



United States of America  
**OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION**  
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SECRETARY OF LABOR,

Complainant,

v.

AUSTIN BRIDGE AND ROAD, L.P., and its  
successors,

Respondent.

OSHRC DOCKET NO. 05-1376

**APPEARANCES:**

For the Complainant:

Danielle Jaberg, Esq., Carlton Jackson, Esq., U.S. Department of Labor, Office of the Solicitor, Dallas, Texas

For the Respondent:

Steven R. McCown, Esq., Jason R. Dugas, Esq., Littler Mendelson, Dallas, Texas

Before: Administrative Law Judge: James H. Barkley

**DECISION AND ORDER**

This proceeding arises under the Occupational Safety and Health Act of 1970 (29 U.S.C. Section 651-678; hereafter called the "Act").

At all times relevant to this action, Respondent, Austin Bridge and Road, L.P. (Austin Bridge) was installing concrete traffic barriers along I-30 in Dallas, Texas. Austin Bridge admits it is an employer engaged in a business affecting commerce, and is therefore subject to the requirements of the Act.

On February 20, 2005, one Austin Bridge employee was killed and another injured when the two were crushed between a stationary flatbed truck trailer and truck mounted crane. Upon learning of the accident, the Occupational Safety and Health Administration (OSHA) initiated an investigation of the incident. As a result of that investigation, OSHA issued a citation to Austin Bridge alleging violation of §5(a)(1) of the Act. By filing a timely notice of contest Austin Bridge brought this proceeding before the Occupational Safety and Health Review Commission (Commission). A hearing was held in Arlington, Texas on May 10, 2006. During the hearing, the Secretary was granted leave to amend her complaint (Tr. 9, 175). Briefs have been submitted on the issues, as amended, and this matter is ready for disposition.

**Alleged Violation of §5(a)(1)**

Serious Citation 1, item 1 alleges:

Section 5(a)(1) of the Occupational Safety and Health Act of 1970: The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to the Hazard of being crushed between a Link-Belt HTC-860 60-ton crane carrier and a 45 foot flatbed trailer due to not being warned of the hazards.

At the State Hwy 12 loop expansion project located at: I-30 and State Hwy 12 Loop, Dallas, Texas 75063.

On or about February 20, 2005, at least five employees walking and working near or next to a Link-Belt HTC-860 60-ton Hydraulic Truck Crane and a 45 foot flatbed combination tractor trailer while erecting a concrete traffic barrier wall, were not protected from the hazards of being caught in-between the Crane carrier and the flatbed trailer.

AMONG OTHER METHODS, A RECOGNIZED AND FEASIBLE MEANS OF ABATEMENT TO CORRECT THIS HAZARD INCLUDES BUT IS NOT LIMITED TO:

1) Designate a storage area outside of the hazard area for the retrieval of connection bolts, nuts and angle iron by the employees;

Facts

Sammy Vaughn is a crane operator with 25 years of experience (Tr. 38). During the week prior to February 20, 2005, Vaughn, who was an employee of Maxim Crane, was working with Austin Bridge, operating a 60-ton Link-Belt 860 truck crane, which Austin Bridge leased from Maxim (Tr. 38-39). Vaughn was setting 1-1/2 miles of 30-foot concrete traffic barriers (CTB) along Loop 12 at I-30 for Austin Bridge (Tr. 40, 43, 60, 122-23). Vaughn sat in the crane cab at the rear of the carrier as it backed along the inside shoulder of the highway behind an 18 wheel flatbed tractor trailer loaded with the CTBs (Tr. 41-42, 62; Exh. C-1, C-2, C-3, C-4, C-5, C-6).

Each time the flatbed trailer moved forward, Jack Kemp, Austin Bridge's foreman, backed the crane carrier up to within 18-24 inches of the flatbed trailer's back end (Tr. 42, 130-31). Because the same engine powers both the crane carrier and the crane, the motor continues to run when the carrier is stationary (Tr. 66, 90). After moving the crane, Kemp shifted the carrier into neutral and engaged the air brakes before leaving the carrier's cab (Tr. 66, 71). He then moved to a one-ton service truck equipped with a light tower, and drove it along the inside lane of the highway, where it was protected by orange traffic barrels, until it was alongside the other equipment (Tr. 41-42, 60, 62; Exh. C-1).

David Alvarado, an Austin Bridge employee, was stationed on the flatbed trailer (Tr. 133-34). Enrique Lopez, another Austin Bridge employee, was positioned on the ground to Vaughn's right (Tr. 43-44, 86, 123, 130; Exh. C-1). Each time the crane carrier stopped and the air-brakes were engaged, Lopez

signaled Vaughn to pick up a CTB with the crane (Tr. 43-45, 54). Vaughn moved the boom over the load on the flatbed, and Alvarado attached a CTB to the boom's clamp (Tr. 43-44). The weight of the CTB on the boom engaged the outriggers, which remained extended throughout the entire operations (Tr. 90). Vaughn picked the CTB from the back of the flatbed and placed it on the road between the inside lane and the shoulder. While Lopez and the rest of Austin Bridge's crew aligned and attached the CTB (Tr. 45, 125), the 18 wheeler moved forward. Lopez then signaled to Kemp, who had returned to the cab of the carrier, to back the crane again to within 18-24 inches of the flatbed's new position (Tr. 42, 130-31). While the crew was unloading and positioning the next CTB, Kemp would hop over the traffic barriers, and move the service truck to the new position (Tr. 42, 44-45).

In addition to acting as signalman for both Kemp and Vaughn, Lopez helped align the CTB and retrieved the bolts that were used to tie the barriers together (Tr. 125). The CTB was placed between two pieces of angle iron that were attached to the previously installed CTB (Tr. 45; Exh. C-7). Jose Delgado, an Austin Bridge employee, retrieved the angle iron from the side of the crane where the outriggers were located (Tr. 47-48). At Kemp's direction, the nuts and bolts used to attach the angle iron to the CTBs had been removed from the service truck and stored on top of a tool box mounted to the back of the crane (Tr. 46-47, 82, 84, 110, 125; Exh. C-8, C-9, C-10). Lopez retrieved the nuts and bolts while standing on an iron step mounted to the back of the crane and passed the bolts to Delgado (Tr. 105, 125; Exh. C-8, C-9). Lopez and Delgado then slid the bolts through the angle iron and the CTB. The remaining crew members, Mateo Hernandez and Juan Alvarado, started nuts on the bolts, and tightened them with an impact wrench (Tr. 45, 86-87, 103, 109-10; Exh. C-1).

At some point on February 20, 2005, after moving the carrier, Kemp set the air brakes, which signaled Vaughn to start picking up a CTB (55-56, 90-91). Kemp, however, had inadvertently left the crane in reverse instead of neutral (Tr. 71). Lopez was standing on the step handing bolts to Mateo Hernandez, who was standing on the ground directly behind him, when the crane lurched backwards (Tr. 55-56, 128, 130). The movement occurred either when Kemp took his foot off the clutch, or when Vaughn attempted to move the boom, engaging the crane's throttle, which was still directing power to the carrier (Tr. 66, 68-71, 91, 151-52, 208). The crane fatally crushed Hernandez against the flatbed trailer; Lopez sustained injuries to his back and both knees (Tr. 130).

Vaughn testified that even when the crane is stationary there is a "pinchpoint" between the crane carrier and the flatbed (Tr. 63-64, 72). Because of the Link-Belt 860's lifting capacity, the crane carrier had to be close to the flatbed to safely pick the CTB (Tr. 69). However, some movement of the crane is natural as the operator lifts a heavy object (Tr. 72). The flatbed will also move somewhat as the object is

removed (Tr. 72). Therefore, the operator left 18 to 24 inches between the two pieces of equipment to provide a buffer zone (Tr. 73). According to Vaughn, there was always a possibility that a person standing in the close quarters between the crane carrier and the flatbed could be caught between the two (Tr. 72). For instance, the crane carrier could roll back when the carrier operator releases the brake (Tr. 73). Vaughn testified that the “pinchpoint” hazard is “a given” on any job, and that it is hazardous to be in any pinchpoint, including the area between the crane and the flatbed trailer (Tr. 63, 76-77, 89).

Vaughn testified that he warned Jack Kemp and Lopez to keep employees out of the area between the flatbed and the crane carrier (Tr. 53, 63, 65, 87). According to Vaughn, Hernandez had attempted to use the area as a pass through and was told to stay out of it (Tr. 53, 76, 79). During his initial interview, however, Vaughn did not tell OSHA Compliance Officer Jack Rector he warned Austin Bridge employees about the crushing hazard between the crane and the flatbed trailer (Tr. 75). Moreover, though Vaughn claimed to have warned Lopez away from the zone of danger associated with the pinchpoint, he knew Lopez generally stood on the step at the back of the crane between the crane and the flatbed to retrieve his bolts (Tr. 65). More specifically, Vaughn saw Lopez there during the lift which ended in the fatal accident (Tr. 55-56). Vaughn testified that Lopez, even though standing directly between the crane and the flatbed on a step at the rear of the crane, did not appear to be in the zone of danger created by the “pinchpoint” between the carrier and the flatbed (Tr. 64, 92).

Upon further questioning, Vaughn changed his testimony, stating that the only employee he saw during the last pick came up over the outriggers to get the bolts (Tr. 80, 91). Vaughn claimed he did not see Hernandez come behind the crane because “he was bent down” (Tr. 93). Finally he testified that from his position in the crane cab, he could not tell whether Lopez was standing on the step or on the outrigger at the side of the crane (Tr. 98). Delgado, atop the flatbed testified that he saw Hernandez grabbing nuts and bolts between the crane and the flatbed (Tr. 140-41).

Alvarado, Delgado and Lopez all testified that they were told not to get between the crane and the flatbed trailer while the crane was in motion (Tr. 120, 124, 142). None of them, however, were told to stay out of the 1-1/2 to 2 foot area between the equipment once the crane was parked (Tr. 120, 124, 142). Once the crane had stopped moving Lopez had to access the bolts stored on the crane from the area between the crane and the flatbed trailer (Tr. 84, 125-27). Lopez always used the step on the back of the crane to access the bolts. He was never instructed to climb the outriggers to retrieve them from the side of the crane (Tr. 85, 88, 126).

Rector, who is also a certified crane inspector (Tr. 146-49), introduced the operator’s maintenance manual for the Link-Belt crane (Tr. 154; Exh. R-26). The manual instructs the operator to “Always look

before you back up or better yet, post a signalman to guide you.” (Exh. R-26, p. 45 of 305). Rector admitted that the manual only recognizes a potential hazard when the operator is backing the equipment (Tr. 156). Complainant’s Exhibit C-12, the National Institute of Occupational Safety and Health (NIOSH) publication, **Building Safer Highway Work Zones: Measures to Prevent Worker Injuries from Vehicles and Equipment** suggests that:

*Road builders and maintainers can:*

\* \* \*

- Design the workspace to eliminate or decrease backing into blind spots. . . .

(Exh. C-12, p. 22). Rector testified the publication demonstrates that NIOSH recognizes a hazard during backing, and so warns operators not to back into areas where there is a potential for hitting or crushing employees working on foot (Tr. 157). Finally, Rector relied on The Association of Equipment Manufacturers’ safety manual, which states “Never travel a machine on a job site, in a congested area, or around people, without a signal person to guide you. . . . Watch for narrow spots and low clearances. Use a signal person when maneuvering in tight quarters and/or clearances are close.” (Exh. R-10, p. 2 of 2). Again Rector testified that the hazard recognized was that of the operator backing equipment into employees working on the ground (Tr. 158-59).

### Discussion

In order to prove a violation of section 5(a)(1) of the Act, the Secretary must show that: (1) a condition or activity in the workplace presented a hazard to an employee, (2) the hazard was recognized, (3) the hazard was likely to cause death or serious physical harm, and (4) a feasible means existed to eliminate or materially reduce the hazard. The evidence must show that the employer knew, or with the exercise of reasonable diligence could have known, of the violative conditions. *Tampa Shipyards, Inc.*, 15 BNA OSHC 1533, 1991-93 CCH OSHD ¶29,617 (Nos. 86-360, 86-469, 1992). A recognized hazard may be a practice, procedure or condition under the employers' control that is known to be hazardous either constructively, *i.e.* by the industry in general, or actually, by the cited employer in particular. *Pelron Corporation*, 12 BNA OSHC 1833, 1986 CCH OSHD ¶27,605 (No. 82-388, 1986). *See also; Coleco Industries, Inc.*, 14 BNA OSHC 1961, 1991 CCH OSHD ¶29,200 (No. 84-546, 1991) [Advisory (ANSI) standards may establish industry recognition]. In order to show an abatement measure's feasibility, the Secretary must show only that such precautions are recognized by “knowledgeable persons familiar with the industry as necessary and valuable steps for a sound safety program in the particular circumstances existing at the employer's worksite.” *Cerro Metal Products Division, Marmon Group, Inc.* 12 BNA OSHC 1821, 1986 CCH OSHD ¶27,579 (No. 78-5159, 1986).

The questions arising in this case are: 1) whether there is a recognized crushing hazard between a parked vehicle and an operating crane after the crane's carrier has stopped moving and its air brakes have been engaged; and 2) whether removing the connecting nuts and bolts for the CTB's from the storage area on the back of the crane would have eliminated or materially reduced this hazard.

On this record it is clear that: 1) While the crane industry clearly recognizes the hazard of being crushed in the area behind a backing crane, it does not similarly recognize a crushing hazard between two parked vehicles; and 2) While, in retrospect, it is clear that this accident may have been averted had the CTB hardware been stored elsewhere, the Secretary has not shown that, prior to this accident, a knowledgeable person familiar with the highway construction industry would have recommended the storage of hardware somewhere other than on the back of the Link-Belt crane in order to minimize employee exposure to the crushing hazard.

Rector testified that the danger of being crushed between the crane carrier and the flatbed was an obvious hazard, and was implicitly recognized by both this crane's manufacturer and in the highway construction industry (Tr. 150-54, 197-98). The evidence, however, does not support Rector's conclusion. None of the industry literature mentions a crushing hazard between parked vehicles. At the hearing, Rector admitted that Austin Bridge's safety instructions, warning employees not to get behind the crane while it was backing up, and its use of a signalman on the ground to alert employees when the air brakes were set and they could go back to work, were consistent with both NIOSH and the manufacturer's recommended practices (Tr. 178, 185-87). Nothing in the industry recommendations prohibits storing materials on a crane, or working between a parked crane and another fixed object (Tr. 189, 192). Further, Rector testified that, in his opinion, it is safe to work on foot around an operating crane as long as the crane is stopped, parked, and the outriggers are in place (Tr. 187). Neither he nor Vaughn had ever heard of a crane lurching backwards as a result of being left in gear rather than in neutral (Tr. 71, 188).

As nothing in the literature presented establishes industry recognition of a crushing hazard associated with a parked crane, Complainant's entire case rests upon the operator's testimony that he both recognized the hazard and warned Jack Kemp of the hazard. Vaughn's hearing testimony constantly shifted, was full of internal inconsistencies, and can be accorded little weight. During the original OSHA investigation Vaughn failed to tell CO Rector that he warned Kemp about a crushing hazard between the parked vehicles. Vaughn first discussed cautioning Kemp a week before the hearing, while discussing his testimony with Complainant's counsel (Tr. 75). Nor did Vaughn's actions on the worksite conform to his alleged recognition of a hazard. Vaughn testified the area between the parked crane and the flatbed formed a recognized "pinchpoint," and stated he warned Kemp to keep employees out of the area. Yet he knew

Austin's hardware was stored on the back of his crane and was accessible only from there. He saw Lopez climb up on the step at the back of the crane to retrieve hardware every time the crane stopped. His testimony and the location of his cab make clear that he watched Lopez each time he entered the "pinchpoint" to retrieve hardware and was unconcerned about it. Though, later in his testimony, Vaughn stated that Austin employees may have been coming over the outriggers to collect their hardware, it is clear that Vaughn knew Lopez was working in the "pinchpoint" between every lift.

Clearly Vaughn did not believe that the area between the parked crane and the flatbed was a "pinchpoint" constituting a recognized hazard prior to the accident. Moreover, according to Rector, in the crane industry, "pinchpoint" is a term of art referring to any area where it is possible to be caught between a moving and stationary parts of the crane (Tr. 192). The Operator's & Maintenance Manual for the Link-Belt crane states "Pinch points, which result from relative motion between mechanical parts can cause injury. Keep clear of rotating upper of moving parts." (Exh. R-26 p. 50 of 305). Thus, Vaughn's testimony that "pinchpoint" hazards are a "given" on any job is meaningless in this context.

Complainant has not established industry recognition of the cited crushing hazard, nor has it established Austin's actual knowledge of a hazard. Rector's testimony that Austin Bridge's foreman, Jack Kemp, had actual knowledge of the violation, was based solely on the hearing testimony of Sammy Vaughn (Tr. 163-182). Prior to the hearing Rector had no reason to believe that Kemp had actual knowledge of any crushing hazard (Tr. 182, 184). Kemp did not confirm Vaughn's story during his interview with Rector. He was not called to the stand as a witness for Complainant. None of the employees testifying for Complainant supported Vaughn's story, *i.e.*, that he warned Kemp to keep employees out of the area between the flatbed and the crane *at all times*. Rather, each employee testified that they were warned to stay out of the area only while the crane was backing. Once Lopez gave the all clear signal, indicating the crane was parked, they believed it was safe to go back to work around the crane. None were told not to enter the area between the flatbed and the crane after the air brakes were engaged on the crane.

In conclusion, on this record, it cannot be concluded that, prior to this incident, either the industry or the Respondent recognized a crushing hazard associated with working behind an operating crane that is parked. That the crane was inadvertently left in reverse was due to an unforeseen operator error, which, to CO Rector's knowledge had not occurred before. With the benefit of hindsight, it appears that, by

taking the simple and feasible step of storing the CTB hardware elsewhere,<sup>1</sup> this accident could have been avoided. However, nothing in this record suggests that, prior to this accident, safety personnel familiar with the crane industry would have recognized such a step as necessary for a sound safety program in the circumstances existing at Austin's worksite.

The Secretary failed to make her prima facie case, and this matter must be dismissed.

**ORDER**

1. Serious citation 1, item 1, alleging violation of §5(a)(1) of the Act is VACATED.

/s/  
James H. Barkley  
Judge, OSHRC

Dated: August 2, 2006

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<sup>1</sup> Vaughn testified that he had never worked on another CTB project where the hardware was stored on his crane (Tr. 94). On other jobs where Vaughn had hoisted CTBs, piles of hardware were laid out on the ground every 30 feet or so (Tr. 48-49). Both Lopez and Delgado testified that they had worked on other CTB projects where the hardware was stored on a separate truck or backhoe, none where it was kept on the crane itself (Tr. 116, 129).