITY - On February 1, 2014, a 56-year old contract belt operator with 4 months of experience was killed at an iron ore mine. The victim was cleaning a return idler inside the frame of a belt conveyor when he became entangled between the return idler and the belt.



Best Practices

- Establish policies and procedures for conducting specific tasks on belt conveyors.
- Before beginning any work, ensure that persons assigned to clean belt conveyors are task trained and understand the hazards associated with the work to be performed.
- Do not perform work on a belt conveyor until the power is off, locked, and tagged, and machinery components are blocked against motion.
- Never clean pulleys or idlers manually while belt conveyors are operating.
- Identify hazards around belt conveyor systems, design guarding, and securely install the guarding to ensure miners do not contact moving parts.

This is the 1st fatality reported in calendar year 2014 in the metal and nonmetal mining industries. As of this date in 2013, there were 2 fatalities reported in metal and nonmetal mining. This is the 1st Powered Haulage fatality in 2014. There were 0 Powered Haulage fatalities in the same period in 2013.

The information provided in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.



METAL/NONMETAL MINE FATALITY – On January 8, 2015, a 63-year old sales manager with 11 years of experience was killed at a sand and gravel mine. He was installing new screen panels in the B tower screen. The feeder box pivoted, pinning him between the box and the rear support beam of the screen deck.



Best Practices

- Establish and discuss safe work procedures. Identify and control all hazards associated with the work to be performed along with the methods to properly protect persons.
- Always follow the equipment manufacturer's recommended maintenance procedures when conducting repairs to machinery.
- Task train all persons to recognize all potential hazardous conditions and understand safe job procedures to eliminate all hazards before beginning work.
- Securely block equipment and components against hazardous motion at all times while performing work.
- Ensure that blocking material is competent, substantial, and adequate to support the load.
- Require all persons to be positioned to prevent them from being exposed to any hazards. Do not work in pinch points where inadvertent movement could cause injury.
- Monitor all persons to ensure safe work procedures, including safe work positioning, are followed.

This is the 1st fatality reported in calendar year 2015 in metal and nonmetal mining. As of this date in 2014, there were 0 fatalities reported in metal and nonmetal mining. This is the 1st Falling Material fatality in 2015. There were 0 Falling Material fatalities in the same period in 2014.