3. Crushed by Trackhoe Bucket

A 28-year-old construction foreman was killed after he was struck by the bucket of a track hoe. The employees were working on a bridge renovation project that was in its beginning stages and would eventually replace the entire top portion of a concrete-and-steel bridge originally built in 1930. On this day, the foreman informed a track-hoe operator and several employees that two racks holding oxygen and propane cylinders were to be moved from the south to the north side of the river. The cylinders were to be used in the torch-cutting process on steel and rebar once they were moved. While the foreman went to the north side, two employees loaded the rack of cylinders into the back of a pick-up truck using a rigging system attached to the rack and to the bucket of the track hoe. The rack was lifted by the bucket and placed in the back of the pick-up. As the cylinders were being unhooked from the slings, the foreman returned and stated he wanted to determine if another rack of cylinders would fit into the back of the truck. The track-hoe operator moved the bucket over to the right of the truck and placed it approximately two-to-three feet above the employees in the truck and just off to the right. The foreman was standing in the truck bed beside the cylinders with his back to the bucket and boom with a tape measure to measure the width of the truck. The track-hoe operator decided to disengage the control joysticks for the boom and bucket, and he reached for the function-control lever which was located low in the cab on his left. Apparently his jacket caught the left joystick, causing it to be pushed down and left. He heard someone yell to move the bucket and looked up to see that the bucket had hit the foreman in the upper back, pinning him to the rack of cylinders in the truck. The injuries to the foreman were fatal.

TOSHA Citation(s) as Originally Issued

Citation 1

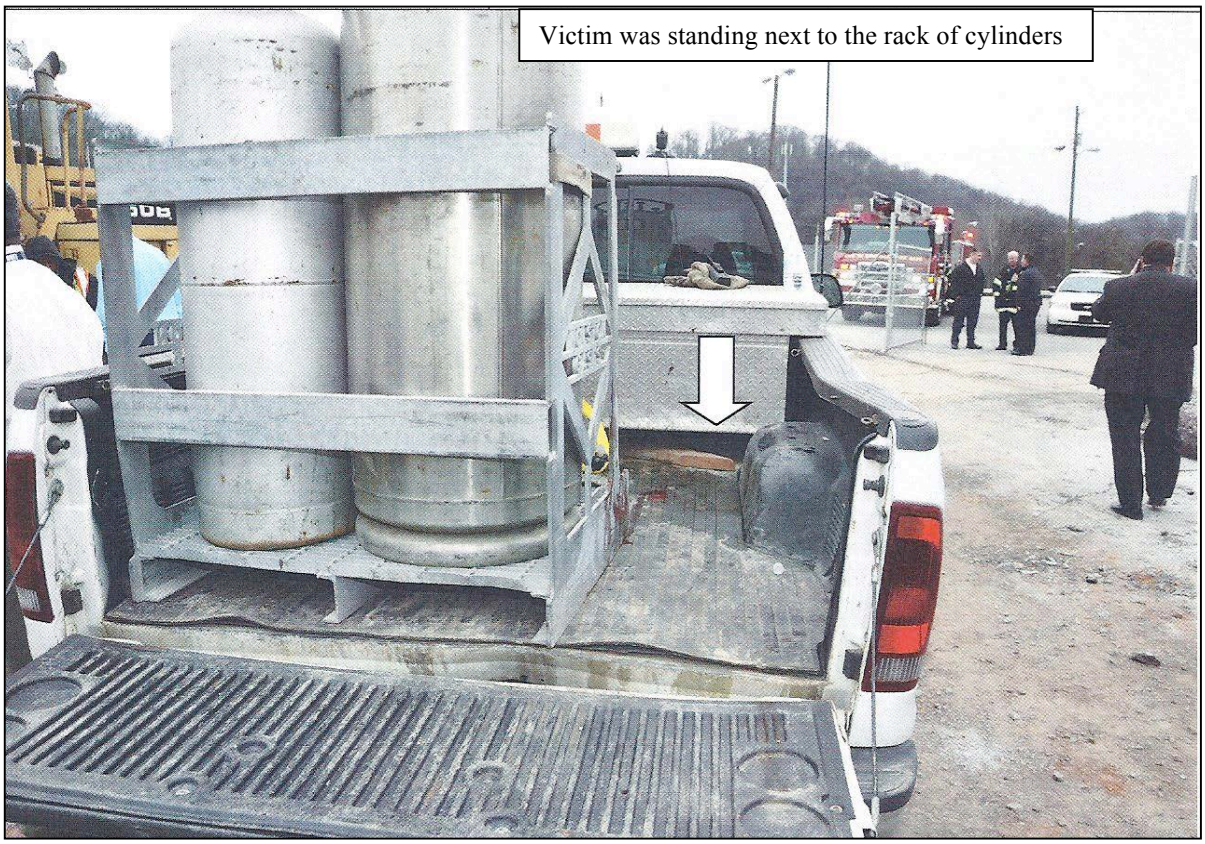
Item 1a 1926.20(b)(3)	Machinery, tools, material, or equipment which was not in compliance with the applicable requirements of 29 CFR 1926 was not either identified as unsafe by tagging or locking the controls to render them inoperable or physically removed from the place of operation. (Front end loader was allowed to be operated in reverse while the reverse signal alarm was not working.).
Item 1b 1926.602(a)(9)(ii)	Earth moving or compacting equipment which had an obstructed view to the rear was operated in reverse gear. Such equipment did not have in operation a reverse signal alarm distinguishable from the surrounding noise level, nor a signal that it was safe to operate in reverse gear. (Front end loader was operated in reverse without having an operational reverse signal alarm).
Item 2 1926.20(b)(4)	The employer permitted employees who were not qualified by training or experience to operate equipment and machinery. (Track hoe operator not trained in proper steps to disable the hydraulic system to prevent unintentional movement of the boom).
Item 3 1926.28(a)	Appropriate personal protective equipment (PPE) was not worn by employees in all operations where there was an exposure to hazardous conditions. (Front-end loader operator did not wear a seat belt.)
Item 4 1926.250(a)(1)	Materials stored in tiers were not stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse. (Old piping removed from the bridge was stacked in a

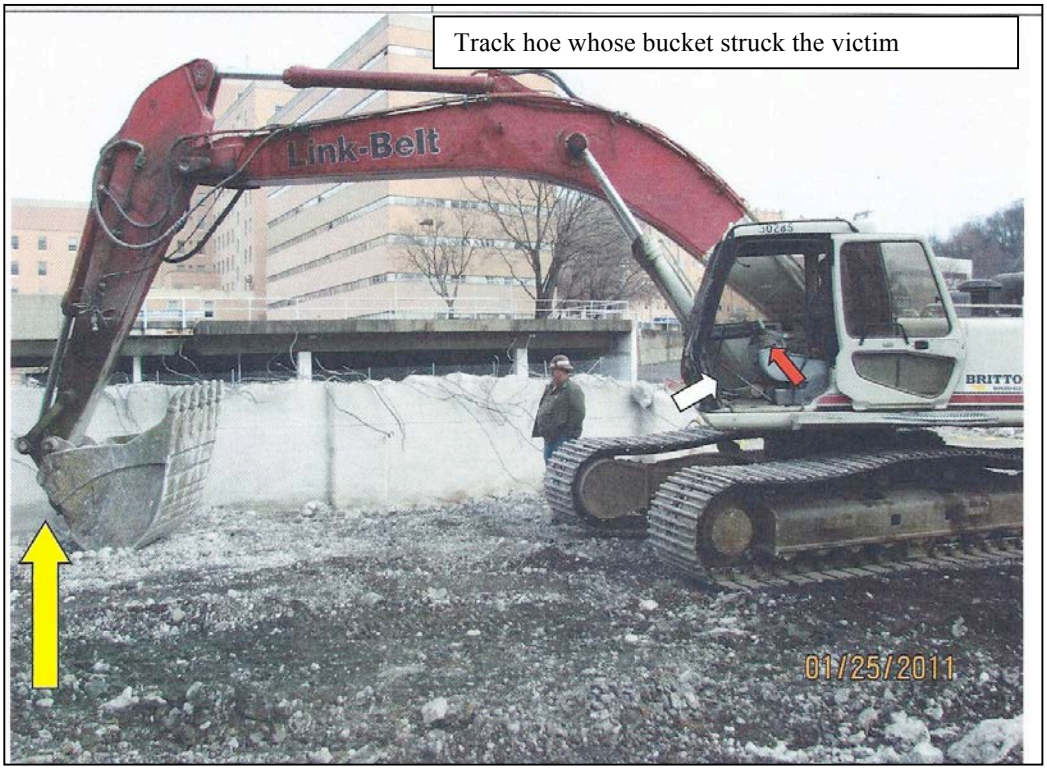
	manner that could allow it to roll onto or strike employees.)
Item 5a 1926.501(b)(1)	The employer did not ensure that each employee on a walking/working surface with an unprotected side or edge which was 6 feet or more above the lower level was protected from falling by a guardrail system, safety net system, or personal fall arrest system. (South and northeast ends of the bridge.)
Item 5b 1926.502(b)(1)	The employer did not ensure that the top edge height of top rail or equivalent guardrail system members were at 42 inches plus or minus 3 inches above the walking/working level. (Northeast end entrance to the bridge [35 in.], northeast side at end of north entrance [30 in.], northwest side at end of north entrance [28.6 in]).

Citation 2

Item 1a 1910.134(e)(1)	The employer did not provide a medical evaluation to determine the ability of an employee to use a respirator before the employee was fit-tested or required to use a respirator in the workplace. (N-95)
Item 1b 1910.134(f)(1)	The employer did not ensure that each employee required to use a tight-fitting facepiece respirator passed an appropriate qualitative fit test or quantitative fit test. (N-95)
Item 1c 1910.134(k)(1)	The employer did not provide effective training for employees required to use respirators. (N-95)
Item 2 1926.150(a)(4)	Defective firefighting equipment was not immediately replaced. (Discharged fire extinguisher in back of work truck)
Item 3 1926.152(g)(1)	In service and refueling areas, flammable or combustible liquids were not stored in approved closed containers, in tanks located underground, or in above-ground portable tanks. (Plastic diesel containers with no caps)
Item 4 1926.352(d)	Suitable fire extinguishing equipment was not immediately available in the work areas where welding, cutting or heating was being performed. (Where oxygen and propane torches were used to cut steel and rebar.)
Item 5 1926.105(a)	Stairways or ladders were not provided at all personnel points of access where there was a break in elevation of 19 inches (48cm) or more, and no ramp, runway sloped embankment, or personnel hoist was provided. (Three-foot elevation change under the bridge.)
Item 6 TDLWD Rule 0800-1-3-.05(2)(a)	When an authorized government representative asked for records kep under this rule, the employer did not provide copies of the records within four (4) business hours. (2010 and 2011 OSHA 300 logs not provided for 8 days)

See Photos on Next Page


Victim was standing next to the rack of cylinders


Track hoe whose bucket struck the victim
Link-Belt
01/25/2011