

OSHA FOIA Report

PRIMARY HAZARD IDENTIFIED:

- 20026143601 Employee #1 entered compartment Number 3 of a petroleum tanker trailer that had contained gasoline to repair a crack in the front bulkhead. The tanker trailer had been steam cleaned and allowed to air overnight. An explosion occurred in the void space between compartment Numbers 2 and Number 3 while Employee #1 was welding and the bulkhead struck him in the head. Employee #1 was killed.
- 20071116601 Employee #1 was using a cutting torch to trim excess metal from a patch that had been welded onto a tank truck that was used to haul waste salt water from gas and oil fields. The tank exploded and Employee #1 was killed. Lab samples showed the presence of hydrocarbons and elemental sulfur inside the tank truck that was being repaired. A vent was open, but the tank had not been purged with an inert gas.
- 20060337101 On August 29, 2006, Employee #1 was welding on a tanker truck that was contaminated with waste oil, causing an explosion. The employee was killed as a result.
- 20139142201 On November 16, 2006, Employee #1 was performing metal inert gas welding inside compartment Number 3 on a bulk-cargo tanker. During the welding process, flammable vapors were ignited which caused an explosion that killed Employee #1.
- 20051162401 At 3:00 p.m. on September 13, 2000, Employee #1 began welding inside a gasoline tanker. The vapors inside the tank exploded and he was killed.
- 20069048501 An employee was welding a small steel nipple onto the top of a fuel tank when it exploded. The tank contained approximately 4000 gallons of fuel and had recently delivered gasoline. The explosion occurred initially within the tank and then propelled the fuel out through a vent and onto the welder. The welder was engulfed in flames and he died several hours later from the burns he sustained.
- 20156214701 An employee was performing welding repairs on a bulk tanker trailer. The employee went to the top of the trailer to remove the cover in an attempt to ventilate the trailer. An explosion occurred and the employee died as a result of the injuries sustained.
- 20099639501 An employee entered the petroleum product tanker truck compartment to weld a broken seam. Air testing not done prior to entry. Vapors present in the void between tank compartments were ignited by the mig welding causing an explosion. The explosion sent the tank section being welded approximately 17 inches into the victim.
- 20137043401 On May 20, 1999, Employee #1 was killed in an explosion while welding an aluminum nipple to the inside of an overturned bar on top of the tank of the fuel truck.
- 20081149501 An employee was welding on an 80-barrel tanker. The tank exploded and killed the employee.

- 20135052701 At approximately 1:00 p.m. on August 18, 1998, Employee #1 was performing hot work (i.e., welding) on the dump pipe of the tanker truck when residual flammable vapors in the piping ignited. The flame propagated up the pipe and into the tank truck causing an explosion and killed three people. Two were employees, Employee #1, and #2, and another individual, who was a visitor to the site. The tanker truck delivered a load of petroleum containing water the previous day. However, flammable hydrocarbon vapors still resided in the tank car prior to the hot work, which subsequently contributed to the accident.
- 20168035201 On February 18, 2000, Employee #1 was welding on top of a tank that was located along the west wall, when an explosion occurred. The explosion caused the roof of the tank and Employee #1 to exit the building through the roof of the plant. Employee #1 was killed from the explosion.
- 20069023801 Employee #1, a mechanic, was welding closed a small leak that had been detected in a 275-gallon oil tank. He had drained the oil below the area where the leak was detected, but almost immediately after the stick of the arc welder was placed against the metal, the tank exploded. Employee #1 was killed.
- 20062039101 Employees #1 through #3 were making welding repairs on a crude oil storage tank in which approximately 90 gallons of crude oil had been placed the previous day. A welding arc was struck on the tank to place a metal patch when the crude oil vapors in the tank ignited, causing it to explode. Employees #1 and #3 died at the scene. Employee #2 suffered burns over approximately 90 percent of his body and was transported to the hospital, where he later died.
- 20176297801 At approximately 11:15 a.m. on July 13, 2007, Employee #1, a welder for High-Tech Equipment, was welding on a 1,000-gallon tank to install a sight gauge. The tank containing over 100 gallons of diesel fuel exploded and killed Employee #1. This accident occurred at Strong Industries Incorporated in Houston, Texas.
- 20175197101 Employee welding on tank was killed when tank exploded from the ignition of flammable vapors.
- 20081288101 On 06/24/09 at approximately 11:30 hrs an EE was welding on an empty condensate water transport truck tank when the tank exploded throwing the EE approximately 30 feet through the air killing him instantly. The EE knew that the truck had been transporting condensate water but did not follow proper procedures prior to welding. He did not fill the tank with fresh water, steam clean the inside or open the top vents prior to welding on the tank. Investigation in progress.
- 20067757301 Mr. Jorge Nunez, a 50 years old Hispanic male was killed when working on a truck owned by EMC Oil Company, Inc. located at 4760 NW 68 Street, Miami, FL. The victim was a certified welder, who was repairing the metal tank on a truck. On 12/04/2008, the decedent and his son were welding the bottom skin of the tank and after having finished the welding process he proceeded to reattached by welding a piece of pipe at the top of the rear compartment when apparently the welding gun touched the metal tank causing to explode. The victim was thrown approximately 61 feet and was killed instantly. The son suffered minor facial injuries.
- 20134348001 On December 31, 2003, Employee #1 was welding a patch to a diesel fuel tank on a pre-mix unit for an oil drill rig. While Employee #1 was welding an explosion occurred. After the explosion, Employee #1 caught fire and went outside of the shop area where two employees from another company extinguished the fire. Employee #1 suffered burns but then proceeded back into the shop area to assist an employee working under a vehicle. Employee #1 was later taken to the hospital where he died.

20064318701 On March 24, 2005, Employee #1, a welder, was assigned the task of repairing cracks in a 500 gallon diesel fuel tank. The tank was used at construction sites to supply fuel for equipment on site. The tank was brought into the welding shop to repair the cracks. With the assistance of two other coworkers, an undetermined amount of the diesel fuel was pumped out of the tank and into a fuel truck. While Employee #1 was using a MIG welder to repair the tank, the tank exploded. Employee #1 received second and third degree burns on 85 to 90 percent of his body and died approximately 24 hours later. The coworkers were treated at the hospital for smoke inhalation and released.

OTHER RELEVANT WELDING HAZARDS:

20099763301 On August 20, 2005, Employee #1, a welder, and a coworker, a welder's helper, were removing a stainless steel storage tank from a de-commissioned industrial facility. The owners of the property had informed the salvage contractor that the tank was empty and clean. However the tank contained 250 gallons of used paint thinner. Employee #1 used an oxy-acetylene cutting torch to sever the pipe at the top of the tank. A spark fell into the tank, causing an explosion. Employee #1 was standing on top of the tank when the explosion occurred which propelled him through the sheet metal roof. He struck an adjacent cooling tower about 40 ft above the ground. Employee #1 died.

20054192801 A worker rebuilding foundation forms to existing columns to ground level while 2 other workers and contractor were welding over head when an explosion occurred which threw the worker against a steel column and fatally injured the worker. The worker welding was admitted at the hospital for burns and contusions.

20060446001 An employee was cutting metal with a welding torch and the sparks from the welding hit an acetylene welding tank and the tank exploded and the ensuing fire burned the welding area down. The acetylene tank 8 feet from where the employee was welding. The employee received third degree burns on 20 percent of his body. The employee died from his injuries a six weeks later.

20026361401 C & C Welding was contracted by TEPPCO, INC to install a remote fuel level gauging rod in tank 1303, a 57,000 barrel capacity gasoline storage tank, located at the McRae, Arkansas terminal. The tank was equipped with two roofing systems. The interior, hollow "floating" roof was approximately 32 inches thick, 100 feet in diameter and was resting upon 6-foot tall legs at the bottom of the 49-foot-high tank. The exterior roof, a geodesic dome consisted of an aluminum skeleton, paneled with Plexiglas polygons. The task was to cut an 18-inch-diameter hole through both the top and bottom surfaces of the floating roof. Shortly after the workers entered the tank to begin this process, the tank exploded, ejecting the top half of the roof, along with the three workers, up and through the geodesic dome to the exterior grounds surrounding the tank.

20170262801 The victim was assigned to repair baffles in a water tank truck at the main shop for Woodpecker Truck & Equipment. The victim was using an airline respirator, an oxy/acetylene torch and an argon wire fed welder inside the tank. At approximately 9:45 am, there was a fire inside the confined space burning the victim. Several coworkers tried to put out the fire with fire extinguishers and water. His body was retrieved officially a couple hours later.

20065148701 Packaging Corporation of America SIC 2621 On 07/29/08, 3 employees were killed when the 80 foot high, 40 foot diameter outdoor tank, they were working on top of, exploded. 2 victims (management official and maintenance estimator) died instantly from the injuries sustained from the 80 foot fall. The third victim (welder) succumbed to his injuries sustained during the explosion shortly after the incident occurred. A fourth individual (firewatch) was

on the tank catwalk close to the access and received minor injuries. The welder was repairing a damaged flange connection to a piece of equipment by welding two temporary clamps to the flange to hold the piece of equipment in place. It is believed the welding on the flange exterior ignited a flammable gas mixture in the headspace of the tank. Air monitoring, conducted after the explosion, revealed hydrogen and methane gas in other tanks of this system. The 80 foot tall, 40 foot diameter tank primarily contained 88 reused mill water (White Water) and 12 recycled corrugated material that had been mechanically reduced to fiber. It is believed hydrogen and methane gas were generated by anaerobic bacteria subsisting on the starches released into the recycled mill water while the used corrugated material is reduced to fiber. The welder had not conducted air monitoring inside the tank before welding on the exterior of the tank. The company evaluation of the welding task hazards did not include the possibility of flammable gas being present in the head space of this large tank. IMMLANG N

- 20249947101 A sole owner of a welding company was in the process of adding additional piping to two separate tanks so that they can be used for the same purpose together, or separate for different operations. He and an employee of the first tier subcontractor had already completed most of the work on the bottom portions of the tank. The next part of the job involved attaching the tanks together at the top through a closed piping system. In order to do this they had to weld a new flange to the top of a tank to connect the piping to. The tank had contained a mix of methanol, water, poultry fat, and sulfuric acid. The tank had been drained but not flushed or cleaned. They had purged the tank with Argon prior to beginning any work to the tank itself. The welder had drilled a pilot hole in the top of the tank to take an air sample with a gas detector. After getting unsafe readings, they continued to purge the tank until they got a safe reading from the gas detector. The welder drilled a 3-inch hole in the top of the tank, and prepared to weld a flange over the hole. He applied one tack weld to the flange, and went to apply a second. When he contacted the flange for the second weld, the tank being worked on exploded, prying the top of the tank away from the sides. The welder was thrown approximately 16 feet to the concrete floor. He succumbed to the injuries sustained from the explosion. The employee of the first tier subcontractor was transported to the hospital where he was treated and released the same day.
- 20128277901 Employee #1 was welding a stainless steel connection on a 540- gallon mixing tank for the installation of a flow meter. The tank previously contained sodium methylate and had been purged over night using compressed air. The welding began at approximately 10:30 a.m. Employee #1 went to lunch at approximately 11:50 a.m. and the tank was purged again from noon until approximately 12:45 p.m. Employee #1 resumed welding once the air line was disconnected. At approximately 1:30 p.m. an explosion occurred. The top of the tank blew off and became lodged in the ceiling of the metal building. Employee #1 was thrown from the tank and had been decapitated. A small fire occurred during the explosion and was quickly extinguished by the fire department. Employee #1 was killed.
- 20136268801 On June 5, 2006, four employees were repairing an oil storage tank. An explosion resulted from the welding needed to repair the tank. Employees #1, #2 and #3 were killed in the explosion. There was no report on the fourth employee.
- 20075812601 At approximately 10:00 a.m. on September 28, 2005, Employee #1 was welding a handle on the side of a crude oil storage tank at an oil drilling site. Prior to welding, Employee #1 hooked the exhaust from an internal combustion engine up to the tank to purge the flammable vapors, but didn't leave it running long enough to completely empty the tank. Also, the crude oil inside the tank was not cleaned out. The flammable natural gas inside the tank ignited and exploded, burning and killing Employee #1.
- 20176168101 On August 30, 2002, the Plant Manager began preparations for repairing a 4- in. split and crack and a 2-in. split and crack in the wall of Storage Tank D-3, approximately 5 ft 5 in. above the base of the tank. The splits and cracks were located on the southwest side of the tank. The tank was drained prior to

the beginning of the repair process. However, a sludge of approximately 2.5 ft to 3 ft was left in the bottom of the tank. The Plant Manager was going to buff the area to prepare it for the welding operation, which had to be conducted to repair the tank. At the end of the day, the Plant Manager turned off the ventilation of the tank. On Monday, September 2, 2002, the Plant Manager buffed the splits and cracks and marked the patches. On Tuesday, September 3, 2002, the Plant Manager turned on the ventilation system, which was located at the top of the tank. The Plant Manager left the facility and returned at approximately 7:45 a.m. He moved the welding machine to Tank D-3. At approximately 8:00 a.m., the Plant Manager told Employee #1, a Plant Supervisor, that he was ready to start repairing the tank. Employee #1 went up on top of the tank and using a 1-in. water hose, sprayed water on the wall of the tank, where the Plant Manager was welding. The Plant Manager, while welding, hit a soft spot and broke through the wall of the tank. He continued welding the patch in place. After completing the patch, the Plant Manager started to weld the hole that was made by breaking through the wall. Since the water was coming through the hole, the Plant Manager told Employee #1 to move the water. The Plant Manager continued to weld the hole and saw a puff of yellow smoke. While the Plant Manager ran away from the tank, he yelled at Employee #1 to run. At that moment, the Plant Manager saw the top of the tank came up and a plume of yellow smoke came out as the top deck went up. Employee #1 was found dead, approximately 215 ft from the tank, laying on the road of the business, which was located next to GTM Waste Processing, Inc.

- 20233775401 Employee #1 and a coworker were changing engines in a boat, 36-ft Trojan, from gas to diesel. The engine had been changed and Employee #1 was adding a fitting to the aluminum fuel tank. The coworker stated that the fuel tank had been flushed to remove gas from the tank and it was filled with water before the work started. Employee #1 was MIG welding a plate to the top of the fuel tank when the tank exploded. He was blown up and out of the back of the boat and landed on the ground and died.
- 20128072401 Two employees had entered a direct-fired liquid asphalt vessel to repair a leak in the hot oil exchange unit. Confined space procedures were not followed. The system was not purged of explosive vapors and liquids prior to attempting the repair. An explosion occurred when the repair crew started welding. Both crew members were killed.
- 20055131501 Employee #1 and a coworker were rigging out a flatbed, 1-ton GMC truck. They were welding the brackets to hold a diesel tank in place on the truck's bed when the tank exploded. Employee #1 was killed; the coworker sustained only minor injuries.
- 20063053101 Employee #1 was using a 55-gallon drum to build a water reservoir tank for an air compressor. He used a pneumatic Milwaukee Magnum hammer drill and a 1 in. to drill a hole in the drum. He then donned a welding hood and was using a Lincoln arc welder, apparently to attach a water line to the drum, when a flash occurred. When he touched the top of the drum with the arc welder a second time, the drum exploded. Employee #1 was struck by flying parts and was killed. Approximately three weeks before the accident, the 55-gallon drum was emptied of its contents, a Class 1B flammable identified as Econo Lacquer Thinner, used to thin sealers, lacquers, and stains before they were sprayed onto finished products. Employee #1 had asked for the water hose prior to the accident and it was lying nearby, but it was not known whether the barrel was filled with water when it exploded.
- 20037092201 Employees #1 and #2 were welding electrical lugs onto the piping of a condensate recovery tank as part of installing static lines. The lines were heated up and flammable gases inside the pipelines ignited, causing the entire tank to explode. Employees #1 and #2 were killed. Employees #3 through #6, who were working in the vicinity, sustained multiple contusions and other minor injuries from flying debris, but none required hospitalization.
- 20054049001 Employee #1 was welding a 14 in. square access hatch onto a fuel tank when his clothing caught on fire. He sustained second- and third-degree burns over 34 percent of the body and was hospitalized. He died on March 16, 2000, as a result of his burn injuries.

- 20010079001 Employee #1 was using a welding torch to dismantle an oil/water separator when the unit ignited. He sustained severe burns, from which he died.
- 20037060901 Employees #1 through #3 were using acetone to clean recyclable industrial drum lids. A welder was nearby, welding a shaft onto a mechanical drum lid washing machine. The welding torch ignited the acetone vapors, causing a flash fire. Employees #1 through #3 suffered severe burns. Employee #1 died as a result of her burns; Employees #2 and #3 were hospitalized.
- 20103157201 At approximately 8:45 a.m. on August 19, 1998, Employee #1, a welder for Total Western, Inc., was placing an Apex radar level indicator on the top of lime slurry storage tank #103. He was using an oxyacetylene torch on the top of the storage tank when, within 2 to 3 minutes after he began welding, the interior of the tank exploded. The removable roof cover plate blew out, striking Employee #1 on the head and neck. The company workers stationed at ground level notified the proper authorities and attempted rescue procedures. The Los Angeles County fire and paramedic departments responded and transported Employee #1 to Harbor General-UCLA, Hospital, where he was pronounced dead.
- 20037372801 At approximately 10:30 a.m., on September 12, 2005, Employee #1 and Employee #2 were preparing to move a storage tank in Plant 5 farm. Employee #1 started welding on top of the tank an explosion occurred. He fell off the tank to concrete and Employee #2 was thrown from roof of building. Employee #1 and Employee #2 were taken to hospital. Employee #1 died at the hospital and Employee #2 was hospitalized for injuries.
- 20175143501 On August 15, 2005, Employee #1 was seriously burned when he attempted to put out a fire that had started when a spark from a welder ignited some lacquer thinner that was being used to clean the objects being welded. Employee #1 died of his injuries on September 8, 2005.
- 20078326401 On August 6, 2004, Employee #1, Employee #2, and Employee #3, who were a welder and two helpers, were welding on an oilfield well service "frac-tank" when its contents of petroleum liquids and vapors erupted into flames and the tank exploded, killing Employee #1 and causing extensive burns in Employees #2 and #3, which placed them in critical condition. It is estimated that the tank was holding 4400 gallons of crude oil, and saltwater. Gases could have been present inside the tank as a result of off-gassing from the oil mixture. The explosion and flaming oil completely destroyed the frac-tank and a nearby crewcab pick-up truck. All 4400 gallons were consumed in the fire along with the contents of the pick-up truck's gasoline tank and gas from a welding set of acetylene and oxygen. The City of Marshall, Texas Fire Marshall and the Harrison County Sheriff department responded. Employees #2 and #3 were taken to the Louisiana State University Trauma & Burn Center, Shreveport, Louisiana, and were hospitalized.
- 20051352101 At approximately 9:00 a.m. on June 7, 2004, an employee was welding or cutting on a portion of an aluminum float on a houseboat that was used as a gas tank at one time. An explosion occurred and the resulting fire and explosion instantly killed the employee.
- 20067466101 On January 21, 2004, Employee #1, an employee of Chassis and Frames, Inc., was welding auto-body parts near a 50-gallon container/drum used for chemical waste storage when a fire started and the storage drum exploded, resulting in burns and death of Employee #1 and the owner of the facility.
- 20054203301 2 workers were fatally injured while they were arc welding on a 15 ft. high X 12 ft. diameter oil storage tank that contained about 85 barrels of crude oil. The tank exploded and was propelled some 220 feet through the air and came to rest in a wooded area of the oil and gas well. The explosion caused the gas well to ignite and remained on fire for 10 hours afterwards.

- 20082443101 At approximately 9:45 a.m. on Monday, April 19, 2010, an automotive technician employed by Shau Muffler Ogden, Inc. dba Midas Auto Service Experts in Westmont, Illinois was operating a Millermatic 140 Auto-Set MIG welder in an outdoor area behind the shop. The employee was fabricating a rack to hold a tarp to cover used tires. The employee welded four used "empty" 55 gallon metal drums together, stacked two high, to make upright supports for the rack. The drums had previously contained a flammable windshield wiper concentrate containing methanol. The heat and/or sparks generated by the welder ignited residual vapors in one of the drums and caused an explosion. The employee died instantly of multiple traumatic injuries. The chemical drums had not been cleaned in accordance with the manufacturer's specifications prior to performing welding on them. The employees had not been trained on the hazards of flammable liquids in the shop. FINAL REPORT
- 20004157201 Four employees were working on the top of a tank measuring approximately 40 feet in height. An ignition source caused the contents of the tank to catch fire. An explosion occurred followed by a fire. Two employees were killed and two others were hospitalized.

OTHER WELDING FATALITIES (Unrelated to Tank Welding Dangers Implicated by Installation of Purging Systems):

- 00095267101 On September 9, 2003, Employees #1 and #2 of E. A. Breeden, Inc. were extending the guardrail system to the hatch and platform area on top of a tank located on the Coors Brewery property. The tank was used for the storage of solid waste at the waste water treatment facility. The tank was 40 ft in height and 48 ft in diameter. The employees were arc welding the guardrail system, 40 ft above the ground, when an explosion occurred. Employee #1 fell to the ground receiving fatal injuries. Employee #2 fell to the inside of the tank, an opening of approximately 10 ft left due to the explosion. The tank had to be drained in order to recover the body. Employee #2 apparently died from injuries due to the explosion.
- 20060249801 Employee #1 was assigned to arc weld a support pole and went into the backyard to do the work. Later, he was found by a coworker. Employee #1 had died. --- An employee was assigned to perform some arc welding on a support pole. The employee was left to perform the task and was later found by a co-worker in the back yard deceased.
- 20007193401 On August 1, 2003, an employee of Specialty Fabricators Inc. was welding on a metal box when the box exploded and killed him.
- 20135217601 On July 13, 2003, Employee #1 was using a Briggs and Stratton arc welder to install metal sub-flooring on a balcony at a construction site. He made contact with the exposed wires on the welding cables and was electrocuted. The welding cables were frayed and improper repairs had been made within 10 ft of the electrode end holders. ----- On July 13, 2003, the victim was operating a Briggs and Stratton arc welder to install metal sub-flooring on a balcony at a construction site. The welding cables of the arc welder had frayed cables and improper repairs within 10 feet of the electrode end holders. The victim came into contact with the exposed wires on the welding cables and was electrocuted. 170 Immigrant Language Questionnaire (Use TypeOver Mode when answering questions) 1.Name of Injured or Deceased: __Javier Gonzalez_____ 2.a.Did the victim speak a language other than English at the work site? Yes No If No, Skip to Question 3. b.What was this language? __Spanish_____ (Example: Korean, Portugese, Spanish, Vietnamese, French, Italian, etc. c.How well did the victim speak English? Very well Well Not well Not at all 3.What was the primary language of other workers at the work site? __Spanish_____ (Example: English, Korean, Portugese, Spanish, Vietnamese, French, Italian, etc.) 4.What was the primary language of the supervisor(s) at the work site? __English_____ (Example: English, Korean, Portugese, Spanish, Vietnamese, French, Italian, etc.) 5.Was the victim Spanish/Hispanic/Latino? Yes X No 6.a.Where was the victim born? United States If U.S. > Skip to

Question 7 Outside the United States (print name of foreign country, or Puerto Rico, Guam, etc.) ___Mexico b. When did the victim come to live in the U.S.? Print Year:_____ 7. Was the victim a day laborer? (Please refer to definition of day laborer) Yes No

- 20158083401 In the morning of July 9, 2003, Employees #1 and two coworkers, the carpenters, finished cutting and framing three holes, measuring 5 ft 10 in. by 5 ft 3 in. in the roof above a welding shop. The holes were made for the installation of the ventilation fans. The openings were covered with plywood siding and the roof membrane was placed over that, and then loosely nailed. There was no marking on the plywood or membrane indicating that these were the hole covers. The nailing was loose enough that a person could pop the covers up by hand. Employee #1 went on to the roof to install larger curbs as part of a three man crew. The coworkers on a lower roof level were to lift the curbs up to Employee #1. They pushed the first curb up on to the higher roof level and Employee #1 pulled it in. When the coworkers pushed the next two curbs up they got no response from Employee #1, who was above. The coworkers went on up to the higher level roof to look for Employee #1. They found that one of the hole covers was removed and that Employee #1 fell into the hole and landed 32 ft on the concrete floor. He was killed. There were no nails found in the plywood or anywhere on the roof.
- 20074137901 On July 3, 2003, Employee #1 was welding on a mezzanine next to a steam turbine. While leaving the area to go on a break, Employee #1 collapsed. Emergency Medical Services was called and Employee #1 was transported to the hospital. Employee #1 passed away at the hospital a couple of hours later. The autopsy report does not indicate a cause of death. There was no evidence to support a heart attack, aneurysm, stroke, embolism or heat stress as the cause of death. Onsite inspection and interview with witnesses did not reveal any apparent workplace hazards which would contribute to the fatality.
- 20004075601 At approximately 11:55 a.m. on July 1, 2003, Employee #1 was tack welding on the roof decking of an office/warehouse building under construction. After falling through a skylight hole approximately 29 ft to the floor, he was transported to a local hospital where he was pronounced dead.
- 20081164401 An Airgas, Inc. employee was electrocuted while attempting to inventory gas bottles in the Noble Construction Equipment, Inc. facility located at 1802 E. 50th St., Lubbock, TX 79404. The incident occurred as he had his hands/arms stretched between two gas bottles and was attempting to turn one or both of them so he could read the type of gas to a co-worker. One bottle was on a welding cart of a Lincoln TIG welder, and the other was chained to the metal post of a fixed welder. Apparently the conductors of the equipment lead / cord was improperly wired / connected, and the welding cart / welder case was energized with 480VAC and the deceased became the direct path to ground and was severely shocked (electrocuted).
- 20234409901 Employee was using a welding machine set for AC welding. He was welding a metal support brace on a shaker table. Employee was lying on a concrete floor and he was between the welding operation in front of him and the ground lead was clamped to the other end of the shaker table beyond his feet. This created a circuit that allowed current to flow through his body from the welding operation and he was electrocuted.
- 20035318301 On June 11, 2003, Employee #1, while spot welding inside a stainless steel tract or trailer tank, a permit required confined space, was found unconscious and unresponsive. Employee #1 was taken to Wilson Memorial Hospital emergency room where he was declared dead.
- 20060245601 On June 9, 2003, Employee #1 was arc welding under a truck. As soon as he made the first weld, a coworker heard him say something unintelligible and then discovered him suffering from cardiac arrest. Employee #1 had been electrocuted. Subsequent investigation revealed that he was welding with damaged cables.

- 20198943101 On May 28, 2003, a crane was lifting a metal plate to be flipped over for welding of the opposite side joints. The welds failed on the side of the lifting ears and Employee #1 was struck by the plate, killing him.
- 20208638501 Lorain, Ohio Police reported that at approximately 6:00am est, May 27, 2003, an employee was electrocuted by a welding machine that had apparently been left energized. The victim was transported to Lorain Community Hospital. Investigation is pending. 170 Immigrant Language Questionnaire (Use TypeOver Mode when answering questions) 1.Name of Injured or Deceased: JOSHUA JOHNSON 2.a.Did the victim speak a language other than English at the work site? Yes[] No[XX] If No, Skip to Question 3. b.What was this language? _____ (Example: Korean, Portugese, Spanish, Vietnamese, French, Italian, etc. c.How well did the victim speak English? Very well[] Well[] Not well[] Not at all[] 3.What was the primary language of other workers at the work site? English (Example: English, Korean, Portugese, Spanish, Vietnamese, French, Italian, etc.) 4.What was the primary language of the supervisor(s) at the work site? English (Example: English, Korean, Portugese, Spanish, Vietnamese, French, Italian, etc.) 5.Was the victim Spanish/Hispanic/Latino? Yes[] No[x] 6.a.Where was the victim born? [x] United States If U.S. !> Skip to Question 7 [] Outside the United States (print name of foreign country, or Puerto Rico, Guam, etc.) _____ b.When did the victim come to live in the U.S.? Print Year: _____ 7.Was the victim a day laborer? (Please refer to definition of day laborer) Yes[] No[x]
- 20157245001 On March 31, 2003, Employee #1, a roustabout; Employee #2, a welder; and Employee #3 and #4, also roustabouts; were installing an additional tank for crude oil as part of group of steel tanks (tank battery). The existing tanks of the tank battery were used to separate waste water (salt water) from residual crude oil in the salt water. Employee #2 was installing anchor brackets at several locations around the circumference of the base of this additional oil tank. The attachment had been completed for one of four anchor brackets that needed to be installed. Welding was nearly completed on the second anchor bracket when suddenly an explosion occurred, which launched the tank approximately 15 feet vertically. At the time of the explosion, Employee #2 and Employees #1 and #3 were immediately adjacent to the tank. Employee #4 was outside the containment berm for the tank battery. Employee #1, positioned adjacent to the tank, suffered fatal injuries and died at the scene. Employee #2 and #3, positioned adjacent to the tank, were hospitalized with serious injuries. Employee #4, positioned outside the containment berm, was hospitalized, treated and released. Prior to welding on the anchor brackets, this additional steel tank had been connected to several pipelines that were already installed and connected to the three existing crude oil tanks in the tank battery. One of these pipelines was a ventilation pipe that was connected to top of the three existing crude oil tanks. The ventilation pipe had been installed to carry flammable vapors from the headspaces of the existing crude oil tanks to relieve pressure buildup in the tanks. The tank battery, at this salt water disposal facility, was comprised of seven steel tanks as follows: three salt water tanks, three crude oil tanks and a smaller sump drainage tank. All of these tanks were located inside a concrete containment berm with a concrete pad entirely covering the floor of the containment area. The tank, that exploded while being welded on, was to become the fourth crude oil tank in the tank battery. The three larger water tanks, labeled Number 1, Number 2 and Number 3, were each approximately 30 feet high and 15 feet in diameter with a reported capacity of 1,000 barrels (42,000 gallons) each. The three smaller crude oil tanks, labeled Number 4, Number 5 and Number 6, were approximately 15 feet high and 12 feet in diameter with a reported capacity of 300 barrels (12,600 gallons) each. The fourth crude oil tank, being installed, was also approximately 15 feet high and 12 feet in diameter with a reported capacity of 300 barrels (12,600 gallons). The entire facility (Salt Water Disposal Number 1) included: the tank battery within a containment berm, two pump stations for unloading tanker trucks with salt water containing 1- 2 residual crude oil, a separate pump and filter building for final treatment of salt water, and a deep well for returning salt water underground. The facility provided final separation of the remaining residual crude oil from the waste water that was produced when oil or gas was recovered from nearby production wells. This waste water was labeled salt water because it contained natural minerals and salts carried from underground. Although most of the crude oil was separated from the salt water at the sites of oil or gas wells, the salt water contained variable quantities of residual crude oil.

- 20157252601 On March 31, 2003, Employee #1, a roustabout; Employee #2, a welder; and Employees #3 and #4, also roustabouts; were installing anchor brackets at several locations around the circumference of the base of the additional oil tank, which was part of a battery of tanks. Prior to welding on the anchor brackets, the additional steel tank had been connected to several pipelines that were already installed and connected to the three existing crude oil tanks. When welding was nearly completed on the second anchor bracket, an explosion occurred, which launched the tank approximately 15 feet vertically. At the time of the explosion, Employee #2, the welder, and Employees #1 and #3 were immediately adjacent to the tank. Employee #4 was outside the containment berm for the tank battery. Employee #1 suffered fatal injuries and died at the scene. Employees #2 and #3, positioned adjacent to the tank, were hospitalized with serious injuries. Employee #4, positioned outside the containment berm, was hospitalized, treated and released.
- 20099265901 On March 6, 2003, Employee #1 was welding floor plates inside a semi-dump-trailer. For some reason, he was found lying face down on top of the welding "stinger". Employee #1 was hospitalized at the St Margaret Mercy Health Center and pronounced dead due to suffering electric shock.
- 20097008501 On February 18, 2003, Employee #1, a boilermaker and welder, was in the basket of a manlift. The basket was 11 ft above the floor of the floating drydock. Employee #1 was welding steel reinforcements to the exterior, starboard, and stern of a barge in the drydock. The welding was being done using a wire-feed welder. The terminated end of the weld was approximately 17 ft above the floor of the drydock. A small rupture occurred in a hydraulic line of the manlift due to unknown causes. This released a fine spray of hydraulic oil, which was ignited by sparks from the welding. The fire was immediately responded to by other employees and extinguished with the lift in place. It was estimated that it took 2 to 4 minutes from the ignition of the fire until it was extinguished. At that time the basket was lowered to the floor of the drydock. Fire Bureau personnel moved Employee #1 from the basket to a stretcher to transport him to the hospital. At the hospital the attending physician determined that Employee #1 had 80-full-thickness burns. Employee #1 died on April 21, 2003.
- 20062230601 On February 5, 2003, Employee #1 was TIG welding on an open pipe when a combustible liquid (majeisol 47 oil) discharged from the pipe and covered his body. The oil was ignited by the welding operation and Employee #1 was killed of burns over approximately 95 percent of his body.
- 17000500301 On February 4, 2003, Employee #1 was fatally injured in the explosion of a cast iron nozzle needle that had heat applied to it before being vented.
- 20021120901 On January 6, 2003, employees were working at a metal fabrication marine yard that primarily produced offshore oilfield structures. A large steel bridge footing was being manufactured when an ignition occurred due to welding gases, including propane and oxygen. Employee #1 was grinding while standing on a 4-ton top plate of the chamber. He was killed when he was vaulted from the structure when the explosion occurred. Employee #2 was hospitalized with hearing loss. Employee #3 was hospitalized with a back strain. Other employees were injured, but not hospitalized. Some received burns, or concussions and others received facial injuries due to flying debris.
- 20168120201 At approximately 11:46 pm on December 12, 2002, Employee #1 and his coworkers were installing a vapor barrier plug in a 28-in-pipe-T and filling it with nitrogen. The foreman checked a bleeder hose several times to verify good flow to prevent any pressure buildup. One coworker was in the process of building up the inside edge of the pipe to allow the difference in the new pipe that reduces to a 16-in-pipe outlet. Employee #1 was beginning to strike an arc when the plug from a vapor barrier blew, struck Employee #1 in the head, knocked off his welding helmet, and propelled him backwards. Employee #1's face struck a pipe support leg brace, killing him instantly.

- 20055266901 At approximately 11:50 a.m. on December 19, 2002, Employee #1 was welding an insert on the open hatch cover of a ship. He fell approximately 25.5 feet to his death. No witnesses observed the incident. He was not wearing any fall protection.
- 20064263501 On December 19, 2002, an oil well service crew consisting of Employee #1 and 3 coworkers had completed the removal of 2.375-inch tubing out of an existing oil well that needed to be plugged due to bad casing. The crew was using a company owned 185,000 pound capacity telescoping derrick. A welding service company completed the welding of a 10-foot pull sub section of 4.5 inch N-80 casing pipe on the top of the existing casing pipe in the well. The weld included three reinforcing metal plates. The well service crew (plus one helper) started the extraction of some 9,176 feet of 4.5-inch casing pipe from the well. The derrick was set at 82,000 pound pull and connected to the pull sub pipe. A boomer chain was installed on the pull sub pipe to help free up the slips and bowl, and then removed. The casing was raised for removal of the slips and bowl assembly. As the casing and assembly was being moved over to rest on the well service pipe, the pull sub pipe broke due to metal failure (located just above the welded reinforcing metal plates). The pipe flew up and the casing and assembly fell back into the well. During the incident, Employee #1 was struck in the head by the pipe, killing him.
- 20055274301 At 12:30 p.m. on November 19, 2002, Employee #1, a welder, fell from a hopper barge into the cargo tank. Employee #1 had the job task of welding two pad eyes on to the cargo hold cover. It is presumed Employee #1 lost his footing and slipped off the edge of the barge and fell 25 to 30 feet into the cargo tank. Employee #1 was not using fall protection at the time of the accident. He was pronounced dead at the scene.
- 20065069501 On September 19, 2002, Employee #1, a welder, and Employee #2 were replacing the threaded studs from an air dump piston cylinder on a bottom drop railroad car. They removed the cylinder by torching off the bolts. They wiped the grease off the top of piston and were welding nuts onto the broken-off studs to screw them off. One stud was already out when they started to attach the nut to the first stud. Employee #1 was welding and Employee #2 was holding the nut in place when the cylinder pistons, driven by internal combustion, activated and struck both workers. Employee #1 sustained facial injuries, for which he was hospitalized. Employee #2 was struck in the face and chest, and was killed.
- 12609179201 At 10:30 a.m. on September 13, 2002, Employee #1, who worked at a commercial and residential trash collection, disposal, and recycling facility, was walking in the driveway toward the welding area. A coworker was using a Caterpillar GPL 40 forklift to transport a 67 in. tall metal bin to the welding area to be refurbished. The forks were elevated between 6 in. and 9 in. The forklift moved forward and the 4 yd. bin struck Employee #1, knocking him to the pavement and pushing him several feet. Employee #1 was killed.
- 20082171801 At approximately 7:55 a.m. on August 29, 2002, Employee #1 was spot welding a 4ft diameter impeller that had been loaded by a forklift truck onto a larger, circular steel table 2.5 ft above the floor. The unit was set on the rollers of a fixture that sat on the table. The impeller was slowly turned by the operator to spot weld at various locations on its face. The fixture was designed with a vertical mechanical stop on one side but not on the opposite side. As a result, impeller began to drift toward Employee #1 while he was welding. The 500 lb unit came off the rollers of the fixture and fell toward Employee #1, knocking him onto the concrete floor and then landing on top of him. Employee #1 was killed.
- 20063079601 FINDINGS - Employee, Rusty Mick, Jr., was electrocuted when he reached through a 5 inch diameter access hole on the side of the 10' x 15' dealership sign. From the bucket of a truck crane, the employee was attempting to change 10' fluorescent lamps mounted horizontally within the interior of the sign. Ritchey Advertising was hired to erect and install a flag mount type sign at the Bill Forbes Chevrolet Chrysler-Dodge dealership located on Route 2 in New Martinsville WV. The sign is 10' x 15' and mounted on a pole at a height of 34'. The sign is illuminated by 10' fluorescent lights, mounted horizontally within the sign. The job began on July 31, 2002 when concrete and anchor bolts were installed to prepare the foundation. On Thursday,

August 15, 2002, the sign was delivered to the site and installed. The company was aware of lamps that were broken during shipment that would require replacement. Electricians were contracted to install the wiring and would be responsible for the final hook up. Friday, August 16, 2002, lamps were taken to the job for installation. Work began at approximately 2:30pm after completing another job in the area. Using a Ford F-Series diesel truck, VIN#1FDNF80CXSV A64335, 25,800 GVWR with a Radocy telescoping boom and man basket, Rusty Mick was raised to the sign to install new lamps. A full body harness was on the floor of the man basket and was not used by Mick. Mick installed three new lamps with the power off to the sign. Once the lamps were installed, Mick asked Ritchey to turn the power on to see if the lamps were operable. Located on the ground was Pat Ritchey and Ed Harmon. Mounted on the bed of the truck was a Miller AEAD-200LE constant current AC/DC arc welding generator rated at 5000 watts with no GFCI. An orange, three wire extension cord was plugged into the generator and would provide power to the sign by inserting the signs permanent hot and neutral wires into the female end of the extension cord. Performing this operation was Pat Ritchey, Vice President of the company. When plugged in, the upper of the sign did not light. Mick placed his arm inside the sign and told Ritchey to turn it off which was done so immediately and Mick slumped down into the bucket. The sign had been energized and a short in the wiring of the sign resulted in an electrocution to Mick. Ed Harmon ran into the dealership and told someone to call 911 and Ritchey lowered Mick and the bucket to the ground. The Wetzel County EMS arrived and transported Mick to the Wetzel County Hospital in New Martinsville. Mick died on 8/16/02 at approximately 4:39pm.

- 20139035801 On August 15, 2002, Employee #1 was preheating and tungsten inert gas (TIG) welding an aluminum mold with two unvented cavities that were filled with a solution of water and sodium nitrate when the fluid vaporized, causing the mold and backing plate to blow apart and strike Employee #1 in the chest, killing him.
- 20163291601 On August 12, 2002, Employee #1 opened a safety gate and entered the area of the can manufacturing machine that was used to accumulate and transfer can blanks from the slitter to a forming and welding machine. She was removing metal shavings, referred to as hay, from a stack of can blanks when the safety gate swung shut, activating the machine. Employee #1 was under the machine's gantry head when it descended to pick up the material and her head was crushed against the table. Employee #1 was killed.
- 20051310901 On July 31, 2002, Employee #1 was welding a crack in a single-piece rim. The H34 x 10.0 R16, 14-ply Goodyear Flight Radial tire still mounted on the rim and was inflated to 50 lb psi. Employee #1 had been welding for approximately five seconds when the tire and rim exploded and struck him in the head. The force of the impact disintegrated his welding helmet and he sustained a severe skull fracture. Employee #1 was killed.
- 20026187301 On July 29, 2002, Employee #1, a welder, was operating the mash lap seam welding machine at the entry of the galvanize line in the cold mill. His job was to weld together the ends of the steel coils so they could be run into the galvanize line as a continuous sheet of metal. The line was running when, for some reason, Employee #1 reached between the entry clamp and the welding carriage. The entry clamp traversed forward and he became trapped between it and the welding carriage. Employee #1 died of crushing injuries to his torso.
- 20045127601 A shipfitter received fatal injuries when he received an electric shock when his co-worker accidentally struck the pipe in front of them with his welding electrode. The victim fell from the top the ship's mud tank to the lower deck approximately 14 feet below. The employees were building the HVAC duct system on the supply ship module section of hull # 7330 which was under construction. The two employees were tack welding a flat bar while standing on the oval roof of the mud tank. The employees were lodged, chest high, in between two steel pipes that had a stainless steel casing. The welder inadvertently arced with his electrode the pipe in front of them causing both employees to receive electric shock. The victim fell from the top of the tank to the deck as he apparently suffered heart arrhythmia due to the current flow.

- 20005167001 On July 8, 2002, Employee #1, a maintenance worker, was repairing and constructing metal waste containers and dumpsters. Employee #1 was working inside the container delivery area conducting welding operations on a metal waste receptacle. While Employee #1 was conducting the welding operation, another employee was cutting the metal rods to fit the lid onto the receptacle. Two other employees were taking the wheels off the dumpster to be replaced, while another employee was cutting on the side of the container to fit the lid to the container. At approximately 2:00 p.m., another employee walked out the back entrance of the maintenance area and noticed smoke coming from the container repair/delivery area. The employee ran over to the area and noticed that Employee #1 was lying on the floor engulfed in flames. The employee called for help and another employee arrived. The two employees dispensed fire extinguishers in an attempt to extinguish the flames on Employee #1. The employees extinguished the flames and realized that Employee #1 was still lying on the cutting torch. The other employees shut the tanks off and were able to extinguish the flames in the container as the rescue personnel were arriving on the scene. Employee #1 is alleged to have a history with epilepsy, and it is thought that the employee had a seizure and fell onto the torch. The torch and hoses were taken as evidence by the Dodge County Sheriff's Department and later released to the compliance officer. The hose connections to the torch were not in accordance with welding standards.
- 20158080001 On July 1, 2002, Employee #1 died of a heart attack while performing common, non-strenuous welding tasks (such as pulling back welding leads and grinding smooth build-up welds). He had a prior history of heart problems.
- 20136175501 Four employees were working on a roof performing leading edge work. An iron worker and Employee #1, a foreman, were measuring and placing location marks every two feet on the steel beams. The marks identified the location for placement of metal roof decking. Another ironworker was shaking out roof metal sheets for future placement. A fourth employee was welding the roof decking to the steel beams. Employee #1 and the iron worker were marking the steel beams every two feet. The employees were working near the edge. Employee #1 was kneeling down on a loose sheet of decking when he fell 17 feet to a concrete floor and was killed.
- 20010136801 On April 29, 2002, an employee complained of pain and heartburn in his left arm and shoulder. After returning from lunch and donning his personal protective equipment (PPE), he collapsed. The company called an emergency response team. They were there within 5 minutes. Two coworkers were trying to stop the bleeding from a deep wound on his face where his welding helmet had cut into his face. The wound was 4 inches long and 1.5 inches deep. The employee was bleeding profusely. He died of heart failure and a compound head fracture.
- 20067371301 At approximately 8:40 a.m. on April 4, 2002, Employee #1 was preparing the upper area of a steel caisson for welding. He was struck several times by a track-mounted drill rig, which was operating within several feet from him and had no swing radius guard. He died at the scene.
- 20136174801 Employee #1, a welder, was assigned to weld an end wall (bulkhead) of a ship module. The employee and a coworker were standing between the unit they were welding and an adjacent unit in a space approximately 24 to 30 inches wide. The coworker forgot to connect his air supply and had just stepped out from between the units when the unit they were working on gave a loud popping sound and rotated on its jig in a clockwise motion. The gap between the units closed to less than 7 inches, crushing Employee #1 between the two units and killing him. Other employees in the area ran to the aid of the employee. Using jacks, they forced the two units apart enough to extricate Employee #1. When emergency services arrived, they were unable to revive Employee #1.
- 20007130601 At 10:30 a.m. on February 21, 2002, Employee #1 and Employee #2 of Silver Lake Welding Service, Incorporated were working inside feed bin number 17 repairing worn metal plating on the walls. The air actuated slide gate for bin number 17 was opened, releasing its contents of approximately 12 feet in

depth grain with two employees caught in the grain. The older employee was pulled under the grain first with his legs partially exposed out the slide gate opening. The other employee also pulled under the grain was wedged in on top of the older employee, preventing the two from coming on through the slide gate opening. A truck driver called for medical assistance. The Elkin Rescue Service arrived at the accident site and found one of the employees for Silver Lake Welding Service, Incorporated using a cutting torch to make a 36-inch-square large hole opening to help free the two trapped employees. The older employee was partially removed up to his chest by the time the second Elkin Rescue Service member arrived on site. The Elkin Rescue Service, at the top of the feed mill bins, observed that the hand operated, Model 482, hoist, with PN A7332, was set in place above the entrance into feed bin Number 17. A boatswain chair and swing seat was attached by a 0.375-inch diameter metal cable to the hoist. The boatswain chair and swing seat had been lowered into feed bin Number 17. The 0.375-inch diameter metal cable for personnel live line rescue was attached around one of the metal angle iron post used to support the feed inlet pipes used to transfer feed grain. There were three electric cords running into feed bin Number 17. One cord was for a stick welder, one for an explosion-proof light, and one for a portable grinder. A vent hose was lying next to the entrance of feed bin Number 17, but not inside the bin. There were two ladders in use at the time of the accident. The metal fixed-rung ladder was hung over the entrance into the feed bin Number 17, and the fiberglass extension ladder was inside feed bin Number 17 at the time of the accident. The Elkin Rescue Service members removed the two employees from the bottom of feed bin Number 17 at the pneumatic actuated slide gate opening cut open by one of Silver Lake Welding Service employees. The pneumatic-actuated slide gate door opening after being cut was pulled back out of the way by the Elkin Rescue Service with a portable hand hoist. Due to the two employees being wedge in on top of one another it took the Emergency Services approximately 3 hours to free them. Employee #1 and Employee #2 were treated by the Emergency Medical Services and died from asphyxia before being transported to Northern Surry Hospital in Mount Airy.

- 20226059201 On February 19, 2002, Employee #1 and coworkers were working on top of an unsecured roof formwork. As they were moving welding equipment towards the edge of the formwork, the formwork tipped over, and ejected Employee #1 and other coworkers from off the roof. They fell 33 ft striking the ground and suffering injuries. Employee #1 died while being transported to a medical center.
- 20108313601 At approximately 2:00 p.m. on December 20, 2001, Employee #1 was assisting with the welding of pipe sections on a pipe support bridge 33 ft above ground level. A 1,600-lb section of pipe had been set in place (but not secured) the previous day. Employee # 1 and a coworker were to perform their usual task of first welding the unsecured pipe to the end of a secured one already in place. This first step stabilizes and secures the pipe for alignment and attachment of support clips around the pipe's three shoes that were to be welded to the pipe bridge support beams. However, they discovered that the pipe's protective ring had not been removed prior to setting the pipe in place, as should be routine. Since there wasn't sufficient clearance between the ends of the two pipes, they had to move the unsecured pipe back a couple of inches in order to remove the ring. Although they did not secure the pipe prior to moving it, they successfully removed the ring without incident. However, during their attempt to move the unsupported pipe back into its original position, it fell off its support shoes and began to slide off the beam. Employee #1 fell with the pipe section because his personal fall restraint equipment was attached to it. Employee #1 sustained multiple blunt traumas to the body, including closed head injury, and died. The accident was caused by failure to properly secure the pipe before attempting to move it, and failure to tie-off personal fall restraint equipment to a secured anchorage point.
- 20064242901 On December 12, 2001, four employees were completing the assembly of an asphalt plant loading and holding silo with the addition of accessories. Employee #1 was working in the discharge end in a confined area installing hose brackets. The area was the enclosed bottom of the silo and contained the discharge cone base with a pair of clam doors, a false bottom with a safety gate and man way completing the enclosure. The silo was lying horizontally, and the 3-foot by 3-foot safety gate opened for access. Employee #1 was arc welding and using a torch cutter on the hose brackets. Employee #2 and another employee were working on the silo top with the four employees supporting the other three with material and tools. Employee #1 was welding and

cutting, which generated smoke. Instead of obtaining available mechanical ventilation equipment, Employee #1 disassembled the cutting torch and turned the oxygen on to vent the space. Then, all four employees went on a 15-minute break. Employee #1 and Employee #2 with the third employee returned to the silo bottom to weld the brackets. Employees #1 and #2 entered the silo bottom with the third employee just outside the safety gate. An arc was struck and a flash fire ensued. The clothing of Employee #1 and Employee #2 caught fire with both receiving severe burns. Employee #1 died about two weeks after the fire. Employee #1's action of ventilating the space with oxygen and the subsequent use of the arc welder caused the accident. Their employer failed to provide adequate training on welding/cutting in confined spaces, ventilation methods, hazards of ventilating with oxygen, and the inconsistent use of the available mechanical ventilation equipment. Employee #2 was hospitalized to treat his burns.

- 20192228301 At approximately 1:20 p.m. on November 17, 2001, Employee #1 and other welders and fitters of the Fab Shop at Piping Technology & Products, Inc. were working full staff in preparation for the holiday. Employee #1 had finished welding a file t weld to attach an I-beam to the base of two 15-inch-long and 3-inch-diameter schedule 160 pipes. Another employee had tack welded an angle bar (balance bar) to the two pipes prior to the welding of the I-beam by Employee #1. Employee #1 had finished welding the I-beam to the two pipes and was moving the structure by the balance bar using an overhead hoist and sling. The balance bar snapped off causing the structure to knock Employee #1 down. No other employees claimed to see what happened. Employee #1 was found by another employee on the concrete floor with one of the pipes on top of him and his head bleeding. He was conscious and asked the employee to get the pipe off of him. The Fab Shop foreman heard the commotion and summoned emergency medical services. Employee #1 was in the hospital until he died on December 3, 2001 at approximately 11:20 a.m.
- 20083049501 On August 10, 2001, Employee #1 was found dead at his worksite. He had been using uninsulated locking pliers, such as Vise-Grip pliers, as an electrode holder to perform arc welding, and he was electrocuted. He had not been provided with personal protective equipment, such as a flame resistant shirt, work boots, welder's gloves or a welder's apron.
- 20020143201 On August 6, 2001, Employee #1 and a second employee were welding a channel on an iron vertical beam. Both employees were wearing full body harnesses. Employee #1 was hit in the head by an overhead 20-ton crane that was traveling on the bridge and suffered a fatal concussion.
- 17004118001 An electrical instrument technician for the Weyerhaeuser Company in Longview, WA, was investigating an incident in which an employee of another company had received an electric shock while cleaning a large fuel oil storage tank at the Weyerhaeuser site. To facilitate the cleaning of the tank, the technician had installed a temporary power supply at the tank the day before the incident. This temporary power system utilized a 240/120-volt transformer and spider box fed from a 5 75-volt high resistance ground system. The spider box was connected to the branch circuit wiring by a pigtail and large metal cap welding plug. When the technician tested for voltage between the spider box and ground using a voltmeter, the reading indicated leakage in the system; the box was hot. Employee #1 then disconnected power to the box by unplugging the welding plug. When he broke the welding plug connection, he was electrocuted. An investigation determined that the temporary power system had been wired incorrectly, as one of the power conductors had been spliced directly to the ground conductor.
- 20020154901 Employee #1 was working at 130 ft while welding on a new construction municipal water tank. He was tied off to a metal ladder hooked over the top of the structure. The ladder came loose and fell causing the employee to fall. The employee died as a result of the fall.
- 20064196701 At approximately 3:00 p.m. on June 23, 2001, Employee #1 of Tate Metalworks, Inc., working with two other coworkers, finished the week's welding work inside a new power plant exhaust stack. The crew descended from atop scaffolding about 100 feet high. About halfway down Employee # 1 went to

retrieve some personal items, and elected to use a secondary 75- foot attached fixed ladder. While accessing, or on the ladder, the employee fell about 45 feet to the second level within the exhaust stack, suffered a concussion and died.

- 12327688301 At approximately 10:00 a.m. on June 21, 2001, Employee #1 was welding while on a 24 ft stepladder when he apparently lost his balance and fell approximately 20 ft to the ground. A coworker 60 ft away heard the noise and turned to see Employee #1 lying on the ground bleeding from his nose and ears. He had been killed by the fall. The stepladder had a defective rubber skid on one its feet. ----- On June 21, 2001, at approximately 10:00 am, employee #1 was leaning over welding off a 24 ft. stepladder with defects on the rubber skid of one of the feet at heights greater than 6 feet. Another employee was 60 feet away from employee #1, when the other employee heard a noise and turned around and saw employee #1 on the the ground bleeding from his nose and ears. Employee #1 lost his balance and fell 20 feet to his death.
- 20231734301 An employee was welding angle iron into bar joist roof structures to accommodate duct work and frame supports for an air conditioning unit. The employee was found lying on the floor by his coworker assistant. Emergency medical services transported the employee to the hospital. Medical examiners determined the death to be from natural causes.
- 20145052501 Five employees were working from the trolley of a container crane 125 ft in the air. The employees were welding angle iron to the crane to make a cat walk. Employee #1 stepped onto a small platform that was attached to the trolley and fell into the river. Employee #1 drowned.
- 17000744701 Employee #1 walked away form his welding operation to get a sawhorse. Employee #1 was pushing the sawhorse back to where he was working when he collapsed to the floor. Employee #1 died as the result of a heart attack.
- 20045108601 At approximately 8:10 p.m. on April 23, 2001, Employee #1, a welder, was fatally injured when he was struck-by a 16-in. by 80-ft-long metal pipe as it rolled along a double joint pipe rack from one welding station to the next. Employee #1 w as killed.
- 20134164101 Employee #1 was attempting to pull to top dead center a cross country pipeline riser unit. He was pulling with a one-inch manilla rope. When the riser unit reached top dead center, it fell over to the north, fatally striking Employee #1 in the chest. Estimated weight of the riser was approximately 1680 pounds. Employee #2, who was welding the pipeline riser in place, was struck on the knee. Employee #2 was treated for contusions and released.
- 20116244301 Employee #1, a welder, was employed by Columbia Pictures Industries Inc. in Monrovia, California. A fatal accident occurred from a rough terrain forklift tipping over on March 6, 2001. Employees from multiple disciplines were constructing a large movie set for an upcoming feature called "Spiderman". The set was a build facade that was to have several steel framed signs hung from the facade corners and scaffolding set up behind it. The signs were constructed of steel square tubing. The one involved in the accident weighed 1800 pounds, and measured approximately 15 feet wide and 30 feet long. It was being hoisted in place by an Ingersoll Rand rough terrain forklift that had a shop-made truss weighing 800 pounds attached to the forks, which effectively converted it into a crane. The truss, which was constructed by the orders of the welding foreman from his memory of one that he had seen sometime in the past, moved the loads center of gravity forward 12 feet, and completely off the standard load chart. In order for the load to be handled, the boom was fully extended and at a 60 or above degree angle. The load had been picked up to where the sign was several feet off the ground and was being moved into position on the set. As it moved forward, it was being followed by a Genie brand, Model S-60 elevating platform, which contained two welders who were going to weld it in place when it arrived at its destination. In the path of the forklift was a 4 inch concrete curb that was being approached at approximately a 45-degree angle to its front axle. Tire pressure of the forklift tires was 44 psi for three of its wheels and 43 psi on the

fourth. The right front wheel of the forklift went up on the curb first, which caused the forklift to tip slightly to its left. This in turn caused the load to shift to the left of center. As that occurred, the forklift began to tip over. The man basket that had been following the forklift was now directly in the path of the falling boom. The boom hit the basket of the lift, and Employee #1 was struck in the head, partially decapitating him.

- 20064174401 At approximately 6:45 p.m. on February 23, 2001, Employee #1 was struck by and killed by a falling bridge girder. The bridge girder weighed approximately twenty tons. The Number was 12E3. The girder was repositioned by O.H. crane from the west side welding area of the plant to a temporary storage area at the east side of the plant. Bridge girder Number 4E1 was picked up on the east side and moved to the west side welding area. Bridge girder Number 12E3 was left standing unsecured in the vertical position on the east side and parallel to girder Number 8E2, which was lying horizontally. At 7:00 p.m., an ironworker employee went in between the two girders, checking details on girder Number 8E2. Girder Number 12E3 toppled over, striking Employee #1, killing him.
- 20000117001 Some maintenance electricians had replaced the contact rings on the bottom of an oscillating tube for a Thermatool welder. The maintenance supervisor removed lockout devices, and the welding machine was reenergized. The maintenance supervisor and two electricians were standing on the side of the welding machine, observing energized parts with the outer door removed and the machine running. One of the electricians stepped forward, contacted a circuit part that was energized at 25 to 27 kilovolts, DC, and was electrocuted. He had not been using any personal protective equipment.
- 20060174801 Employee #1 died when he fell from a girder while welding.
- 20021080501 Employee #1 was tungsten-inert-gas welding in a confined space at a refinery and suffered Argon asphyxiation. Employee #1 was killed.
- 20158077601 Employee #1, a welder, was using a high volume cutting torch. He accidentally ignited his clothing and sustained burns over 38 percent of his body. He was hospitalized for 11 days and then died.
- 20010106101 An employee was removing a welding pit cover using a 5-ton overhead crane. The pit was covered by metal plates and a steel I-beam support structure. There was no guardrail system in place or alternative method of fall protection. As he was removing the metal plates and steel I-beam support structure he fell into the 8-foot-deep pit. The employee suffered severe head trauma and was hospitalized for medical treatment. He died three months later from his injury.
- 20135125101 On November 13, 2000, Employee #1 died when he fell from a steel beam without using any fall protection. He was working 24 feet, 8 inches above the concrete floor without using any fall protection. He was involved in steel erection, installing (spot welding) a joist on the roof support of a building under construction. His employer failed to provide fall protection. On November 15, 2000, he was removed from life support and pronounced dead.
- 20062118301 At approximately 12:30 p.m. on November 8, 2000, Employee #1 was working in a wire drawing area. He had made a weld on a Jackson welding machine and was preparing another bale of wire when the machine's lights and alarms began to go off. Employee #1 and a nearby coworker went to assess the situation. Employee #1 released the left clamp and then left the work area to shut down the machine. He hit the SLOW TO STOP switch located near the end of the production line, then entered the hazardous area to find out what was wrong. The additional tension being placed upon the welding machine by the wire caused it to overturn. The machine struck Employee #1 from behind, pinning him against the right pay off stand. He suffered a fractured neck and other injuries that resulted in his death.

- 20064204901 At 9:55 a.m. on October 20, 2000, Employee #1, the grandson of the owner of a welding company, was getting on-the-job training from his grandfather at an oil well site where they were installing and repairing a metal ladder on a 210-barrel production tank that was being set up. The welding was on-going when the tank exploded and burst into flames. Employee #1 was killed. At the time of the accident, the tank was two-thirds full of crude oil and wet fire blankets had been placed over tank openings.
- 17086932501 On 10-17-00 at about 1300 HRS, the victim, an employee of B.P Wolfe Trucking working at a place of employment located at 6340 Virginia Town RD. Newcastle, CA. The victim was welding at the rear of the bed of the dump truck with the box raised. The victim attempted to secure the bed in the raised position with a length of 1 3/4" pipe. While welding, the victim contacted a cable that opened the valve that released the fluid from the hydraulic ram reservoir causing the dump box to free fall pinning the victim between the truck frame and the dump box. The victims injuries were fatal.
- 20134126001 On October 6, 2000, an employee was welding on a steel structure. The employee lost his balance and fell approximately 19 feet to the concrete floor. The employee was wearing fall protection but was not tied-off. The employee died eleven days later.
- 20055153901 On the morning of October 3, 2000, Employee #1 was part of a crew engaged in general repair work on the cargo transfer crane barge, the Paddy Ryan. The crew was welding metal grommets under the crane tracks on the deck of the barge. Employee #1 removed a cover from an 18 in. diameter manhole leading into one of the barge's flood compartments. For some reason--possibly to check support structures under the deck for the crane tracks--Employee #1 entered the 10 ft deep by 40 ft long by 10 ft wide hold. He climbed down the straight, fixed access ladder and was overcome by anoxia. He was eventually found by coworkers and transported to a local hospital, where he was pronounced dead. The hold showed evidence of rust that could have displaced the oxygen while the hold was sealed. Employee #1 did not mechanically ventilate the compartment or check the oxygen content prior to entering. The company had no confined space entry policy and did not use oxygen monitors for such compartments. The crew normally went into stern and bow compartments, but these had easier entrances and exits. Employee #1 was the superintendent's substitute when he was not at the site, and thus had a managerial function.
- 20231125401 On September 29, 2000, employees were performing maintenance operations by welding a metal plate to the side of hopper number three to cover a crack on the hopper wall. Employee #1, a maintenance employee, entered the hopper to set up to weld the metal plate. A loader operator, who was not aware of the work in progress, inadvertently poured soil into the hopper. The loader operator had received instructions, by the process operator, to start filling the hoppers with the soil components, in order to start a batch of "hard wood fines compost." Employee #1 died after being inadvertently buried under about 6 yards of soil.
- 20157070201 On August 28, 2000, Employee #1, an ironworker, employed by Anderson Steel Erectors was welding steel knee braces into place on the structural steel frame of a Best Buy retail store. He was apparently positioned on top of an east-west bar joist while welding. While performing this work, Employee #1 fell 23 ft, 11 in. to the ground and was killed. He was wearing a harness with a double lanyard. However, the lanyard was not attached to the static line, which was located next to him and was running along the north-south joist girder.
- 20092032001 At approximately 6:00 p.m. on September 22, 2000, Employees #2 and #3 were welding a 3- or 4-gallon parts-washer sink on top of a 275-gallon metal fuel oil tank. They had tack welded two of the four legs to the top of the tank and had struck an arc to start on the third leg when the tank exploded. Employees #2 and #3 were killed. Employee #1, an accountant with the auto company, also died of burns sustained in the fire.

- 20106358301 An employee was welding a jack onto a heavy equipment trailer at a small welding fabrication shop. The employee, who was a certified welder, was under the trailer, in a hands and knees position, atop a plywood sheet that kept him off the wet ground. A homemade metal tow bar was attached to the case of the welding machine. The power supply cord for his DC-rectifier welding machine was connected to a 240-volt wall-mounted receptacle outlet. The circuit supplying the outlet was ungrounded and had no overcurrent protection except for a 200-ampere circuit breaker in the service panelboard. There were numerous openings and potential ground fault points on the circuit, including 240-volt extension cord sets fabricated by the employer from parts obtained from a nearby welding distributor. The receptacle boxes for these extension cord sets were broken, had large openings in them, and the body of the receptacle was welded onto a steel plate, which rested on wet soil. The employee was electrocuted apparently by contact with the welding electrode. An emergency medical services team, which arrived at the scene within a half hour of the accident, found that the employee had no pulse. The employee had burns on his abdomen matching the shape of the welding electrode and its holder.
- 20067277201 An employee was using a Lincoln Idealarc welder to apply a hard coating to the grinding surface of a sugar mill. Standing on a metal decking, he grabbed the welding electrode and was electrocuted.
- 20046081401 Employee #1, an iron worker, was welding on the 19th floor of a steel structure when he lost his balance and fell to the fifth floor roof. He was killed.
- 20035159101 Employee #1 was welding an overhead canopy that was being erected at a job site. He fell approximately 12 ft and sustained injuries that resulted in his death.
- 20231128801 A repair welder was making repairs in the engine room of a ship. The area in which the employee was working was wet. He contacted the welding electrode and was electrocuted. The employee had entry and exit wounds at the left, anterior chest wall and his right arm. The autopsy revealed that the employee had been intoxicated with heroin at the time of the accident.
- 20082091801 Two employees were welding bolts onto an electric sign in a shop. When one of the employees failed to respond to a question, his coworker looked over the sign and found that the first employee had collapsed. Two employees removed the injured employee from the sign and administered cardiopulmonary resuscitation. Emergency medical services arrived within minutes and transferred the injured employee to a hospital, where resuscitative procedures were continued to no avail. The employee had been electrocuted. He had been wearing a gold chain, which apparently contacted the arc welder.
- 20206409301 A tack welder was working on the rake bottom of a tanker barge under construction. A shipbuilding company had a contract to build a tanker barge that was 90.7 meters long and 16.5 meters wide. The barge was being constructed in sections. The section on which the welder was working was fabricated of 12.7-millimeter-thick, 836 mild steel plating with Zinc coating. The plate was 16.5 meters by 12.2 meters. The welder was tacking 9.5-millimeter-thick angle braces, one measuring 152 millimeters and the other 89 millimeters. The angle braces were placed 610 millimeters apart. The employee was using a Lincoln Idealarc (Model No. TM400/400) combination AC/DC welding machine. The welding rods were Jetweld 2, and the welding rod holder was a Duro. The employee was standing on the steel plate, using the welding machine in AC mode. The employee had been having problems welding, and the welding instructor had been called to the plant to determine what the problem was. The lead worker had switched welding machines and instructed the employee to continue welding. Because of this, the employee was nervous and sweating profusely. A coworker noticed that the employee was having a problem and asked if he was okay. The employee said that he was receiving an electric shock and fell over. The employee was electrocuted. The welding rod holder was defective, and the gloves worn by the employee were wet. Additionally, employees had not been properly trained in welding operations.

- 20179311401 At approximately 7:30 a.m. on June 30, 2000, Employee #1 and a coworker, of Bare Metal Works, a licensed contractor on Elmhurst Ave. in Alta Loma, CA that had been hired through Apex Process Systems, were relocating a popcorn line in the FDA processing room at Snak King Corporation on Stephens St. in City of Industry, CA. This popcorn line consisted of a popper, a sifter, a wheeled seasoning tumbler, and an Aseeco bucket elevator conveyor. All elements of the system except the seasoning tumbler, which was on wheels, had four feet, each of which was mounted on a stud secured to the floor held in place with a nut. Employee #1 removed the hold-down nuts from the popper and the sifter, and the units did not move. The popper and the sifter were rectangular, while the bucket was an asymmetrical, backward Z-shape, with a 28 in. floor-mounted horizontal base, a 171 in. vertical section, and a 98 in. upper horizontal platform that held the motor and drive mechanism. The unit was top-heavy, with most of its weight on the upper horizontal platform. The coworker asked Employee #1 to bring the portable welding machine over to the scissor lift so they could finish modifying the food grade oil pipe, which was near the top of the overhead. Employee #1 refused, saying he was first going to start unbolting the popcorn line. The coworker argued briefly, saying that the first thing to get done was the piping so that Snak King could resume operations. Employee #1 continued removing the nuts on the hold-down feet and the coworker elevated the scissor lift so he could weld the pipe cap in place. Employee #1 removed the four nuts on the popper and the sifter, and had removed three of the four nuts on the bucket elevator conveyor, when the unsupported weight of the upper horizontal section of the bucket elevator conveyor snapped off the fourth stud. This caused the bucket elevator to cantilever, and one of the hold down feet was driven into Employee #1's chest, impaling him. He was killed by the blow. The employer failed to conduct a survey to determine any hazardous conditions before his employees began work, and he failed to warn his employees that the top of the bucket elevator was not supported and that if the hold-down nuts were removed, the bucket elevator conveyor would fall. The employer was checking out the piping on the roof with the Apex Process System representative when the accident occurred. Employee #1 was pronounced dead at the site. Accident-related citations were issued for violations of T8 CCR 1510(c) and T8 CCR 1511(b).
- 20179311433 ON 06/30/00, AT ABOUT 0730 AM, AN OCCUPATIONAL FATALITY OCCURRED AT SNAK KING CORP, LOCATED AT 16150 STEPHENS ST, INDUSTRY, CA 91745. THE FATALLY INJURED EMPLOYEE, EMPLOYEE #1, AND THE WITNESS, EMPLOYEE #2 WERE EMPLOYEES OF BARE METAL WORKS. BARE METAL WORKS IS A LICENSED CONTRACTOR, LICENSE # 732116, AND IS LOCATED AT 6448 ELMHURST AVE, ALTA LOMA, CA 91701. THE EMPLOYER WAS HIRED BY SNAK KING, VIA APEX PROCESS SYSTEMS, TO RELOCATE THE POPCORN LINE. THE POPCORN LINE IS LOCATED IN THE FDA PROCESSING ROOM, AND CONSISTS OF FOUR PIECES OF EQUIPMENT; THE POPPER, THE SIFTER, THE SEASONING TUMBLER, WHICH IS ON WHEELS, AND THE BUCKET ELEVATOR CONVEYOR. THE POPPER, SIFTER, AND THE "ASEECO LIFT" BUCKET ELEVATOR CONVEYOR WERE MOUNTED TO THE FLOOR. EACH PIECE OF EQUIPMENT HAD FOUR FEET AND A FLOOR MOUNTED STUD AND CORRESPONDING NUT HELD EACH OF THE FEET IN PLACE. THE POPPER AND THE SIFTER WERE RECTANGULAR AND DID NOT MOVE WHEN EMPLOYER #1 REMOVED THE HOLD DOWN NUTS. THE BUCKET WAS ASYMMETRICAL, A BACKWARD "Z" SHAPE, WITH A 28 INCH HORIZONTAL BASE WHICH WAS MOUNTED TO THE FLOOR, 171 INCH VERTICAL SECTION, AND A 98 INCH UPPER HORIZONTAL PLATFORM THAT HELD THE MOTOR AND DRIVE MECHANISM. MOST OF THE WEIGHT WAS ON THE LONGER UPPER HORIZONTAL PLATFORM. EMPLOYEE #2 ASKED EMPLOYEE #1 TO BRING THE PORTABLE WELDING MACHINE OVER TO THE SCISSOR LIFT SO THEY COULD FINISH MODIFYING THE FOOD GRADE OIL PIPE, THIS PIPE WAS LOCATED NEAR TH
- 30293547301 On June 5, 2000 at approximately 5:50pm, Sagger Furnace # 61 exploded at SGL Carbon, LLC at 307 Jamestown Road in Morganton, North Carolina. The furnace exploded when the operator attempted to relight burner # 1 in zone # 1 using a hand held propane torch. The furnace had been manually lit at approximately 4:20pm and had been moved to the automatic mode at approximately 5:40pm. When the operator went to the furnace to make his first round, he started at burner 1 and found it to be out. He closed the air and gas valves and attempted to relight the burner using an electric spark (spark

plug) unsuccessfully so he again closed the valves and retrieved a hand held propane torch. He opened the gas valve, lit the torch and held it at the site glass, and opened the air valve slightly. The furnace exploded at this point because all of the burners were out and the controllers had continued to introduce the gas/air mixture as if they were burning causing a build-up of the explosive atmosphere inside the furnace. Once the spark from the torch was introduced the furnace exploded. The furnace operator was injured and a maintenance employee welding on covers approximately 10 feet from the west end of the furnace was hit by the flying debris causing his death. Another employee was slightly injured when came to the aid of the two employees.

- 12209145701 Employee #1, a machine repairman, was working inside a robotic welding unit without the unit being properly locked out. He was crushed and killed when the transfer conveyor unexpectedly returned to the start position.
- 20090072801 At about 10:30 a.m. on April 19, 2000, Employees #1 and #2 were working on a truck tire. The shop manager instructed them to repair the tire rim, which was leaking, by welding the affected area. One of the workers was welding the rim with the tire mounted on it when the tire exploded. Employee #1 was killed and Employee #2 sustained injuries that required hospitalization.
- 20026101401 An employee was standing between a welding trailer and a Grove 22.7-metric-ton crane (Model No. TM250). He instructed the crane operator to pull the boom in about 6 meters and swing it around to pick up the welding trailer so that the trailer could be suspended and secured for the night. The boom was extended 20 to 25 meters. The crane operator retracted the boom and rotated it to pick up the welding trailer. As the crane operator rotated the boom, the headache ball dropped and contacted a 7620-volt overhead power line that was located 9.8 meters from the ground. The employee between the trailer and crane was touching the crane and the tongue of the welding trailer. He was electrocuted. (He was pronounced dead at a hospital 55 minutes after the accident.)
- 20092021301 Employee #1, a welder, was in the baghouse area at an incinerator plant. He was lying on his back on a 36 in. diameter poppet steel disc, stitch-welding on a poppet damper collar located in the steel duct above one of six modules. He was welding overhead when the poppet disc, which operated by air, was activated and rose up. Employee #1 was crushed and killed between the disc and damper collar on which he was welding. No lockout or confined space procedures were in effect.
- 20037100301 On January 25, 2000, Employee #1 and three coworkers were assigned to lower the conveyor table on the slow-down belt of a planer mill machine at a sawmill. To lower the table, they had to remove 4 in. spacers from between the center beam and the swing arms of the machine. Two of the coworkers were then given other assignments, so Employee #1 and one coworker were left to complete the task. They used a bottle jack to lift the machine so the spacers could be removed. Because the jack handle was too short, they had to get under the machine to jack it up. After they removed the spacers, they lowered the machine back in place. It was then they noticed that the machine was not sitting level due to a small piece of slag on one side of the metal frame in the area where the spacers had been. The coworker prepared his welding equipment to re-weld the frame after the slag was removed, while Employee #1 jacked the machine back up. Seconds after he raised the machine, its swing arms turned approximately 45degrees, displacing the jack, and causing the machine to drop. As it fell, an eye bolt struck Employee #1 in the head, killing him. No jack stands or cribbing had been used.
- 20010066701 Employee #1 was welding a 6,500 lb bearing housing that was secured to a welding positioning table. The welds broke and the bearing housing fell on Employee #1. He was crushed and killed.

- 20010094901 An employee was working at a welding machine testing station, testing welding machines by temporarily energizing them. He performed the tests at three different voltages, 230, 440, and 575 volts. A board on one side of the tester had exposed parts that were energized while the test was in operation. The employee was electrocuted when he contacted the parts while he was performing a test.
- 20128062501 A maintenance employee at a hospital was welding a dumpster to make it waterproof. The cables to the welder were in very poor condition--the insulation was split, exposing the conductors. The welding machine was located in a boiler room adjacent to the dumpster. The cable, which had been run from the boiler room to the dumpster area, was lying around the employee's feet and legs. The boiler room floor was constructed of concrete and had a metal grate over a water drain moat. The cable ran across the boiler room floor through a metal window frame. The ground lead connection was through a length of completely threaded rod. The rod had been bent and twisted so that the ends would press against the dumpster and the metal grate. The employee was found face down near the dumpster. He was dead. The hospital claimed that the cause of death could have been a heart attack, but the coroner considered it a possible electrocution. There was evidence of arcing at the window frame, the metal grate, and where the threaded rod had been touching the dumpster.
- 20078098901 Employee #1 was placing 22-gauge metal roof decking on the frame of a steel structure in preparation for welding when he stepped on a sheet of loose decking. The decking slipped away from the supporting structure and he fell 14ft to the interior floor of the building. Employee #1 was killed.
- 20083021401 Employee #1 was welding a piece of angle support during the installation of metal decking on the roof of the building. He fell 25 ft to a lower level and was killed.
- 20035116101 Employee #1 was inspecting a Hydro-Ax logging machine, which had recently undergone welding repairs to its frame, to check why the claw arm of the feller-buncher shear attachment would not close. He stepped inside the swing radius of the claw arm and then requested that a coworker activate the switch again because it had closed only halfway the first time. This time the claw arm closed immediately, crushing Employee #1's head. He was killed.
- 20176092301 A maintenance worker who repaired cranes, welding machines, and other equipment was instructed by management to connect the electric supply conductors for a 240/480-volt, single-phase Lincoln welder (Model No. TM 500/500, Serial No. AC 185658) to a disconnect switch. The employee connected the welder. Sitting on a metal bench and leaning against the welder, he closed the disconnect switch and was electrocuted. He had connected the welder's equipment grounding conductor to the bus for the ungrounded circuit conductor. The employee had not been trained as an electrician.
- 20135081601 Employee #1, a welder in a steel fabrication shop, was going to weld on a steel form. He was using an overhead hoist to position the form and lowered the 5,500 pound steel form onto an electrical cord. The electrical cord supplied power to a Miller Millermatic 300 electric welder. The welding machine was off, but its cord was plugged into a 480-volt outlet. The steel form cut into the insulation of the cord, and the form became electrically energized. Employee #1 was electrocuted when he came into contact with the steel form and died.
- 20037056701 Employee #1 and a coworker, the company owner, were installing metal roof decking on a warehouse building. Employee #1 was moving a welding lead near an undecked opening when he lost his footing and fell over 31 ft from the roof onto a concrete floor. He was killed. No form of fall protection had been provided.

- 20105248701 At approximately 7:20 a.m. on August 26, 1999, Employee #1 and coworker were welding on the top of two separated vessels. These vessels were shorter than usual and were mounted on two sets of the positioning devices. Each vessel was driven separately. The positioning device included powered driven wheels and non-powered idler wheels. The powered driven wheels pushed the idler wheels while turning the vessel via friction. At the time of accident Employee #1 was slowly rotating the vessel to the next position to be welded. Suddenly, an unstable condition occurred and the tank moved. As a result, the vessel came off the rolls of the positioning device. Employee #1 was thrown from the vessel. When Tank Number One tipped over, it hit Employee #1's head and shoulder. Then, it hit Tank Number Two and knocked it off the positioning device. Employee #1's head was crushed between these two tanks and Employee #1 was killed at the scene. When Tank Number One hit Tank Number Two, a coworker felt Tank Number Two moving. He immediately jumped off from the ladder and sprained his ankle.
- 20096320501 Employee #1 was standing on a stairway, two or three steps from the third-floor landing, welding a kick plate channel using a vertical weld. For some reason, he fell 18 to 20 ft onto some concrete steps, then rolled off the edge of those steps and down onto another flight of stairs, for a total fall distance of approximately 30 ft. He suffered cranio-cerebral injuries and was killed. The steps were not guarded because the temporary railing had just been removed to install the permanent ones. Employee #1 was not wearing any personal fall protection equipment even though he was working near an unprotected side or edge that was over 6 ft above a lower level.
- 20128055901 On August 19, 1999, Employee #1 was performing assigned duties of rigging on a bridge construction site. A suspended load, consisting of a welding unit, was over Employee #1 when the sling supporting the welding unit became unsecured from the crane's hook and fell. The falling welding unit struck Employee #1 killing him.
- 20112172001 On July 26, 1999, Employee #1 was supervising the movement of a welding machine. The forklift operator had been instructed by Employee #1 to move the welding machine from a loading dock to be set down on the ramp. As the machine was being raised the forklift began to tip forward. Employee #1 hopped onto the forklift to prevent it from tipping. As the forklift began to back up Employee #1 fell head-first to the concrete ramp. Employee #1 died as a result of his head injuries.
- 20090058701 Employee #1 was standing on the drum of a mobile chipper or mulching machine, welding on a tub grinder, when a coworker started the chipper. He became caught in the machine and died of crushing injuries.
- 20000073501 Employee #1 was welding bridging onto bar joists when he fell between 32 and 35 ft, and was killed.
- 20136087201 On June 1, 1999, Employee #1 was welding bolts inside the port column of an offshore drilling rig. Employee #1 complained to coworkers that he was being shocked when he placed welding rods in the stinger he was using. Employee #1's helper suggested that he put on his rubber (PVC) gloves. Employee #1 continued to complain that he could feel a shock. A ship fitter suggested that he put up the welding rods with the stinger. Employee #1 followed the suggestion and no further complaints were voiced. At approximately 9:30 a.m., Employee #1 was working from a metal systems scaffold ladder attempting to arc weld a bolt to the column when his chest contacted a threaded headless bolt that had been welded perpendicular to the steel surface of the column. Employee #1 struck an arc and received a shock. Employee #1 went into cardiac arrest. He was transported to a local hospital where he was pronounced dead.

- 20136088001 On May 17, 1999, Employee #1 was welding on a coated steel material which contained lead, but the exposure was minimal. Employee #1 did not feel well and left work. The next day Employee #1 was not feeling better and his family took him to the hospital. Employee #1 died the following day. The autopsy stated that Employee #1 died of sepsis and not of a work-related illness.
- 17084306401 Employee #1, a field mechanic for a vineyard, was repairing a broken PTO-driven 3-point, hitch-mounted, back flail mower attachment on a Ford 7610 4-wheel drive diesel farm tractor. He was standing in front of the left rear wheel, welding the broken support back together, when he reached across to the hydraulic controls on the right and accidentally engaged the transmission. The tractor drive wheel ran over his chest and crushed him. Employee #1 was killed. The auxiliary transmission was not in neutral, and the brakes were not set.
- 20021051601 Employee #1 was one of several temporary workers hired by an employer for a metal scrapping project in the back yard of a different employer. Employee #1, a leased welder, was working alone using a fuel-oxy torch want to disassemble a large metal spool. The spool previously had rubber hose wrapped around it, which had been scrapped. The supervisor, who was working approximately 50 ft away, had checked in with Employee #1 and briefly discussed the cutting work to be done. Employee #1 cut on one side of the spool, first removing the large side wheel, and then cutting and kicking over the vertical support arms. This first wheel appeared to have leaned against the second side. Employee #1 apparently changed the sequence and cut on the support arms first on the second side, leaving a small connection (tack weld). Once he cut the second side wheel, the structure became unstable and pushed over the support arms. Employee #1 was fleeing the immediate vicinity when he was struck along the lower back by the large, toppling parts. The supervisor responded, keeping Employee #1 from moving or getting up while outside medical help was summoned. Employee #1 suffered multiple contusions and was hospitalized for a week. He was about to be discharged when he died of adult respiratory distress syndrome. Employee #1 was apparently wearing full PPE, including welding gloves, face shield and goggles, back belt, safety shoes, and hard hat.
- 20105205701 At 10:20 a.m. on April 21, 1999, Employee #1, a trailer mechanic, suffered second-and-third-degree burns throughout his body due to a fire. The fire initiated when a plastic hydraulic line burst due to unprotected torch cutting within 1-to-1.5-feet of the hydraulic line, which splattered hydraulic oil over his body. Employee #1 passed away the following morning at LA County USC Medical Center. The facility involved in the accident is a small corporation engaged in repairing freight trailers. Employee #1 had been working there for over 10 years, performing all the duties of a mechanic, including acetylene torch cutting and welding. At the time of the accident, he was performing a regularly assigned task of cutting hydraulic leg brackets to install new ones. Since there was no strict policy of using guards to isolate fire hazards from combustibles, the mechanic did not use any barriers while torch cutting in close proximity to the hydraulic lines. Whether a spark or direct flame contacted the plastic line is unknown, but the line ruptured and covered Employee #1 in hydraulic oil, setting his body on fire. A fellow worker extinguished the flames on Employee #1's body with a nearby water hose.
- 20062051601 Employee #1 had just finished welding washers to secure the metal decking around a pit opening and laid down his equipment down. When he stood up, he fell 14 ft to a lower floor level and was killed.
- 17038119801 At approximately 6:30 p.m. on April 5, 1999, Employee #1, a welder for Mejia Steel Welding, Inc., and his employer/coworker, had finished a freeway retrofitting job and were trying to remove and replace the pin from the trailer. Both men went under the trailer and hammered on the pin for a few

minutes. The coworker then noticed that the trailer was tipping. He screamed for Employee #1 to run, but Employee #1 ran in the direction of the falling trailer. He was crushed and killed. A third person was also crushed and killed by the falling trailer.

- 12600854901 A farm worker was unloading produce packing crates. The employee was experienced in performing this job. He had parked his truck and was raising a 5.2-meter hydraulic boom mounted on the back of his 1997 Mitsubishi Fuso Truck (Model FM-SP). He was standing at the right rear of the truck, using a pendant control to guide the boom into position. (The boom was manufactured by Frank's Welding.) The boom contacted a 12-kilovolt overhead power line, and the employee was electrocuted.
- 17070747501 Employee #1 was welding metal decking to structural steel at the edge of a roof canopy covering the third floor walkway between buildings #7 and #8 at the Fallon Naval Air Station. He fell approximately 29 ft on hard, compacted soil, suffering head and internal injuries. Employee #1 was killed. At the time of the accident, he was not using a personal fall arrest system or any other form of fall protection.
- 20026055201 Employees #1 through #3 were in the area during a welding operation near a SLOP (standby lube oil pump) tank when an explosion occurred. All three suffered burns and other injuries that resulted in their deaths.
- 20195136501 On December 11, 1998, Employee #1 was working at the back stage area of the school auditorium where employees were setting steel roof beams. At the time of the accident, the employee had gone back up onto a roof beam to retrieve his work belt and welding cable. Employee #1 lowered the welding cable and was attempting to place his work belt onto the crane hook from the open steel. At this point, the employee lost his balance and was killed when he fell 37 feet to the stage.
- 20054032601 On December 5, 1998, Employees #1 through #4 were in two aerial lifts approximately 20 ft above the ground and 20 ft apart. They were removing piping from a 1-million-gallon storage tank that was being demolished by a contractor. The tank had been emptied of any product and blanking of the lines had been completed. Employees #3 and #4 were using an electric saw to cold cut the 10in. pipe, while Employees #1 and #2 were using a welding torch to cut the flange bolts. As they removed the last of the twelve flange bolts, tar product sprayed out from the pipe flange and was ignited by the cutting torch. Employee #1 escaped from the aerial lift, traveled 20 to 30 ft along the existing pipes, and then jumped to ground. He was transported to the hospital, where he died the following day of his injuries. Employee #2 jumped directly from the basket into the flaming tar on the ground below the lift. He suffered extensive burns and was pronounced dead at the scene. Employees #3 and #4, who had been working from the other aerial lift, suffered from minor burns and smoke inhalation. Employee #3 was hospitalized overnight; Employee #4 was treated and released.
- 20204382401 Employee #1 was cutting on some Number 2 steel pipes with an oxygen and acetylene torch when an explosion occurred. It appears that the explosion originated from an adjacent 55-gallon drum containing an unknown substance. The explosion caused the bottom to separate from the drum, which struck Employee #1 in the face causing massive facial trauma. Employee #1 was killed.
- 20178005301 At 8:20 a.m. on October 29, 1998, Employee #1, of Circle A Construction, an excavation subcontractor for Dillingham Construction Pacific Basin, was spreading sand in an excavation under some recently erected precast concrete members at the Micronesia Mall expansion project in Dededo, Guam, a \$40 million construction project consisting primarily of a new movie theater, two parking garages, and two shopping areas being added to the existing mall. The multiple level structural construction consisted mainly of cast-in-place concrete and precast concrete. The precast concrete members above Employee #1 were three double Ts-39 ft, 48 ft, and 57 ft long, respectively-and a 34 ft long ledger beam. They had been delivered on trucks by Rocky Mountain

Prestress to the construction site and erected with a crane the day before. Their total weight was approximately 50 tons. Dillingham's workers did the erection work and a McConnel Smith worker operated the crane. The precast was used to form the second level structure in a transition area between the existing mall and the new north garage. First, the ledger beam was placed on corbels, reinforced concrete projections from the cast-in-place concrete. Next the shortest double-T was set on the ledger beam that had just been set in place, followed by the middle length double-T, and finally the longest double-T. A portion of one of the double-Ts was to rest on a cast-in-place corbel; however, this corbel was missing. Temporary supports, consisting of shoring posts and an angle iron that was bolted into a concrete column, were erected to support the double-T. The design drawings showed steel plates embedded into the cast-in-place concrete and precast concrete. The temporary connections were completed by welding steel plates between the steel plates of the cast-in-place concrete plates and the previously erected precast members. No temporary connections were done on the precast members erected the day before Employee #1 was in the excavation. Before 8:00 a.m., Dillingham's project superintendent told Dillingham's welders to weld the temporary connections for the precast installed the previous day, and Dillingham's project superintendent also told Circle A to backfill along the footings in the same area. At 8:20 a.m., Employee #1 and a coworker were spreading sand over electrical conduits in the trench while another coworker was bringing more sand with a backhoe. A fourth coworker, also for Circle A, was backfilling along a cast-in-place footing with an excavator. A welder's helper for Dillingham was on the precast double-Ts that had been erected the previous day (the ones with no temporary connections) and a Dillingham welder was on double-Ts and a beam that had been erected and temporarily connected. At 8:20 a.m., the three-double Ts and ledger beam collapsed. Employee #1, spreading sand in the excavation below, was trapped in the debris and killed. The coworker in the trench with him escaped either by ducking into the excavation or running to avoid the falling concrete. The rollover canopy on the backhoe protected the operator from injury, although the canopy itself was severely damaged and the backhoe's front tires were flat. The excavator operator was in the cab of the machine, which was not under the collapsing precast concrete. He was not injured, although the ledger beam slid down the excavator's boom to the ground. The Dillingham welder managed to grasp onto the welder's helper, who was falling with the precast as it collapsed. and managed to pull the helper up onto the secured precast. The welder strained his back, but the injury did not require days away from work. The welder's helper had some skin scraped from his finger, but did not require medical attention. The coworkers immediately called for medical assistance and used the excavator to remove the concrete off of Employee #1. The primary cause of the accident apparently was the failure to weld the temporary connections immediately aft

- 17000847801 At approximately 11:31 a.m. on October 5, 1998, Employee #1 was welding concrete stops on the second floor of a building. He was descending a stepladder when he fell 20 ft, striking his head on a beam. Employee #1 was killed. He was not using any form of fall protection.
- 20055034101 At approximately 2:30 a.m. on October 2, 1998, Employee #1, a welder, was walking behind another welder on the deck of the ship Southern River, which was in dry dock for repairs. He fell approximately 17 ft through a hole in the deck and landed in the bottom of a liquid holding tank that was being modified. Employee #1 suffered massive head trauma and was killed instantly. Witnesses reported that rope guard barriers were down in the area where Employee #1 fell; other witnesses stated that the rope guard barriers had been up two days before the accident, when welding was being done in the area.
- 20176070901 Two employees were spot welding on a drum decker. One of them picked the welding lead up from the ground and was electrocuted. The welding machine was a 480-volt, single-phase machine, and its plug would not fit the 480-volt, three-phase receptacles in the plant. The plant electrician had removed the single-phase plug and replaced it with a three-phase plug, removing the connection for the equipment grounding conductor in the process. Even though the instructions for the welding machine did not recommend using it in wet conditions, the employees were using it under wet conditions. The employees had been working in a hot, wet area; their clothes were wet; and they were wet. Employees interviewed after the accident stated that people had received electric shocks from the machine before the accident.

- 20067142801 An employee performing a welding operation was electrocuted when he contacted the welding rod.
- 20108130401 An employee was assigned to weld a metal plate to the inside of the exit chute of a New Holland hay bailer. The job was not a routine assignment for the employee, but no job briefing was conducted. The employee had to lie on his stomach within the exit chute to weld the plate. He was using an electric arc welder. The employee apparently contacted the energized welding rod and was electrocuted. There were electrical burns on his face.
- 20195305601 At 6:10 a.m. on August 17, 1998, Employee #1, the operator of the 16-inch baffle line, was struck by a steel plate during a testing procedure. The baffle operation involved placing an open 16-inch-diameter steel cylinder into a welding machine which welded a baffle plate inside the cylinder. Although the company indicated both baffle plates should be tested within the confines of the clamping cage, it had become routine practice to test the second plate outside the cage. It was during the testing of the second baffle plate that the fatal accident occurred. While Employee #1 was in the process of looking for leaks in the pressurized cylinder, the baffle plate was discharged with force from the cylinder, striking Employee #1 in the head and killing him.
- 20176067501 Employees were in the process of tack welding the bar joists on the structural roof of the building. Employee #1 was with another employee who was doing the tack welding. Employee #1 was aligning the bar joist with a cheater bar when the cheater bar slipped and Employee #1 then lost his balance, falling to his death from an elevation of 28-feet-2-inches onto a concrete floor. Employee #1 had not been wearing a safety harness all day long.
- 20023250201 Victim died as a result of being crushed between a forklift backrest and a potato cellar door header. The victim and other employees were tasked with replacing damaged potato cellar doors with the victim as the lead. Prior to the accident, the victim was standing on a pallet on the forks of a Hyster H40 that was elevated to approximately 9 feet. He was removing insulation on the interior of the cellar around the door header in preparation for welding a piece of angle iron onto the header as a door stop. The header is approximately 14 feet above the ground level, putting the height of the header at neck level on the victim. The victim asked employee #1 to move the forklift forward toward the door header. Employee #1 got on the forklift and apparently stepped on the accelerator instead of the brake when releasing the parking brake. The forklift lurched forward pinning the victim's neck between the backrest of the forklift and the door header. Employee #2 ran around the side of the forklift and put it in reverse and the victim fell 9 feet to the ground. EMS was contacted and first responders were on scene within minutes. The coroner pronounced the victim dead at the scene due to an apparent broken neck. The door header was made out of 1" by 6" channel iron and was measured to be displaced by 5 inches near the middle. The door frame span was approximately 16.5 feet. The Hyster 40 was borrowed from a neighboring farm, however, the farm owners were aware that it was on site and being used.
- 20071400401 Fatality occurred 09/15/10 at approximately 12:00 (noon); when employee was electrocuted while welding angle iron on to a retaining wall. The employee was standing in approximately 3 feet of water while welding. The welding lead was also in water. Deceased Victim Info: Josh Widener, Age: 27 yrs old, W/M 319 Chelsea Streetman, TX 75859 No Phone NOK: Father, Johnny Widener
- 20055619901 An employee, Shayne Rebaradi, Age 36, was cutting and removing a section of the forward bulkhead (located inside of barge behind bow rake void) on the port side in preparation for replacing the section of the bulkhead with a new piece of metal. The employee was found collapsed on the interior bottom surface of the hull at approx 1045, and he was the only employee in that compartment. He was pronounced dead at the scene.
- 20135408101 The victim was performing some welding work on the DDM log selector gate at the Rex Lumber sawmill. This gate was part of a conveyor system for logs. When the logs approached the gate on the conveyor system, the gate pneumatically closes if a log is sufficiently large enough to trigger gate. The large log would then be conveyed to another part of the conveyor system behind the gate. If a log is not sufficiently large enough to trigger the gate, the

gate remains open, and the smaller log is dropped through the gate to be conveyed to another part of the conveyor system. Portions of this gate had become damaged, and needed to be repaired. The DDM Wave Feeder and the Reception Belt conveyor system was de-energized and locked out. The DDM Edger Chipper Multifunction line operators control panel was being used to maintain the log selector gate in an open position. The Log Selection Gate control switch was placed in the "AUTO" position on the control booth console. This provided a compressed air energy source which was holding the Log Selector Gate OPEN while the victim was welding on the trough of the machine where the logs drop down onto the reception belt. There were two safety chains attached to the side of the machine. The host employer used these chains to hold the gate open in case the facility lost electrical power which would cause the Log Selector Gate to lose compressed air which was being used to hold the gate open. The victim did not attach the safety chains to the gate to hold it in place in case it were to close. Another maintenance employee of the host employer entered the DDM operators control booth to turn off some Log Accumulation Deck chain conveyors which were left running by the day shift. When the maintenance employee turned the Log Accumulation deck chains control switch to the OFF position, the Log Selector Gate closed immediately, crushing the victim as the gate closed on him. The maintenance employee was not aware the Log Accumulation Deck chains were interconnected to the Log Selector Gate machine. The victim died from blunt force injuries to the chest and abdomen. The injuries included abrasions, fractures and lacerations.

- 20084191401 *DRAFT*DRAFT*DRAFT Foltz Welding, Ltd. SIC 1799/NAICS 238990 Foltz Welding, Ltd. is a commercial mechanical piping contractor which employs 160 skilled Pipefitters, Operating Engineers, and Laborers. On August 23, 2010, at approximately 5:00 PM, at the Plains Pipeline tank farm project in Vernon, IL, south of Tank 1011, a Pipefitter was critically injured when struck in the head by a section of 8" HDPE (high density polyethylene) pipe. Weather conditions: temperature 84 F; humidity 48; visibility 10 miles; wind direction NE at 4.6 mph; overall conditions clear. At or near to the end of their shift, a crew of six Pipefitters and one Operator were in the process of moving a long section of 8" HDPE pipe into position onto a McElroy Mfg Fusion Machine MN 6-12. The crew was in the process of staging the part so as to weld a flange and Chicago fitting onto the end of the 8" HDPE the following day to provide water for a hydrotest of fabricated process piping prior to being placed into service per applicable API mechanical integrity standards. The 8" HDPE pipe ran from a retention pond several hundred yards to the north and had previously been used to run water elsewhere on the new construction project. There was standing water in the charged line. The crew cut the 8" HDPE pipe with a chainsaw (in proximity and adjacent to the parts to be hydrotested) and rigged a 12' endless synthetic web sling to the bucket of a Caterpillar 346 CL. The cab of the Caterpillar 346 CL was positioned approximately 21' from the McElroy fusion machine. As the Operator began to drag the long section of 8" HDPE into position, his primary attention was concerned in watching the movement of the pipe on the ground, while the forward section was elevated by the endless sling rigged approximately 10' - 15' from the end of the pipe in a choker hitch. The sling slid out of the wet/smooth surface of the 8" HDPE pipe, fatally striking the victim in the head with enough force to break the suspension of a Bullard MN S-71 protective helmet. Cause of death: blunt force trauma.
- 20053362801 Employee was working alone in the welding department and collapsed. Died of apparent natural causes.
- 20140828301 Electrocuted while welding.
- 20064479701 A supervisor had just finished welding on a part for the Wheelbrator blaster and had placed the electrode end (stinger) of the welding lead on the floor in contact with the machine's base structure. An employee (victim) was assisting the supervisor and was on the table of the blaster and began picking up tools and when he reached to remove the ground lead he received an electrical shock. The employee fell from the table striking his head on the floor. He was transported to Coffeyville Medical Center in Coffeyville, Kansas where he was pronounced dead.

- 20000302801 On July 12, at approximately 1:40 pm, an employee was struck by a stud welding box and gun that fell when it came loose from a rope which being lowered from an elevated work place. Workers had been engaged in welding activities on an overhead air pollution control unit. They were lowering the object from approximately 40 foot overhead. The welding box came loose from the rope and fell, striking the victim in the head as he was walking below. The victim was taken to local hospital and on 7/13/10, died as the result of his injuries.
- 20252824601 The deceased was doing some welding on a new piece of farming machinery. The piece of machinery had been set up on its side (in a vertical position) so that welding could be done on the bottom side of the equipment. To help hold the piece of machinery in the vertical position a piece of steel support rod had been welded to the frame of the piece of machinery and also welded to a metal portion of the floor. It appears that the welds for the steel support rod were not sufficient to hold the piece of equipment in the vertical position. The piece of equipment fell over on to the employee crushing him between the piece of equipment and the concrete floor.
- 20158106301 Employee 1 was welding on the guardrail system on a crane barge adjacent to the crane structure, and was struck by the counterweight.
- 20156247701 Sabre Steel LLC was in the middle of steel erection activities at a new construction site, for a new Granite School District Central Kitchen Food Facility, located at 4152 W 2200 S, West Valley City, Utah, when a gust of wind came up, and blew an employee of Sabre Steel LLC off the structure. The employee had either been in the process of welding a piece of ledger angle in place or trying to place the last piece of metal decking into the expansion joint and no fall protection was in place. The employee fell approximately 16' 8" to the ground below and sustained fatal injuries as a result.
- 20236830401 One Hermann Brothers Logging and Construction employee was sitting on conveyor welding when the conveyor system was energized causing the employee to be crushed. No locks were used to lockout the conveyor system.
- 20055599301 The crew was in the process of installing a "red-iron" I-beam 45 feet long and at a slight angle - with one end approximately two (2) feet higher than the other. The beam was being held aloft with a single choker sling centered on the beam. Intentions were to insert the I-beam between the flange plates that were welded to, already installed, vertical columns. The initial attempt to hang the I-beam revealed that the space between the flange plates was "very tight" and it was not possible to place the beam between the flange plates. After the paint and excess welding slag from the beam and flanges, as well as using a maul hammer to open the flanges slightly, another attempt was made to hang the I-beam. During this attempt the upper end of the I-beam was slowly being rocked into position and as it was being inserted farther between the flanges the lower end of the beam was being brought into position. As this was taking place the upper end of the 3000(+/-) pound I-beam sprang loose from the flanges. When this occurred the beam attempted to balance itself and in so doing struck the scissors lift being used to support the two employees working to hang the I-beam on the higher end. The lift tipped over from a raised height of approximately eighteen (18) feet - to the top railing. The tipping lift/fall resulted in one fatality and one employee being hospitalized.
- 20037499901 The deceased was delivering a load of propane to the Raisio plant. He had parked his truck next to the header in the rear parking lot. While the deceased was hooking up the delivery hose to the header, the Raisio plant manager went to the tank to open the valve. After grounding the system the deceased started pumping the gas from the transport trailer. The deceased went around toward the front of the truck to check a gauge. After about a minute or two the deceased told the plant manager that there was a leak. The deceased went to shut off the valve at the truck and the plant manager went to shut off valves at the tank. After shutting off the tank valves the manager turned toward the truck and saw a fire and heard a "whoosh" sound in the direction of the driver. He saw an expanding fireball and yelled at the driver to run which he did. The manager started the fire monitor system and heard two "bangs" and the fire subsided he then saw the deceased on the ground about 30 feet away. The driver got up and walked over to the manager and they went to the

locker room to await EMS. The driver passed away from his burn injuries seven days later. After investigating with the State Fire Marshal's office it was determined that the contractor who had been hired to build the plant had hired a subcontractor who was not licensed to install this type of gas line, had used the wrong kind of pipe, had screwed it together in some places instead of welding it, sections of pipe that was coated had the coating abraded and cut and had used construction debris as trench fill around the pipe. The underground pipe had deteriorated and allowed propane to leak out into the ground. This gas came out of the ground and ignited causing the burn injuries to the driver.

- 20185994901 ON DECEMBER 26, 2009 AT APPROXIMATELY 8:30 AM, MAINTENANCE EMPLOYEES WERE IN THE PROCESS OF REMOVING A 10 FOOT SECTION OF A STEEL BEAM ABOVE AN ASSEMBLY LINE. THE BEAM WAS BEING REMOVED TO ALLOW ROOM FOR NEW EQUIPMENT INSTALLATION DURING A PLANNED SHUT DOWN. TO REMOVE THE BEAM, A "JLG" SCISSOR LIFT WAS POSITIONED AT ONE END AND A "GENIE" SCISSOR LIFT WAS POSITIONED AT THE OTHER END TO ALLOW EMPLOYEES TO DISCONNECT THE BEAM, WHICH WAS OVER 11 FEET FROM THE FLOOR. A "LINDE" FORKLIFT WAS POSITIONED IN THE CENTER TO CRADLE THE BEAM. AFTER ONE END WAS CUT WITH A WELDING TORCH, THE BEAM SLID OFF THE FORKS OF THE FORKLIFT AND STRUCK THE VICTIM, WHO WAS STANDING ON THE FLOOR OBSERVING THE WORK PROCESS. THE EMPLOYEE DIED FROM INJURIES TO HIS HEAD AND CHEST.
- 20055592801 Employee #1 was operating a LC400 pedestal crane. The pedestal crane has a rating of 200 tons. Employee #1 was lifting a 30 ton concrete test weight off of a flat bed truck. The boom angle was about 72 degrees. The test block was removed from the flat bed truck and was being lowered to the ground. The test block was about one foot off the ground when suddenly the pedestal crane sheared off below the turntable bearing race causing the crane to collapse. Employee #1 was thrown out of the crane. The 200 foot boom on the crane fell into the welding shop. Employee #2 was operating a press break inside the shop when the roof of the shop fell on top of him. Employee #1 sustained injuries to both left and right heel and ankle. Employee #2 was pronounced deceased at a local hospital.
- 20055588601 On 11/02/2009 employee 1 entered the number 1 starboard fuel tank on the tank barge Custom Fuel #1. The last cargo in the cargo tanks was diesel fuel. The barge came from the facility gas free plant where a Marine Chemist Certificate was placed on the barge. Daily checks of the cargo tanks were conducted by the shipyard competent person and forced air ventilation was being used as per instructions on the Marine Chemist Certificate. Employee 1 entered the cargo tank to conduct welding operations. Within 15 minutes after entering the cargo tank employee 1 exited the cargo tank complaining of breathing difficulties. Shipyard personnel attended to the employee. Employee 1 lost consciousness and CPR was started. Local rescue responders were summoned and upon arrival continued CPR on the employee. Shortly thereafter the paramedics arrived and pronounced the employee deceased.
- 20055583701 An employee, Age 43, was completing a task of welding support brackets to a blower cover. As the employee was attempting to exit the area where he was positioned, the welding rod came in contact with the employee, electrocuting him. A 50 year old ironworker was performing the task of bridging joists from the platform of an JLG aerial lift. The process included stick welding angle iron perpendicular to the joists. Eventually the employee was seen by another employee outside of the basket standing on the boom of the aerial lift. The employee slipped and fell approximately 25 feet to the lower level. The employee was fatally injured after being impaled by a piece of re-bar and suffering a head injury.
- 20255063801 The accident occurred on September 21, 2009 and was reported to DOSH on September 21, 2009. Employee #1 (decedent) was a journeyman welder employed by a structural steel fabrication and erection company. At the time of the accident employee #1 was from a Condor Manufacturing Scissor Lift, Serial Number V1800829H (SL) at an approximate height of 13 feet marking a structural beam for a brief welding job. The SL was positioned on a level

concrete slab approximately 12 inches from a 7 1/2 inch deep by approximately 36 inch wide ledge surrounding a 19 X 20 foot X 69 inch deep concrete pit. Witnesses stated that the decedent was at the controls when the SL slowly drove off the 7 1/2 inch ledge, tipped over and fell on its side. Employee #1 was catapulted out of the basket in to the North-West corner of the striking the pit wall head first then fell onto the pit floor. Employee #1 was a full-time payroll employee.

- 20252801401 On September 7, 2009, Gregory Mize, ash operator, reported to his shift supervisor, Pete Moore, a 3/4 inch steel end cap that is attached to a wall was bent. The wall is approximately 4 feet high, 70 feet long, and 8 inches wide. The concrete wall has steel plates on the ends, on top, and on the South side. On the North side, where the trucks are loaded, the wall does not have steel plating. On September 8 Mr. Mize located a welding machine and attempted to repair the damaged end cap. Mr. Mize asked Noe Cabrera, loader operator, to help him repair the weld. Mr. Mize then had Mr. Cabrera use the loader to push the steel end cap into a vertical position. Mr. Mize then began to weld a piece of angle iron onto the end cap and the steel side wall. Mr. Mize also welded the end cap to the steel top piece. The angle iron was going to be temporary. Mr. Mize then told Mr. Cabrera to move the loader back. As the loader was moving backwards Mr. Mize got in front of the end cap and as he was in front of the end cap the welds failed and the end cap sprang back and hit Mr. Mize. Mr. Mize was transferred to the hospital where he died on 9/14/09.
- 20107423401 On 09-03-09 at approximately 2:45 PM an employee of Superior Cattle Feeders was performing arc welding at the jobsite located at 551 S. Industrial Avenue, Calipatria, CA when he collapsed and died. According to the Coroner's Report the employee died from natural causes and the activity of arc welding is not considered a contributing factor. The employee was transported to Pioneers Memorial Hospital in Brawley, CA. The Division was notified by the employer of the serious accident on 09-03-09 at 3:07 PM, which did fulfill the 8-hour reporting requirement.
- 20192494101 On or about August 12, 2009 at approximately 3:15pm, employee #1 was found unresponsive on scaffolding in the residential water tank in which he had performing stick welding on the interior overhead of the tank. He was removed from the tank, and emergency services summoned. He could not be revived. The medical examiner determined that core body temperature of employee #1 exceeded 109 degrees fahrenheit, indicating that the preliminary cause of death was hyperthermia.
- 20071374101 Employee was in the process of welding cracks at the base of the mast when the forks came down, crushing employees head.
- 10026529701 The employee was in the process of installing a commercial garage door. He was using the Champion 16 welder as a generator to provide A/C power to charge his cordless tool batteries and to power his chop saw. The welding leads were not stored properly and the insulation on the end of the positive electrode/stinger was missing. The positive electrode/stinger was loosely wrapped on its hanger and was in direct contact with the bed of the truck. The negative ground clamp was also loosely wrapped on its hanger, but was not touching the bed of the truck. It appears that the employee crawled into the back of the truck while the welder was running and made contact with the negative lead with his right arm which made him an extension of that lead. He was electrocuted as he became the least path of resistance through the ground path.
- 20060432001 Employee of L&J was removing a cap on a 12 inch natural gas pipe line. The line was presumed empty and unpressurized. As the loosened the nuts holding the cap in place, gas escaped and was ignited by a nearby metal cutting/ welding process.
- 20012304001 On June 22, 2009 at approximately 9:00am a male employee was welding steel plates to the frame of a large fuel tank. The employee was on the fourth and final plate for the top side of the tank and the steel plate wasn't lining up right so the employee went to square up the final steel plate which caused

the steel frame to tip over and fall knocking the employee to the floor causing a head injury. At this point it is unknown if the piece struck the employee in the head or if the employee struck their head on the concrete floor. After the accident the 911 was called and the employee was taken to the local hospital where the employee passed away on June 26, 2009 at approximately 5:00pm. The company was notified of the passing at 8:00am on June 27, 2009 and immediately contacted OSHA to report the fatality at that time the company also explained to OSHA that the company manufacturing was shut down until after the Fourth of July, but on June 29, 2009 there would be office and management people onsite. On June 29, 2009 OSHA opened an inspection and got a brief explanation of the accident the CSHO also viewed the area where the accident happened but the tank that was involved in the accident had been finished and shipped to the customer. The company also explained to the CSHO that there were other employees working in the area but no one saw the accident happen seeing that manufacturing area was on shut down the CSHO was not able to speak with anyone in the area. At this time this is all the info. that is available updates to OSHA 170 to follow as more info. becomes available.

- 20170274301 A welder working for the contractor, NW Metal Fabricators Inc, at the ConAgra plant, went inside a 27 foot tall tank, used to filter the potato wash water to fix a very small crack at the cone shaped bottom. Just at the time he struck an arc to check the ground for the MIG welding there was an explosion. A witness said there were no visible flames but it lifted the tank approximately 6 inches and moved it 3 inches. The victim was removed several hours later because debris from above had to be removed first. There were no burns on his body but he was impaled many times and buried in mud. The cause of death was traumatic accidental injury.
- 20064439101 Employee was performing welding activity on a water storage tank. When he stepped off a hook ladder onto the scaffold walking and working surface the 2" X 10" pine plank broke causing him to fall to bottom of the tank approximately 125 feet resulting in fatal injuries.
- 20012299201 On February 3, 2009 at approximately 7:00am a 40 year old male employee of Monarch,LLC was welding 1 inch thick steel stiffeners onto a large (19'11" X 7'11") two inch thick steel plate. The large steel plate was standing on end and tack welded to two large steel horses which were meant to keep the plate upright and stable. While the victim was welding the stiffeners into place the tack welds broke loose and the steel plate fell onto the victim instantly crushing him to death. During initial talks with co-workers they stated that a full/complete weld would be used to secure the plate to the horse and not a small tack weld. The victim had worked for the company for approximately one year and had worked on a number of large welding projects. Although there were a number of employees working in the shop no one had a direct view of the incident. Monarch, LLC is a fabrication and weld shop that specializes in heavy duty fabrication and welding.
- 20055551401 On 12/31/08 employee #1 was setting up to conduct TIG welding on a 2" x 65" piece of pipe located in the vent trunk compartment of new aluminum vessel under construction. The estimated height where the pipe entered the compartment was about 1.5 foot from the bottom of the deck. The welding process involved using an argon gas purge on the pipe. The hose supplying the argon gas was in place on the top of the pipe. Employee #1 had not started the welding process. Employee #1 went on his scheduled break from 9:00 am to 9:10 am. At 9:15 am employee #1 completed a prior welding project. At this time employee #1 exited the vessel to adjust his welding machine to complete to welding process in the vent trunk. At 9:18 am employee #2 passed the compartment where employee #1 was working and saw employee #1 laying on his side and was unresponsive. Employee #2 called his foreman for help and the in house rescue team was activated. CPR was administered to employee #1. Employee #1 was transported to a local hospital and was pronounced DOA. The cause of death was Asphyxiation secondary to suffocation.
- 20256055301 An employee was 18 feet above the ground sitting on a steel roof joist welding a metal splice plate to a ledger angle iron that was against the northeast wall of the building when he fell to the ground seriously injuring himself. The employee was wearing a full body harness with a lanyard attached to it,

however was not tied to an anchorage point. There were no witnesses to the event and the employee was rushed by helicopter to Maricopa County Medical Center in Phoenix, Arizona, where he died three days later.

- 20033216101 A construction worker was welding steel roof joist on top of a 14 foot high cinder block wall and was crushed by the boom of a crane that tipped over.
- 20152322201 The employee of Unique Steel LLC along with the employee from C & L Landscaping arrived on the site and parked the Fuso truck on the driveway of the site location. The Unique Steel employee and the employee set up the welding equipment and began installation of the handrail. The portable welding unit was located on the ground between the water fall and the east side of the stairway. The stairway contained nine (9) uprights to support the handrail. The Unique Steel employee and the C & L employee were in the process of installing the handrail between the fifth and eighth upright (starting from the top of the stairway). According to the employee, while performing the installation of the handrail the Unique Steel employee was kneeling on the stairway between the fifth and sixth upright. Mr. Pascarella lost consciousness. The C & L employee attempted to evaluate the Unique Steel employee's condition but could not get the employee to regain consciousness. The employee called 911 to report the incident. Clinton Fire Department, Clinton Police Department and Clinton Fire Marshal arrived on site. According to the C & L employee, the Unique Steel employee was not using the welding machine at the time he went unconscious.
- 20136330601 Forty five year old Wesley Allen Ferguson was welding on a piece of earth moving equipment (scraper) when sparks melted a plastic container with an unknown substance near him. The container exploded, catching the employee on fire. Mr. Ferguson was hospitalized on 10/9/08 and died on 10/16/08.
- 20194270301 A worker was welding components of a catwalk over a waste oil storage tank. The welding activity ignited waste oil flammable vapors that resulted in the storage tank exploding. The explosion resulted in one fatality and three other workers being hospitalized. The other three injured workers belonged to three separate companies.
- 20045246401 During ship fitting operations a welder was electrocuted after falling and being struck by his own welding rod.
- 20133105501 Victim was crushed by 4.1 ton rotor compartment that he was welding.
- 20053251301 The employee was the maintenance supervisor. We were told the employee was welding in the throat area of the shear about two feet from the bolt when it broke and struck him in the head. The two other employees were tightening the nut on the other side of shear when the bolt broke in the thread area near the nut. An excavator was being used to pull on a chain that was attached to the end of the wrench that was being used to tightening the nut when the bolt broke. The bolt was about two feet long and about 1-3/4 inch in diameter.
- 20008347501 A sole proprietor was welding a beam connecting the travel beams of an elevator system. A platform had been constructed between the two shafts and the welder either set up his ladder or used the step ladders already set up on the platform. The welder used the platform to access the area where the beam was sitting on the angle iron seat. The welder welded one side. The welder was witnessed on the platform over his welder and somehow either stepped back or lost balance and fell back into the unguard end of the platform and fell approximately 37 feet.
- 20055527401 On Monday the 28th of July about 3:45pm in the afternoon Mr. Sims was welding structural steel on a building under construction at the Lakefront Airport in New Orleans, La. It is believed, because no one actually saw the accident happen, that Mr. Sims was moving the manlift to a higher position

while his welding hood was still on his head. Mr. Sims head or upper neck area made contact with a bar joyce above him forcing his head and upper torso onto the controls. The controls were jammed in the upward position making the lift move up and Mr. Sims was unable to remove himself from the controls. One of the other workers on the ground saw Mr. Sims in an awkward position and called to him, there was no answer. A person working on the ground went to the machine and took control of the lift from the ground to get Mr. Sims clear of the iron. Mr. Sims was brought to the ground, removed from the basket and was not breathing and did not have a pulse. Mr. Sims was given CPR by a fellow worker, emergency services were called and paramedics pronounced Mr. Sims dead on the scene. The coroner was notified, came to the scene and also pronounced Mr. Sims dead.

- 20035710101 The victim collapsed to the floor outside the break room after a small fire was extinguished during welding operations in the facility. Emergency personnel were contacted and the victim was transported to New Hanover Regional Hospital. EMS indicated that the immediate application of CPR at the facility allowed them to maintain a faint pulse en route to the hospital. Hospital personnel confirmed the death was caused by a heart attack. The victim was known to have high blood pressure and was being treated for this and associated health problems.
- 20176371101 Employee #1 was using a welding torch to cut steel nuts from a set-up stand when his foot became entangled in the welding hoses. The employee fell over with his foot trapped in the stand and broke his right leg. He was hospitalized and died 28 days later from complications to his fall injury.
- 20192449501 On July 18, 2008, at 12:50 pm, Employee #1 was welding on a 1000 gallon biodiesel tank that was in the back of a box Isuzu NPR truck. The biodiesel tank contained hydrocarbons. The 1000 gallon tank was said to have a leak. Employee #1 ground on the piping. Then conducted welding. The tank had not been cleared of hydrocarbons nor had the tank been vented. The tank exploded fatally injuring Employee #1.
- 20256384701 Eight employees including the decking foreman were installing metal sheet decking on a warehouse that was approximately 676,000 square feet. The employees were performing leading edge work, tac welding and welding as the work progresses. The site foreman called for a water break about 2:00pm. He left the roof to meet with the iron worker foreman. Immediately after a water break the employees returned to work, to continue the decking at the leading edge. The three employees working at the leading edge were not tied off to the retractable lines. Approximately 2:30 pm one of the employees Mr. Hernandez the victim fell onto the concrete floor. He was pronounced dead by the EMS and later by the ME.of H.D.G. The height at the center of the building was approximately 37 1/2 feet, area from where the employee fell to his death.
- 20149085101 On 6-25-2008, employee no. 1 sustained a fatal injury to his head. The injury occurred on the roof of the new metal storage shed at a construction site located in Strathmore, CA. Employee no. 1 was taken to the Tulare Co. Coroner's office located in Tulare, CA for an autopsy. The Tulare Co. Sheriff's Dep't reported to Cal OSHA Fresno District office of the injury on 6-25- 2008. The employer is an unlicensed welding contractor. Employee no. 1 was assisting on the roof installing a sheet of skylight material. As they were pushing the material in place, employee no.1 suffered a heart attack and fell to the roof and then fell through the opening of the skylight head first to the floor approximately 20 ft below.
- 20246613201 On June 22, 2008, around 3:40pm, four laborers and two non-employees suffered burns due to an explosion of a 55 gallon drum containing VOC. The Division was notified of the accident on June 23, 2008, by the employer, and initiated an inspection on June 23, 2008. Two of the employees succumbed to their injuries at USC Medical Center in Los Angeles. Four others were treated at the Grossman Burn Center in Sherman Oaks. The place of employment involved in the accident is a medium sized agricultural company engaged in the growing and harvesting of cilantro. At the time of the incident the employees were in the process of creating a drainage system for the farm. This drainage system would divert water away from a ravine. The water would be collected in a sump. The employees were directed to install the drainage system by the owner of the company and the owner's wife. The

owner states that he had requested the employees to excavate a sump and install a plastic lining to be purchased from a hardware store. Per the injured persons, the owner told the employees to utilize the 55 gallon drums located on the property at part of the sump system. The drums were to be cut on the side to insert piping into the drums. The employees were in the welding shed at the time of the incident. Based on the interviews conducted of the injured persons, the laborer operating the Oxy-Acetylene torch system (E3) utilized the system to attempt to cut a hole in the barrel. The drum was not cleaned and no measures were taken to ensure that the drum was free of ignitable chemicals. The VOCs within the barrel were ignited by the torch. The resulting fire burned all 6 injured persons. Interviews were conducted of 3 of the remaining injured persons, the owner and fire investigator. The investigation concluded that the drum containing VOCs was ignited by the Oxy-Acetylene system as the flame approached the drum. The use of a flame or other source of ignition on a drum containing flammable or combustibles liquids is prohibited except in cases of repair. As a result, the Division issued serious accident related citation for T8CCR Section 5418(c).

- 20067734201 Structural Systems Technology SIC 1623 On 05/22/08, a 44-year-old male tower hand (victim) died after falling approximately 450 feet from a 1,100-foot communications tower. The victim was a member of a six-man crew which was conducting tower maintenance activities on the tower. The employer had been contracted to: clean all the rusted areas of the tower, patch all the holes in the horizontal and diagonal members by welding half pipes over the rust damaged areas, power wash and clean tower of all rust, dirt, grease, and to treat the entire tower with a coat of primer and a coat of acrylic latex. The day of the incident, the six-man crew began work around 7:00 AM. Three employees were assigned to apply a coat of primer from the top down, and two other employees and the victim were assigned to pressure wash at a lower elevation of the tower, about 500-feet high. The victim was wearing a DBI/SALA ExoFit full body harness, however, there was no lanyard hooked or connected into the victim's back Dee-ring at the time of the fall. IMMLANG N
- 20127274701 Two employees were working from an aerial lift 18 feet high welding a piece of metal onto the newly constructed metal separator. The "UCK" Truck drove through the construction site hitting the aerial lift and pinning the employees against the steel beams on the structure. The victim was knocked out of the lift hitting the ground 18 feet below. The other employee fell to the floor of the lift and was brought to the ground by another employee by another aerial lift. Both employees were taken to the hospital and the victim was pronounced dead on the way to the hospital. It was reported the employees were not wearing fall protection.
- 20236729801 Employee's chest crushed between controls on snorkel lift and beam he was supposed to be welding.
- 20192437001 On January 28, 2008 at approximately 7:30 a.m., employee #1 and another welder were assigned to cut out a section of the pollution pan located in the subfloor of the Hercules 251 Rig. The pollution pan was attached to the walls of the subfloor with 12 flat iron braces approximately 3/8 inches thick by 5 inches wide by 8 inches long. There were 3 braces located on each side of the pollution pan. The braces located on the east and west side of the pollution pan were removed prior to the start of this work activity. It is unknown when these braces were removed or who removed them. The Welding Supervisor directed employee #1 and the other welder to cut the 3 braces that remained in place on the north and south side of the pollution pan. One welder cut his 3 braces then stepped out of the pollution pan. As employee #1 cut his third brace, both he and the pollution pan fell. Employee #1 fell approximately 44 feet to the "Texas Deck" located below the Rig. Employee #1 struck his head on the Well Head, then fell through the gap between the Well Head and the Texas Deck and into the water another 62 feet below. Employee #1 was recovered via use of the Rig's rescue capsule. Employee #1 died at the jobsite.
- 20195539001 On November 30, 2007 Employee #1, a part-time maintenance man, was working with Employee #2 installing a new conveyor line. The work had progressed to within 15 to 20 feet of a floor opening that was left when an old conveyor line was taken out along with the section where an inclined

conveyor went through the floor to the level below. The company had placed 1.625-inch thick styrofoam board over the opening, and a section of roller conveyor on top of the Styrofoam, to prevent it from moving and prevent debris, dust and dirt from falling below. The area around the floor opening was somewhat barricaded with sections of roller conveyor stacked up and other equipment stacked around the opening, as well as caution tape. The floor opening measured 27 feet long by 44 inches wide and 14 feet 10.8 inches (9/10 of a foot) above the floor below. On November 30, 2007, the maintenance supervisor had maintenance employees remove the sections of roller conveyor and styrofoam off the opening to uncover it so the traveling maintenance staff with welders could finish welding diamond plate across the opening. When the traveling maintenance supervisor saw the opening, he said his crew could not finish it that day, as they had to leave by 3:00 p.m. to get back to Lawrenceburg, Indiana. They would not even start on the work, so the maintenance supervisor could cover it back up and they would work on it the next Monday. The maintenance supervisor had the maintenance men put the styrofoam board over the opening, but not the roller sections, and put back up the caution tape. Employee #1 and Employee #2 continued to work in the area on the new conveyor line. Employee #1 sent Employee #2 to get a section of rolled up 12-inch wide conveyor belt section, which was stored on a pallet which was just inside the caution tape. There were several rolled up sections of conveyor belt on the pallet, and sections of conveyor support legs leaned over top of them. Employee #1 said he wanted a small section of the belt. Employee #2 went around the outside of the caution tape to get the rolled up section. When Employee #2 pointed to one of the sections, Employee #1 said he wanted the smaller one. When Employee #2 pointed to another section, Employee #1 ducked under the caution tape, stepped onto the Styrofoam and fell through the opening. Employee #1 hit a rack end on the way down, flipped, and fell the rest of the way. He hit his head on the concrete floor. Employee #1 suffered numerous injuries including multiple broken ribs, multiple skull and facial bone fractures, and was in a coma. Employee #1 died on November 15, 2008 from pneumonia and complications from his injuries.

- 20075856301 Delta Heating and Cooling, Inc. SIC 1711 On November 26, 2007 at approximately 4:00 pm, a 43 year old male fell approximately 9 feet while ascending an extension ladder to a mezzanine approximately 12 feet above the floor. The floor was concrete, dry, with some dried mud on it that had come off workers shoes. The ladder was not extended 3 feet above the upper landing nor was it secured at the top. The employer did not have a competent person perform regular inspections of the work site. The employer had not trained the employee in the safe use of a ladder but he did attend a safety meeting given by the general contractor and reminded to secure ladders. There were three other employees (one employed by a welding company, the other two were Delta Heating and Cooling, Inc. employees), but they did not see the accident take place. The employee was transported to the hospital where he died on November 28, 2007.
- 20051456001 On November 7th, 2007 at approximately 14:22 p.m. an employee fell from the Saint Louis Park's Pedestrian Bridge which was under construction. The area where the employee was working was approximately 15 feet 2 inches above the ground. The employee died as a result of head injuries sustained after falling 15 feet 2 inches from the bridge. The employee was welding from the upper landing surface of the stairway, over the north side of the pedestrian bridge, with his two co-workers before the accident occurred. The employee was wearing a full body harness and had tied his lanyard to a double-eyed choker that was attached to the fallen stairway railing. However, the stairway railing was not permanently secured and/or bolted into place at the time of the accident. Therefore, when the victim was moving from the southwest side to the northwest side, the railing disconnected from the structure members. The railing failed as a result of the greater moment applied by the victim as he leaned on the rail. The Saint Louis Park Police Department report and the photographs described the victim's final rest position. His left leg was underneath the railing. His right leg was over the railing. His right foot was tangled between the metal slats of the railing. Fresh welding fume was on the shim of the stair stringer. Since the rail was between the victims' leg and the shim on the stringer base was freshly welded, this indicates the victim was straddling the railing to weld when he fell. The photographs obtained from the Saint Louis Police Department and the Hennepin County Sheriff's Office Crime Laboratory, show an adjustable spud wrench painted by orange and a safety boot were lying on the ground next to the victim's left leg. The victim's head was toward to the north. There were

numerous spent welding rods near the victim's head and left shoulder. The victim was wearing a hardhat, welding mask and safety gloves. There was a large amount of blood in the front of the victim's body. There were no ladders or JLG type of aerial lifts observed in the area. The immediate cause of death was blunt-force craniocerebral injuries due to, or as a result of the fall. The toxicology was negative. The victim was born on January 11th, 1978 and was employed by E & J Rebar, Inc. on June 16, 2006.

- 20250148201 Employee was working in a ventilation duct 16 feet wide, 16 feet high and 60 feet long located at a power generating plant welding an expansion joint. As the employee was welding he stepped back into a baffle system for flue gases and fell approximately 80 feet to his death landing on a second set of baffles approximately 40 feet off the ground.
- 20163724601 Employee was performing welding operations at a new construction commercial site. Employee fell approximately thirty-six feet through an unguarded floor opening. Employee landed on the concrete flooring of the structure.
- 20055495401 On 08/29/2007 at 4:15 an employee was operating a rough terrain forklift to move welding machines from the roof of the building under construction. The employee had moved two welding machines without incident. While moving the third machine the boom of the all terrain forklift came into contact with a overhead electrical line located in front of the building. The employee was electrocuted.
- 20078424701 A maintenance mechanic was electrocuted when he contacted both the metal casing of a portable TIG welder and the metal frame of the machine that he was servicing. Investigation Findings: The maintenance mechanic was using Chemetron, 250 TIG, welder to install a dust guard on a Shot Peen machine; Approximately two weeks prior to the accident, the electrical cord to the single phase welding machine was replaced with a 10/4 AWG SOW-A/SOW heavy-duty cord and a Hubbell, HBL2731, 3-phase, 4-blade (x-phase, y-phase, z-phase, and ground) attachment plug; The electrical cord, having the designation P-159-18 MSHA, consisted of 4-color-coded insulated conductors (black, white, red, green) inside of an electrically-rated outer jacket/insulation. (NOTE: The black, white and red conductors were intended/designed to be ungrounded, and the green conductor was intended/designed to be grounded); The black conductor at one end was connected to the attachment plug y-phase terminal, and was spliced at the opposite end with another black conductor that went to the on/off switch at the front of the welder; The white conductor, at one end was loosely connected to the attachment plug z-phase terminal, and was spliced at the opposite end with another white conductor that went to the on/off switch at the front of the welder; The green conductor (ground) at one end was connected to the attachment plug x-phase terminal, and was spliced at the opposite end with another green conductor that was connected to the metal chassis of the welder; The red conductor was not connected to any of the attachment plug terminals, nor was the opposite end connected to anything inside the welder; The attachment plug grounding terminal and blade were left open; The outer jacket/insulation of the electrical cord was not retained within the attachment plug cord grip exposing the conductors to pull/strain at the terminal screws; The identification plate on the welder contained the following information: AC input: 208/230/460 volt, 89/80/40 Amp, single-phase, 50/60 cycle; Service and maintenance records were not maintained for the Chemetron 250 TIG welder; and The Owner's Manual, Operation and Maintenance Manual, or Part Manual was not maintained for the Chemetron 250 TIG welder.
- 20021221501 Jose Hernandez, Boiler Maker, was working approximately 31 feet from ground level. He was wearing a harness and lanyard but was not tied off. Mr. Hernandez was cutting the grating that was setting on channels used as a catwalk. Earlier that morning, one end of this grating and channel was cut and removed. This left the next section of the catwalk grading and channel like a cantilever. At approximately 4:00 pm, Mr. Hernandez began cutting the next section of the grating while standing on it. When the grading was cut all the way through, the channel and grading fell with Mr. Hernandez to the next

level of catwalk. He landed on other debris, fell to one side, and hit the top guardrail, killing Mr. Hernandez. When the channel was later lowered for inspection, the owner and Site Superintendent told CSHO the previous welding was porous, rusted and lacked penetration of the weld.

- 20192417201 Employee #1 was tacking 4'x8' sections of expanded metal to the floor of a new compressor building. Employee #1 was using a Miller Electric Welding machine-Dialarc 250 AC/DC in the DC mode. Employee #1 came in contact with the welding electrode (chest) while in the electrode holder. Employee #1 was sitting on a grounded metal surface. Employee # 1 became the path to ground and was electrocuted.
- 20175163301 At approximately 12:56 p.m. on July 9, 2007, several employees were erecting a one-story precast unit. A crane had placed the second double tee concrete roof panel onto the wall supports. At this point of construction, there were two corner sections, consisting of two perpendicular walls, and two additional walls. The walls were on the north and south side of the building. Employee #1 was welding on the north end of the double tee. Employee #1 was anchored via a retractable lifeline to a safety eye on the first double tee. A coworker was working on the south side of the double tee and anchored to a second safety eye on the first double tee. Employee #2 had just shimmed the second double tee and was underneath this double tee in a man-basket. At this point, the coworker disconnected the rigging from the lifting eye which was used in the shimming process. The coworker communicated with the crane operator to cable up. The rigging consisted of a 4-leg wire rope sling. During the cabling up, one of the hooks on the rigging from the crane caught and snapped into the safety eye on the south end of the second double tee. This resulted in the south end of the second double tee being lifted, and pulled off the supports on the north. This, in turn, resulted in the second walls falling, and then the first double tee rupturing lengthwise. Employee #1 was on the north end of the double tee and fell with his tripod to the ground and was fatally injured. Employee #2 was underneath in the man-basket and suffered serious crushing injuries and was hospitalized in stable condition. The coworker was not injured because the section of the double tee where the safety eye to which he was connected did not fall. Employee #3 and Employee #4 were injured on the ground and were transported to the hospital, and treated and released.
- 20244619101 At 3:10 p.m. on July 7, 2007 Employee #1 a welder, was in the NW corner of a room under construction at a huge commercial site in San Bernardino, CA. Employee #1 was welding ledger angles of the South wall from a 60 ft JLG, model #660SJ, serial #03 00060394" aerial lift. The ledger angles were located about 21 ft, 6 in. above the dirt ground. Employee #1 welded a ledger angle on the North side of an I beam, while simultaneously moving the boom's basket towards South side of the I beam by passing it underneath beam, Employee #1 inadvertently pinned himself between the beam's bottom flange and top rail of the basket. At the same time Employee #1 was pinned, Employee #2, an ironworker, climbed up the 30 ft long extended boom of the aerial lift to rescue Employee #1 pinned in the basket. Employee #2 tried to lower the basket by using lift controls when it suddenly surged and shook, pinching Employee #2's left arm and left ribs between south side of the I beam and the control panel of the basket causing a serious left arm fracture. Both Employee #1 and #2 were taken to Loma Linda University Medical Center for treatment. Employee #1 sustained neck and chest trauma injuries and later died from his injuries. Employee #2 had surgery on his arm and was hospitalized for more than 24 hours.////.... On 07/03/07 at 03:10 PM, the employer notified to the District Office that at or about 01:25 PM, a serious accident occurred to a welder employee (V1) at NW corner of a room of an under construction Building #1 of a huge commercial site, located at 1701 E Harry Sheppard Rd., San Bernardino, CA 92410. The employer is a structural steel erection contractor. At the time of the accident V1 was welding ledger angles of the South wall from a "60' JLG, model #660SJ, serial #03 00060394" aerial lift. The ledger angles were located about 21' 6" above the dirt ground. V1 welded a ledger angle on the North side of an I-beam. V1 was in the process of moving the boom's basket towards South side of the I-beam by passing it from underneath it when inadvertently pinned him between the beam's bottom flange and top rail of the basket. V1 sustained fatal neck and chest trauma injuries. V1 was taken to Loma Linda University Medical Center 9 , Loma Linda, CA for treatment and died at approx. at 02:10 pm. At that time another ironworker employee (V2) climbed up the 30' long extended boom of the "60' 1 JLG" aerial lift to rescue V1 who was pinned in the basket between the bottom flange of the I-beam and top rail of the

basket. V2 tried to lower the basket by using lift controls when suddenly the it surged/shook pinching V2's left arm and left ribs between south side of the I- beam and the control panel of the basket causing serious left arm fracture injury. V2 was also taken to Loma Linda University Medical Center, Loma Linda, CA for treatment. Surgery was performed and V2 was hospitalized more than 24 hours. Both V1 & V2 were regular employees of the employer.

- 20244597901 At approximately 3:30 p.m. on June 1, 2007, Employee #1 was cutting a shock absorber joint out of a Chevrolet Silverado, Suburban-20, using a welding torch to remove the rear axle of the truck. He was cutting very close to the fuel tank of the vehicle when the fuel tank exploded, causing burns over his entire body. He was air-lifted to a nearby hospital, where he died the next morning.
- 20103926001 At approximately 10:51 a.m. on May 19, 2007, Employee #1, a welder, was repairing a diesel fuel tank that had an 88-gallon capacity, L-shaped, welded steel fuel tank labeled "Diesel Fuel Only." It was located in the bed of a 2007 Ford F-350 pick-up truck, bearing license plate Number 8G21478. The truck was backed into the southern most mechanics bay at the entrance to the welding shop. Employee #1 had cleaned the surface of the tank with a grinder to prepare for the weld and had completed three tacks with a Lincoln Power Mig-255 welder; Serial Number K16931 10563 U1000 926694, when the tank exploded. Employee #1 was thrown off of the back of the truck and sustained severe blunt force trauma to his face. He was transported to a nearby hospital, but pronounced dead on arrival.
- 20027170801 At approximately 11:00 a.m. on May 17, 2007, Employee #1 and three coworkers were constructing a grain leg on a farm. The day was clear with moderate wind. The grain leg was approximately 100 ft tall and they were installing a down tube on the leg. Employee #1 was in a fiberglass bucket attached to a chassis-mounted articulating crane, Model Number 4T46, manufactured by National Crane Corporation. Employee #1 was ensuring that the down tube being installed was plumb. One coworker was on the grain leg ladder, welding a bracket and attaching the down tube. Another coworker was operating the boom from the truck moving Employee #1 into position. The coworker welding could not reach the entire bracket to weld and handed the welding helmet through the ladder rungs to Employee #1. Employee #1 was going to weld the bracket from the boom-mounted bucket, when the axle attaching the bucket to the boom sheared. The bucket and Employee #1 fell approximately 38 ft, landing on a concrete foundation. Employee #1 was not wearing fall protection and was killed.
- 20045221701 On April 18, 2007, Employee #1, a welder, was welding on a flat bed trailer. In a wash booth, approximately 50 ft away, four coworkers, assisted by the supervisor, were manually pushing another trailer towards Employee #1. They were pushing without checking to see if the area was clear. They could not see Employee #1 when the trailer struck him. They continued pushing the trailer and pinned Employee #1 between the two trailers. Employee #1 received severe internal injuries and later died.
- 20157322701 The employer was operating a rough terrain forklift to hold a "welding machine" at approximately a 45-degree angle. The welding machine is actually a large steel structure approximately 1-ft by 7-ft by 3-ft used to hold automatic welding equipment to weld large above ground tanks together. The machine was attached to the mast of the forklift by a chain connected to the back of the mast and the back of the machine by shackles. Employee #1 was under the load guiding it in place so he could touch-up the paint on the back of the machine. The chain disconnected from the back of the mast and the machine fell striking Employee #1 in the head. Employee #1 died on the way to the hospital.
- 20078412201 Employee #1 was welding the rim of a car tire, when the tire exploded. The employee was killed.

- 20001254001 On February 1, 2007, Employee #1, the job foreman, was welding from an aerial lift. His coworker, a laborer/apprentice, was observing and acting as a fire watch from a scissors lift. The area directly below Employee #1 contained magnesium shavings and cuttings. Welding sparks and slag from the welding operation landed in the magnesium shavings/cuttings, causing a violent fire that consumed Employee #1. He sustained severe burns, fire and smoke inhalation, asphyxia and was killed.
- 20062414601 On February 1, 2007, Employee #1 was using a TIG welder to weld doors for tool boxes. He had just returned to his work station after the morning break and had apparently put on his welding hood and gloves and had his hood flipped up. A coworker observed Employee #1 fall over in his chair prior to starting welding operations. Employee #1 died, possibly due to cardiac arrest.
- 20234171501 On January 6, 2007, an employee was working for about a week with a ship repair crew which was welding new 0.5-in. inch steel sheeting on the bottom hull of a tanker. Work began between 7 a.m. to 7:30 a.m. The supervisor started work at 4 a.m. and around 9 a.m. went to lunch. While he was gone the crew worked on. They were working on a plate 8-ft by 40-ft which would patch the outboard port-side between centerline and the bilge strake. Three chain-falls were used to lift the plate, two Blackbear 3-ton capacity chain-falls and one Tractel Tralift 1-ton chain-fall. When the plate was raised, it didn't fit into the hull. It was off by 6 inches. The employee began welding a pad eye hook to the edge of the plate so that a come-along could be attached which would allow the plate to be pulled into position. While the employee was welding the pad-eye, one of the interior pad-eyes let loose, causing a chain reaction which caused the plate to drop on the employee. The crew immediately raised the plate by hand and pulled the employee out while summoning emergency services. The employee later was pronounced dead.
- 20055463201 Employee #1, a shipfitter, was instructed to install a bulkhead penetration insert in the grey water tank of a tug. It was known by his supervisor that Employee #1 sometimes tightened his oxygen/propylene hose couplings hand tight. Employee #1 assembled his hoses and torch and told his tacker to lower his torch and hose and the welding lead into the tank. The tacker lowered the torch and hose into the tank but couldn't lower the welding lead because it fell short of reaching the tank opening. While the tacker went to look for more welding lead, Employee #1 charged the oxygen and propylene lines at the manifold and proceeded to the vessel. Employee #1 placed his feet on the ladder to descend into the tank when the tank exploded. Employee #1 was blown upwards 30 feet from the tank opening and fell 45 feet to the dry-dock floor. Employee #1 died instantly from his injuries.
- 20067641901 On November 19, 2006, Employee #1 was on a scissor lift that was being elevated by a coworker. Employee #1 was monitoring a welding cable that was hanging from the side of a scissor lift. Employee #1 was killed when he was crushed between the rail of the lift and a roof joist.
- 20136277901 On November 15, 2006, Employee #1 was operating a forklift to relocate a welding machine. A malfunction occurred and Employee #1 exited the forklift to evaluate the situation. With the forklift in-gear and running, Employee #1 attempted to walk alongside the forklift while using his left hand to press the gas pedal and his right hand to steer the forklift in reverse. The welding machine was still attached to one of the forks and he was in close proximity to a building. As he maneuvered the forklift, he steered too close to one of the walls of the building and caught his neck between the overhead support of the forklift and the building. Employee #1 was killed.
- 20062403901 Mr. Chris Sullivan, 31, a welder with HETSCO, Inc., was working inside of a heat exchanger box (a permit required confined space) at Air Products and Chemicals, Inc. The employee had been tack welding a new aluminum header in place with a TIG welder. Mr. Kyle White, welder/assistant with HETSCO, had also been working in the heat exchanger box with Mr. Sullivan. Mr. Roger Fields, Operations Technician with Air Products and Chemicals, was acting as the confined space attendant. Mr. Fields had been monitoring the space for oxygen content. Mr. Sullivan had sent Mr. White

back to the truck (approximately 75 feet from the confined space) to adjust the argon flow to the welder. Mr. Fields stated he observed Mr. Sullivan slump down inside the space. Mr. Fields contact the control room via radio to call 911 and shouted for Mr. White to return from the truck. Mr. White returned and entered the space to help Mr. Sullivan. Mr. Fields stated he checked the space for oxygen content again and then he also entered the space to assist. Mr. Fields and Mr. White performed CPR until paramedics arrived on site. Mr. Sullivan was taken to Wellmont Holston Valley Medical Center where he was pronounced dead.

- 20033178301 On August 18, 2006, Employee #1 was lying down under a scraper and was welding the frame. The scraper's emergency brake was on but the machine was on an incline and was not blocked. The air in the emergency brake released and the scraper rolled over the employee, killing him.
- 20176273901 On or about August 17, 2006, at approximately three o'clock, in the rear southwest corner of the automotive shop, where employee #1 (32 yr. old H. male, 5 month employee) fabricated and welded a bracket for the outside portion of the sleeper rack on the Peterbuilt tractor #78283. Employee #1 removed the bracket and welded from the outside with the mig machine, then he ran out of Argon. Employee #1 asked another co-worker if he could use the electrical Lincoln AC - 225 - 2 Arc welding machine. Employee #1 was informed that they do not use the welding machine because it does not work right, but the employees began to search for welding leads. Employee #1 used the Lincoln welding machine to complete the welds to the bracket then showed his co-worker that the welding machine does work and proceeded to complete the task. Employee #1, placed and welded the bracket which is located under the frame on the drivers side, approximately 32" from the outside frame and in a very awkward position to weld. Employee #1 proceeded to complete the welds on the bottom of the C-channel bracket with the Lincoln welding machine. As per employee interview, he heard a shout and ran to employee #1 who was approximately 15 to 20 feet away and found the employee on the ground laying on his right side. The employee went on to mention that employee #1 had his back turned away and could not tell if he had the stinger in his hand. At the scene CSHO that the welding machine in the "on" position (disconnected) and the welding rod was still in the stinger. Possible electrocution until otherwise ruled by the Medical Examiners office based that the welding leads had several areas on both the stinger and the ground ends exposed, the ground clamp was broken, the leads on the ground were very dry-rotted and cracked, and the possibility of connecting the DC electrical welding machine to the 220v/AC metal-quad-box on the ground used a flexible extension cord.
- 20246167901 At approximately 2:15 p.m. on August 9, 2006, Employee #1, a welder, was inside a dry dock welding a bulkhead. A coworker discovered Employee #1 slumped over part of the bulkhead he was welding. The coworker performed CPR, and Employee #1 was taken to a local hospital, where he later died due to heat exhaustion.
- 20104280101 Employee #1 was welding, when he was caught between the forward double-sided clam shell gates of a transport semi-trailer (BAM Trucking ID Number 203A, Vehicle ID Number 1R9BS4038VL168257). Employee #1 was killed.
- 20157309401 On June 13, 2006, Employee #1, a worker at a salvage yard, was working under two crushed vehicles to remove the rear end of the bottom car with a welding torch. The crushed cars were suspended from a front-end-loader equipped with forks. While he was cutting the rear of the bottom car, the top car fell from the forks and landed on Employee #1, who was killed.

- 20135311701 On June 5, 2006, Charco Maintenance & Welding was hired by the facility owner, Petro Operating Company, to do maintenance and repair work during a shut-down of the facility. The four-man crew was replacing some valves that were attached to a 10,000-gallon capacity surge tank. The surge tank contained saltwater that was mixed with hydrogen sulfide, carbon dioxide, and hydrocarbons. The contents of the surge tank were lowered to a level below, where the valves were attached. Employees #1 and #3 climbed the fixed ladder of the tank to one of the elevated platforms to remove one of the valves. They used a MiniCheck hydrogen sulfide detector, which was manufactured by Del Mar Scientific that changes color when hydrogen sulfide is detected. They used the detector, when the valve was initially loose from its connection, but the detector did not indicate any hydrogen sulfide. During the removal of the valve, hydrogen sulfide was released into their immediate work area. It was estimated that the airborne concentration of hydrogen sulfide was approximately 500 parts per million. Employees #1 and #3 lost consciousness from the exposure. When Employee #3 regained consciousness, he climbed down from the platform. Employee #4 climbed the ladder to help Employee #1. He removed his SCBA mask to provide clean air to Employee #1, but was almost overcome, and had to redon his mask. Employee #1 was lowered to the ground, but did not regain consciousness, and later died at the scene from his exposure. Employees #3 and #4 were not hospitalized for their exposure. Employee #2 was not exposed. It was determined that the employees had not been properly trained on the lock-out/tag-out program, handling the potential exposures to air contaminants, or rescue efforts.
- 20194229901 At approximately 1:15 p.m. on May 25, 2006, Employee #1 was welding connections of a hydraulic lift basket. He situated himself between a steel column and the underside of a steel I-beam to conduct the welding. It was at an approximate 14 ft height. After approximately 10 minutes, a coworker found him pinned between the basket control panel and an I-beam, which he had been welding. His head was caught between them with his neck pressed against the basket guardrail. The bracket supporting the control panel was bent down. He did not have a pulse. Employee #1 was taken to the hospital, where he was pronounced dead. An autopsy revealed the cause of death was from the neck compression that fractured two cervical vertebrae and the thyroid cartilage, and damaged the cervical region of the spinal cord, preventing him from breathing and resulting in asphyxia.
- 20106974701 A workplace accident occurred on Wednesday the 10th of May 2006 at approximately 1900 hours and the Division was notified at 2000 hours on 5-10-06. An investigation by DOSH was initiated on May 10, 2006 at approximately 2200 hours at the accident site located at 30282 Castle Crest Drive, Valley Center, CA 92082 for the employer Harvest Time Produce which is located at 303 Via Del Monte, Oceanside, CA 92054. Employee #1 is a truck driver supervised by manager #1 and both are employed by Harvest Time Produce. Employee #1 was electrocuted when his boom made contact with a high-voltage overhead power line. Employee #1 drove a flatbed truck with a boom attached at the back of the flatbed. The articulating platform that holds the boom is approximately 9' off the ground and the boom is approximately 19' in length. A fully extended boom (90 degrees) from the tip of the boom to the ground is approximately 28'. Employee #1 loads (half to full wood and plastic bins of avocados and kumquats) and unloads (empty plastic and wood bins) using a boom lift attached to the back of a flatbed truck (STRG, 2204, VIN # 2FZACGCS44AM76606, License Number 7E44816). The boom lift is custom made for the truck by Frank's Welding in Escondido. Employee #1 was attempting to lift bins using the boom when the end of the boom made contact with the north high-voltage power line (6,930 volts phase to phase). The high-voltage power lines, at the accident scene, was estimated to be 25' from the pavement to the north power line. Employee #1 was operating the boom while standing on the ground with a remote control device that was plugged into the boom platform. Employee #1 was standing next to a black metal cyclone fence when he was operating the boom. Employee #1 was electrocuted via the cable when the boom became energized upon contact with the high-voltage power line. Employee #1 was found by a neighbor when he went out to investigate why his power went off and saw the deceased on fire and smoking thus assuming the area was still energized he called 911. The police arrived on scene used a fire extinguisher on the deceased. SDG&E arrived on scene to de-energize the power lines so the boom that was entangled in the north power line could be separated and the line repaired. Harvest Time Produce pick up bins of kumquats and avocados that have been harvested

by other employers and then transport them down on flatbed trucks to their packing house in Oceanside, California. Harvest Time Produce transports, boxes, and ships avocados and kumquats to buyers worldwide.

- 20148889701 At approximately 11:30 a.m. on April 27, 2007, Employee #1 was working from an aerial lift, JLG Model Number 400S, Serial Number 30079117, approximately 21 feet above ground, welding steel bracing under the ceiling of a commercial building under construction. A coworker noticed that Employee #1 seemed to be not moving and blue in the face. Employee #1 was lowered to the ground and cardio-pulmonary resuscitation started but was unsuccessful. Employee #1 was pronounced dead at the scene, apparently due to being caught between the aerial lift and a brace. The aerial lift was later tested and problems were identified with the control stick which controlled upward movement of the boom. The control stick would not self-center or stop movement of the boom when released slowly as required by the manufacturer. Examination of the control stick found that hardened and compacted granular material built up on the centering ring and spring prevented the control stick from centering. There was also an absence of grease or lubricant on the centering ring and spring. Once the granular material was removed, the control stick functioned properly and self centered.
- 20064349201 April 24, 2006, A trade contractor, a crew of two (owner + 1 employee), were working for a farmer on an irrigation project. The contractor was boring a hole and installing pipe under highway 64, a mile west of Webbers Falls, Oklahoma. The crew heard about pending bad weather and decided to pack up and leave. At about 1:35 PM, the crew was moving the welding cart and bottles over to the trailer, using the excavator. Though, alerted to the close overhead power lines, the boom of the excavator made contact with one of the lines. Employee #1, who was on the ground by the cart, was electrocuted.
- 20090178301 On April 10, 2006, Employee #1 was on a catwalk, welding on equipment that was not locked out. As he was working, the air pressure relief valve of the blow tank he was working on released black liquor (a waste product of the chemical pulping process) and steam, forcing him against the guardrails. The guardrails broke and gave way, and Employee #1 fell to another catwalk 30 feet below. He was killed.
- 20176260601 At approximately 11:22 a.m. on April 4, 2006, Employee #1, a welder, and a coworker, an assistant, were cutting and plugging a 30-in. steel water line in an excavation approximately 15 ft deep. After a section was cut out of the 30-in. water line, Employee #1 and the coworker finished the welding of the plug on the dead end of the water line. The water flow through the line was reestablished that resulted in a pipe becoming separated and striking Employee #1, killing him. Water began flooding into the excavation site. The coworker was able to exit the excavation without injury.
- 20067584101 On March 23, 2006, Employee #1 was welding steel braces onto the inside wall of the warehouse building for the overhead crane hoist to be installed. Sparks ignited the insulation material, causing a flash explosion which lasted only a few minutes. Employee #1 sustained first, second, and third degree burns to body and died four days later as a result of the injuries.
- 20099559501 Employee #1 had been welding gondola boxes. A coworker left the work area, and upon her return found the Employee #1 on the floor. Employee #1 was pronounced dead at the hospital. The cause of death was a heart attack.
- 20206428301 On December 9, 2005, Employee #1 was supervising a maintenance crew that was working on a dredge. The maintenance employees were chipping away ice at various locations where welding was to be performed. At the 9:00 a.m. break, the Captain of the dredge noticed that Employee #1 was missing. The Captain immediately initiated a search, and called 911 for assistance from rescue personnel. The body of Employee #1 was recovered from the water at approximately 3:45 p.m., on the following day. There were no witnesses to the events that led to his disappearance, and death. He was not wearing a personal flotation device.

- 20053031901 On November 22, 2005, Employee #1 was working at a firm that performed welding jobs and other repairs, when he sustained a heart attack and died.
- 20176246501 At approximately 12:30 a.m. on November 21, 2005, Employee #1 was working in an open bay and finished tack welding a hand rail. He began replacing his lenses to clear ones when he passed out. Employee #1 died of a heart attack.
- 20060312401 On November 4, 2005, Employee #1 was working at a construction site, welding on a slab at grade level. At the same time, a coworker was driving a forklift to move columns at the site. The forklift operator was moving in reverse, when he struck Employee #1, killing him. The investigation revealed that the day of the accident was the first day of employment, and the accident occurred within three hours of the beginning of the work day.
- 20114730301 On October 04, 2005, Employee #1 was a full-time payroll employee, with no other contracts, working as a carpenter for a general building contractor, who had Employee #1 and three coworkers preassembling and installing panelized roofing assemblies onto a tilt-up building under construction. Prior to the installation of the panels, wood bracing was installed on the north building wall to act as a position stop for the first panel. The first panel was erected into position, followed by the second panel. The first panel, though, was not welded or bolted to its attachment points to prevent shifting before the second panel was erected and nailed to the first panel. In addition, the second panel was not connected by welding or bolting to its attachment points. The third panel was erected into position and pressed against the second panel, when, without warning, but with a loud noise, the first and second panels collapsed and fell. At that point, the first coworker turned and saw Employee #1 standing mesmerized on the center beam. Employee #1 then lost his balance and fell, head-first, behind the panels to the concrete floor below. Prior to the collapse, this coworker had seen Employee #1 climb to the roof without any fall protection. Less than two minutes later, the panels fell. Two other coworkers observed Employee #1 walking on the east end of the roof panels near the building center beam for approximately two minutes, when they heard a loud noise and saw the panels fall, followed by Employee #1. Employee #1 fell approximately 30 feet. He was killed.
- 20035486801 On September 19, 2005, Employee #1 was installing and welding metal decking materials to support members, at approximately 24-ft above concrete, without any type of fall protection system. He fell from the roof and was killed. The ambient temperature was 94 degree Fahrenheit, and Employee #1 might have become disoriented on the hot and extremely reflective roof. Employee #1 was observed drinking several cups of water from the water cooler located on the surface, which was adjacent to the roof. Employee #1 was also reported to have gastric bypass surgery, diabetes, and arthritis. No one at the site was aware of any specific instance of drug intake that day, although several coworkers were aware of medication availability in Employee #1's personal vehicle.
- 20067549401 On September 10, 2005, Employee #1 was working from a steel joist that was approximately 27-feet above a concrete floor. Simultaneously, a coworker was being raised by a Lull boom that acted as a working platform for welding steel plates to the joist. The plates were attached to prep cast concrete walls. As the boom was being raised it struck the joist that Employee #1 was on, causing him to fall to the concrete floor. Employee #1 was killed.
- 20037366001 Employee #1 was in the process of installing an air regulator. Later in the work day he began welding on a corner section of black iron pipe while 8 feet high on a scissors lift platform. He was observed lifting up his helmet, looked upward, then fell, feet first through the scissors lift rails to the ground. EMS responded and he died at the scene.

- 20071260201 On August 28, 2005, Employee #1 was part of a seven man crew working on a pre-cast concrete building. A header, hollow core panels, and pre-cast wall panels were put in place. Employee #1 was dragging his welding leads to the wall panel when the header came down. The east wall gave way causing the building to collapse on top of him. It appears some field modifications were made during the construction deviating from the engineering plans. Employee #1 was killed.
- 20055404601 On August 12, 2005, Employee #1 was welding a unit in-place to an oil rig. He was tied off to a blow-off pipe. The blow-off pipe broke off falling overboard and carrying Employee #1 underwater. Employee #1 drowned.
- 20245006001 The deceased was a versatile employee who could do various jobs at the company which manufactures open utility trailers. At the time of the accident the deceased was working in a part of the facility, which is called the component room, where he was welding trailer gates. The deceased was welding with a Wire Feed, Arc Welding Machine, when the accident occurred. There was another employee which was also working in the component room, at the time of the accident, but he did not actually see the accident because he had is back towards the deceased as he was doing his work. This employee said that he heard the deceased cry out, and when he turned around the deceased was on the floor. Employees ran to the component room to see what happened, 911 was immediately called and two employees started administering CPR. When the Rescue Unit arrived they took over the CPR and the deceased was transported to the hospital. Immediately after the accident, the company conducted an investigation into the accident and they found that the welding machine was in the on position, and they also found that the 50 Amp electrical breaker, which served the circuit to the welding machine, had tripped. It was also observed that the deceased did not have his welding hood on and the welding gun was not in his hand, but he did have his work gloves on. The OSHA investigation into the accident revealed that the electrical conductors (2 hot and 1 neutral) inside of the male attachment plug for the welding machine were not securely connected to their terminal points. Visible evidence of burns inside of the attachment plug, and melting of the individual strands of the neutral conductor, indicated that the neutral conductor came out of its terminal point inside of the attachment plug and it made contact with a hot (energized) wire that was also inside of the attachment plug. This contact allowed current to flow through the neutral conductor and back down to the equipment grounding attachment location which was on the metal frame inside of the welding machine. The frame of the welding machine became energized and so did any metal parts of the welding machine that were in contact with the metal frame. The welding machine was sitting on the floor next to a tin wall when the accident occurred. There were two (2) electrical burn marks on the tin wall which matched up perfectly with two (2) electrical burn marks that were on the side of the welding machine which was facing towards the tin wall. It is believed that the deceased made contact with the energized welding machine and he received an initial electrical shock, and he either fell against the welding machine causing it to hit the tin wall, or both the deceased and the welding machine hit the tin wall. When the energized welding machine made contact with the tin wall an electrical short circuit would have been created that would be sufficient to cause the fifty (50) Amp circuit breaker to trip out.
- 20136240701 At approximately 1:55 p.m. on July 14, 2005, Employee #1, a welding assistant, was working with two coworkers, both welders, who were to begin repair work to a V-shaped bulldozer blade that was used for oil field site clearing. The blade was not connected to a bulldozer so another coworker from the employer's sawmill operation was assigned to move the blade using a front end loader used for moving logs. The loader lifted and carried the blade to the outdoor area where Employee #1 and his coworkers were going to begin their work. Employee #1 and his two coworkers began building a frame for the blade to rest on by placing wood blocks under it, while the blade was raised by the loader. Employee #1 and one of the coworkers were stacking two blocks high, while the other coworker was stacking one block high. Employee #1 was working near the front of the raised blade and was positioned under it, attempting to place a block on top of another. At this time, the blade fell. Employee #1 was crushed between the blade and the bottom block. He suffered a head fracture and was killed.

- 20015099301 On June 28, 2009, Employee # 1 and a coworker were trying to move 2,000 lb Industrial Hydro Traveler water cannon which was being repaired, back into the work garage at the end of the work day. The Hydro Traveler consisted of an 11 ft high by 32 in. wide frame, supported, by a 6.5 ft diameter reel filled with an irrigation hose. It had a single steering wheel and two wheels on a 6.5 ft long rear axle. The rear axle had been removed for welding repairs, leaving only the single front steering wheel. The rear of the vehicle was supported by two stationary jack, standing 32 in. apart. After lifting the rear frame off the stationary jack stands, the two employees used a steel H-Beam as an extender block between the saddle and the load being lifted. The unit toppled over as they moved the top heavy and unstable unit backwards into the garage. Employee #1 was fatally struck on the head between the hose reel and a portable welding unit on the side of the garage bay.
- 20082316901 On June 27, 2005, Employee #1, who worked in the yard as well as in the shipping and receiving area started work at 7:00 a.m. He delivered some material off and on for the first 4 hours of his shift and worked outside on steel beams. Employee #1 was cutting material with an acetylene torch and he was welding steel beams in his spare time. He welded one beam and cut one beam for one job. On the second job he cut 2 beams but did not start welding the 3rd beam for the job. At noon, Employee #1 went off site for his 30-minute lunch break. At 12:30 p.m. he returned to work and worked in the warehouse for about 0.5 hour. Employee #1 then worked on the steel beams outside and collapsed at 1:30 p.m. On June 27, 2005, temperatures in the Rockford area ranged from 69 - 95 degrees Fahrenheit. At the time of Employee #1's collapse, the temperature in the region was 93 degrees Fahrenheit with 38-percent humidity. The calculated heat stress index for these conditions was 95 degrees Fahrenheit. On September 26, 2005, the Rock County Coroners' report was received. The cause of death was a differential diagnosis between heat, which induced death and dilated cardiomyopathy.
- 20117778901 At approximately 7:50 p.m. on June 06, 2005, Employee #1 was welding on an excavation bucket. The bucket fell on him and a tooth of the bucket crushed his head, killing him.
- 20064323701 On May 24, 2005, Employee #1 and two coworkers were moving a steel flow line that was 121 feet long and weighed approximately 2,000 lbs. The steel pipe was being relocated from its original location to a trench running from a well to production equipment. One end of the flow line was hoisted by an A-frame winch truck with three chain slings suspending it, while the other end was lifted by a backhoe loader bucket with three chain slings. Employee #1 was guiding the section of line hoisted by the backhoe. As the coworkers operated the winch truck and the backhoe, traveling towards the trench, a parked welding truck obstructed the path. Instead of moving the truck out of the way, Employee #1 instructed the welding truck to raise the pipe over its back end. As the line was hoisted higher and the truck moved over the welding truck, the east chain sling slipped from its connecting hook and landed on top of the backhoe. Employee #1 was struck by the line on the right side of his head and then proceeded to fall on his chest, coming to rest on his neck. Employee #1 was pronounced dead due to his injuries. The accident investigation revealed that the east chain slipped from the attachment hook on the backhoe bucket due to the backhoe being angled across the pipe and its bucket being raised and tilted up to provide the clearance over the truck. In addition, Employee #1 was not wearing a hard hat and had no material handling training.
- 20000195601 On January 28, 2005, Employee #1 and a coworker, both employees of APCom Power Inc., were repairing a leaking tube in a boiler at the Independence Power and Light Blue Valley Power Plant. Independence Power and Light (IPL) had a service agreement with APCom Power Inc. to service boilers and repair leaks. The contract employees were working as a two-man crew with no direct supervision by IPL. Employee #1 was the foreman and both employees were boilermakers by trade. The coworker was working at the third floor level of the boiler performing welding on casings on the outside of the boiler. Employee #1 had finished all work inside the boiler and was scheduled to break down the basket of the single-point adjustable suspension scaffold and remove it from the boiler. The employees ate lunch together at 4:30 a.m. and the coworker went back to the third floor at 5:00 a.m. to resume his work duties. The next break time occurred at 6:15 a.m. and the coworker returned to the bottom floor of the boiler to check in with Employee #1 when

he found him laying unconscious with his head against the boiler door, his feet straddling the scaffold basket, and the scaffold partially collapsed on top of him. The rollers of the scaffold mast were lying just below his navel, his thighs were between the top rail and mid rail of the work cage, and the hoist motor and motor mount were positioned at his knees. The coworker found an IPL employee and emergency services were called. The employees returned to the boiler and attempted to free Employee #1 from the scaffold. The coworker operated the scaffold hoist to take the slack out of the wire rope and lift the scaffold mast, motor, and motor mount from Employee #1's body. Another employee, an IPL shift supervisor, administered CPR to Employee #1 but never got a response. The Fire Department arrived at the scene at 6:24 a.m. followed by the American Medical Response ambulance service at 6:29 a.m. Employee #1 was transported to MCI hospital by ambulance where he was pronounced dead. An autopsy was conducted. The coroner's report indicated that the victim died of mechanical asphyxia from being trapped by the partially collapsed scaffold.

- 20151025201 On November 9, 2004, at 1:22 pm, an explosion and fire occurred in Walnut Creek, California when Employee #1, an excavator, struck a petroleum line. A representative of the Mountain Cascade, Inc. notified the Divisions. The East Bay Municipal Utility District domestic water main required excavation of a 15-ft deep trench to set the ground support systems, and the placement of a 72 in. by 40-ft water line segment with fit test and welding of the water line. The petroleum line was carrying gasoline at the time it struck the line; the pressure was estimated to be 974 psi. When the line was punctured, the pressurized fuel was ignited by the welding operations. Five employees died, and four sustained serious burns and remain hospitalized.
- 20151024501 At approximately 1:22 p.m. on November 9, 2004, an explosion and fire occurred when a Mountain Cascade, Incorporated excavator struck a 10-inch Kinder Morgan Energy Partners petroleum line. The San Ramon Valley Transmission Improvement Project (East Bay Municipal Utility District's domestic water main) required excavation of a 15-foot deep trench, setting of the ground support systems, and placement of 72-inch by 40-foot-long water line segments with fit-up and welding of the water line. The 10-inch petroleum line was carrying gasoline at the time of penetration, and was estimated to be at a pressure of 974 psi. When the line was punctured, the pressurized fuel was ignited by the welding operations. As a result of the excavator's puncture of the petroleum line, Employees #1 through #3 were killed and Employees #4 and #5 sustained serious burns and were hospitalized.
- 20244013701 At approximately 11:45 a.m., on November 03, 2004, Employee #1 was welding with Employee #2. Employee #2 had to weld more on the 8-ton Steel I-Beam, but had to have the I-Beam laid down. Employee #2 motioned to another employee, the crane operator, to move the overhead crane. The other employee, the crane operator, lowered the chain down. Employee #2 was handing the chain to Employee #1 as he stood behind the 8-ton Steel I-Beam took the chain and held them close together while the crane operator trolled the chain in. Employee #2 grabbed the hook of the chain with his right hand and the slack with his left hand. As Employee # 2 was handing the chain over the I-Beam, it started to tip over in the direction of Employee #1. Employee #1 was between two 8-Ton, I-Beams when the I-beam in front of the employee fell on Employee #1, crushing the employee. Employee #1 died.
- 20074170001 At approximately 1:47 p.m. on October 26, 2004, an employee was working with a coworker setting up for a welding job that had to be completed on pipe brackets. The employee was going to get his welding hood and apron. According to the coworker, the employee walked behind him, and he heard something hit the ground. The coworker turned around and saw the employee lying on the ground. The coworker called for help and the on site paramedic arrived, and the employee was connected to a AED. Advanced life support was started and then the employee was transported to Albany Medical Center, where he was pronounced dead. According to the Albany County Coroner, the employee passed away from Cardiac arrest caused by coronary myopathy. The coroner stated that the cause of death was due to natural causes and not job related.
- 20179924401 At approximately 9:45 a.m. on October 15, 2004, Employee #1 and Employee #2, maintenance mechanics, were performing some welding and repair work on the dock leveler inside a dock-pit, 13 in. high by 70 in. wide by 84 in long, below a ramp plate, approximately 1500 pounds. The dock's electric

power was de-energized and hydraulic hoses were disconnected prior to repair work. In the absence of power, a chain sling and a crane were used to lift the ramp plate upwards so that they could crawl under and work inside the dock-pit. They were lying on the leveler unit inside the pit horizontally with their backs up and their heads down facing west when the ramp plate fell on their backs. Employee #1 died in the pit and Employee #2 was hospitalized and died later.

- 20021155501 On October 10, 2004, Employee #1 returned to the well site to perform some contract welding, after visiting the site and scoping out the work on the first day. The work site was a drilled well, a shallow scale, where the crews already rigged down. The monkeyboard platform was being modified and upgraded, and replaced on the rig, which the employer recently acquired. Employee #2 was onsite to help with the welding work and review of the work. No other workers were present on the day of the incident. The rig derrick was telescoped down and laid over horizontally. Some confusion existed as to why the steel platform was not tied back and secured in the upright position. Employee #1 reportedly reached up to grab a hold to reposition himself and the platform fell over suddenly. Employee #1 was struck, being in a bent backward body posture. He was crushed and died soon after. Employee #2 was also struck and sustained temporary lower-body paralysis. He was treated at the hospital in the intensive care unit. The drilling employer had a written safety program, which addressed lockout and tagout hazards.
- 20055352701 At approximately 5:00 a.m. on September 20, 2004, Employee #1 was working with a DART welding machine. This machine measures approximately 60 ft by 60 ft and moves on steel tracks that are supported 2 ft above the floor. Approximately every 45 to 60 minutes, the machine is moved along the rails about 6 to 7 ft into a new working position. The working portion of the machine (located within and traveling perpendicular to the tracks) performs six simultaneous welds on the bottom of a barge hull. Employees occasionally work within the rails during welding operations, either to the north or south of the DART welding. When the DART is ready to move to a new position, the DART operator is required to ascertain the location of any other employees and ensure that they leave the location between the tracks. A bell sounds when the DART actually begins to move (when the motor circuit is activated). The bell does not provide any adequate warning time for potentially exposed employees to clear the area. The vertical building columns located a few inches from the DART welding machine posed a "caught-between" hazard as the machine moved along its rails. While setting up for morning operations, the operator of the DART welding machine set it in motion towards the location of the pending operation. A few seconds later, the machine stopped moving. It was then discovered that Employee #1 had become caught between the moving DART welder and one of the building columns and was killed.
- 20055350101 At approximately 1:00 a.m. on September 8, 2004, Employee #1, a mason, was helping to form 3 feed boxes inside a rotary kiln. The kiln was 160 ft in length and 8 ft 6 in. in diameter. A coworker, a laborer, and two other employees, the masons, were nailing a feed box together, while another employee, a welder, was welding the anchors on another box. Employee #1 reported to the welder that he was going to check the brickwork towards the back of the kiln. Approximately 2 minutes later, the employees in the kiln heard sounds coming from the area of the combustion chamber. The area leading to the combustion chamber was darkened and located 20 ft away from the area where employees were working. The employees moved a light into position to view the bottom of the chamber. They saw Employee #1, who fell 25 ft from the open end of the kiln to the combustion chamber floor. Employee #1 was killed.
- 20207615401 On 26 August 2004, employees were working on the fifth floor installing insulation on the HVAC ducts and pipes. At approximately 2:00pm, Employee #1 observed the decedent lying on a pile of metal conduit which was directly in front of HVAC ducts. Employee #1 and Employee #2 approached the decedent and discovered that he was unconscious and without a pulse. Employee #3 and Employee #4 performed CPR until medical personnel arrived. The decedent was not revived and pronounced dead at 3:03 pm. Prior to the accident, the decedent was working around two HVAC ducts installing 2" insulation with an aluminum skin. The insulation was being attached to a 20-22 gauge galvanized sheet metal HVAC ducts. Employees utilized a

ProWeld International CD- 212P capacitor discharge stud welding machine with a magnetic chuck to weld AGM 2"length #4 12 gauge cup head pin to the insulation and HVAC duct. The ducts were sitting on top of a concrete pad and extended up through the roof of the building. The ducts measured 4' in width and were 1' apart. The installation of the insulation appeared to be complete on the front, back, and outer sides of the ducts. The insulation on the inner sides, in between the two ducts, was not complete. There were two pieces partially attached to the rear corners of the ducts. The aisle/work area in front of the duct measured 6'5" in width and contained piles of metal conduit. The ground cable, "C" clamp, of the welding machine was attached to the duct access panel lock. The machine was set-up for straight polarity and 80 volts. Upon closer observation of the welding machine, indications of arcing around the magnetic chuck, shaft, and nut on the "C" clamp were observed. Through the investigation, it was discovered that the decedent was not wearing gloves at the time of the incident.

- 20132059501 At approximately 11:01 hours on July 26, 2004, Franconia Township Emergency Services responded to an unknown medical emergency at H. Shoemaker Welding and Machine Shop located in Souderton, PA. A welding shop foreman was pinned between the cab of a 1978 GMC C60 dump truck and the dump bed. The employee had remained late at work that evening to weld plates onto the dump bed, where it had rusted through. The most probable scenario suggested that the foreman inadvertently activated the externally mounted lever for lowering the dump bed, pinning him between the front surface of the dump bed and the cab. The employee was killed. Appropriate lockout of hazardous energy sources on the vehicle was not performed during the maintenance activity.
- 17084094601 On June 20, 2004, an employee was assisting his son, who was CEO of company, to do a bore. He was cutting steel blocks using a ring from the inside of 24-in. diameter steel pipe as casing for a horizontal bore. The auger hung up on casing during pullout and the CEO went inside to burn off obstructions. He came out after 1.5 hours and the employee went in with hammer and wedge to knock off blocks. After knocking off blocks which had been cut, the employee asked the CEO to turn on the torch so he could cut more blocks. After about 5 minutes the employee yelled out to turn off the gas bottles and smoke started pouring out of the open end of the bore. The employee was approximately 70 ft inside the pipe when he apparently cut through his gas lines, creating an oxygen-rich fire, which burned him to death inside of the pipe. The bore was to be approximately 150 ft long for installation of a new 12-in. water line under the highway.
- 20081183401 On June 27, 2004, Employee #1, with an HVAC contractor, was performing welding operations from an aerial lift. He became caught between the lift basket and the ceiling supports. Employee #1 was crushed and killed.
- 20108531301 On May 24, 2004, Employee #1 was welding the deck caps on the of fourth floor decking. The employee fell from the edge and sustained life threatening head and internal injuries. Employee #1 was then transferred to the Kaweah Delta District Hospital, where he subsequently died from his injuries. The employee was not wearing any fall protection but there was a single line of wire rope at the perimeter of the structure.
- 20236362801 Employee #1 was welding under an 8-ft diameter brush beater that was supported on a jack. The jack dislodged and the brush beater fell on the welder. Employee # 1 was asphyxiated.
- 20038052501 On January 27, 2004, an employee was welding a six-inch piece of six in channel onto the frame of a farm wagon. A 6,300 gallon tank, used to transport crude oil from the field to the refiner, was set on the four pieces of channel located on the wagon frame. As the employee began welding on one of the channel pieces, the explosion occurred. The employee was killed.

- 20140707901 Employee #1 was welding steel plates when he fell approximately 24 feet and was killed.
- 20192308301 On December 4, 2003, Employee #1 was welding the outside of a floating roof for a storage tank. He just started his shift and welded a few inches of a seam. Employee #1 collapsed when he stood up to speak with a coworker. He died from a heart attack.
- 20235351201 On November 14, 2003, Employee #1 was welding north pre-cast wall to the west pre-cast wall at the stair tower on the first floor when the wall anchor pole was struck by the east wall being placed causing the north wall to collapse on Employee #1 causing fatal injuries. Employee #2 received injuries to his foot while escaping the area of the collapse. Employee #2 was treated for fracture but was not hospitalized.
- 20235220901 At approximately 7:30 a.m. on November 11, 2003, Employee #1, a painter, was painting an antenna base in a paint spray booth. Directly outside the spray booth were four 55-gallon barrels on a pallet that he had retrieved from a nearby storage yard with a forklift. His intent was to use the barrels to support the antenna base while he painted it. In order to use the barrels as a base, Employee #1 needed to make modifications. He approached a welder in a neighboring booth and asked if he could use the station to do some welding on the barrels. The welder permitted the request and went off to work on a nearby press brake. Using a MIG welder, Employee #1 attached two, 2-inch square legs of steel stock onto the bottom of the first barrel, which formerly contained DTE 25 hydraulic oil. While welding legs onto the second barrel, labeled FLAMMABLE, the barrel exploded. The bottom of the barrel split at its seam and it propelled upward, striking Employee #1 in his head and ricocheting off a point on a wall 10.16 feet high. The barrel landed in an adjacent welding station. The barrel had previously contained thinner, number 25 Mattos brand. Employee #1 fell to the ground and was bleeding profusely. He was transported to the University of Maryland Shock Trauma Center in Baltimore, Maryland, where he died from massive trauma to his head.
- 20128163101 At approximately 7:23 a.m. on November 10, 2003, Employees #1 and #2 were working in a dry 72-in water pipe. The work involved welding the pipe sections together. Employees #1 and #2 were approximately 300 ft from the entrance when a flash fire occurred. Employees #1 and #2 walked 300 ft back to the entrance manhole and were assisted in getting out of the pipe by a neighbor who heard the explosion and brought a ladder. Employees #1 and #2 had burns over 75-80 percent of their bodies. They were hospitalized. Employee #1 died from his injuries on November 11, 2003. The source of ignition and equipment used were unknown.
- 20178058201 A shoring frame fell from the eighth floor landing platform while it was being rigged to fly from the eighth floor to the eleventh floor. The frame fell on an employee who was welding from a zoom boom near the second floor below the platform, killing him.
- 20128162301 An employee had just finished welding on a bar joist. He disconnected his lanyard and stoop up on the girder. He began walking on the girder toward a telescopic aerial lift when he stumbled and fell approximately 35 feet to the lower level. He died as a result of his injuries.