

United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1924 Building - Room 2R90, 100 Alabama Street, SW
Atlanta, Georgia 30303-3104

Secretary of Labor,
Complainant,
v.
Chicago Bridge & Iron,
Respondent.

OSHRC Docket No. **10-2318**

Appearances:

Mary L. Bradley, U. S. Department of Labor, Office of the Solicitor, Cleveland, Ohio
For Complainant

Carl B. Carruth, Esq., McNair Law Firm, P.A., Columbia, South Carolina
For Respondent

Before: Administrative Law Judge Sharon D. Calhoun

DECISION AND ORDER

Chicago Bridge & Iron (“Chicago Bridge”) builds water towers for municipalities. On October 13, 2010, Occupational Safety and Health Administration Compliance Officer Rick Burns conducted an inspection at a work site located 1111 Gray Drive, Pickerington, Ohio, where Chicago Bridge was constructing a water tower. Based upon Burns’s inspection, the Occupational Safety and Health Administration (“OSHA”) issued one citation containing one item to Chicago Bridge on November 2, 2010.

Item 1 of Citation No. 1 alleges a serious violation of 29 C. F. R. § 1926.550(a)(9), for failing to barricade the swing radius of the rear of a crane’s rotating superstructure so as to prevent employees from being struck or crushed by the crane. The Secretary proposed a penalty of \$2,550.00 for this item. Chicago Bridge timely contested the citation and contends no employees were exposed to a hazardous condition and no one had access to the zone of danger.

The undersigned held a hearing in this matter on April 1, 2011, in Columbus, Ohio. At the conclusion of the hearing Chicago Bridge moved to dismiss the citation and notification of penalty,

asserting the Secretary had failed to establish employee exposure. The parties filed post-hearing briefs.

For the reasons discussed more fully below, the undersigned affirms Item 1 of Citation No. 1 and assesses a penalty of \$1,500.00.

Jurisdiction

The parties stipulated that jurisdiction of this action is conferred upon the Occupational Safety and Health Review Commission pursuant to Section 10(c) of the Occupational Safety and Health Act of 1970 (“Act”). The parties also stipulated that at all times relevant to this action, Chicago Bridge was an employer engaged in a business affecting interstate commerce within the meaning of Section 3(5) of the Act, 29 U.S.C. § 652(5) (Tr. 7).

Background

Chicago Bridge builds various types of water towers (Tr. 63-64). Its employees assemble fabricated parts of the water towers onsite (Tr. 65). The water tower being built at the Pickerington work site was the 750 Water Spheroid (Tr. 64). A crew of six was utilized to build the water tower (Tr. 65). The tank of the water tower under construction was approximately 90-100 feet tall (Tr. 72). At the time of the OSHA inspection by Burns, the upper ball of the water tank had not been put in place (Tr. 71). When constructing the water tower, employees go up the tank in the morning and remain there until lunch (Tr. 73). Employees remain in the tower until they are radioed to come down (Tr. 93).

Two cranes, a Derrick crane and a Mantis crane, were used by Chicago Bridge at the Pickerington work site (Tr. 75). The Derrick crane was used to build the water tower and was the primary crane used on the work site (Tr. 76, 78). The Mantis crane was used to move cylinders from one location to another (Tr. 75, 78).¹ The superstructure of the Mantis crane extended 6 to 7 feet (Tr. 85). The Mantis crane is the subject of the citation at issue in this case.

Compliance Officer Burns conducted a programmed inspection of Chicago Bridge at its Pickerington work site on October 13, 2010. He arrived at the work site at approximately 11:45 a.m. (Tr. 15; Exh. C-1). When he arrived at the work site, Burns observed employees working in the tub of a water tower, an employee standing at a trailer, and someone in the cab of the crane (Tr. 16).

¹ The silver cylinders contained carbon dioxide and the blue cylinders were air receivers (Tr. 79-80). The parties stipulated that the cylinders were empty at the time of the inspection (Tr. 102).

Burns testified he observed the crane move from the right and swing to the left (Tr. 16). An employee was connecting cylinders to the crane and moving them to the left, over the top of large pieces of steel siding. Burns testified the employee walked over to unhook each cylinder once it was landed at the new position (Tr. 16). The employee's path of travel to the new location for the cylinders was between the crane and pieces of steel (Tr. 16). As the employee traveled along this path, he came within the swing radius of the rotating superstructure of the crane. Burns observed there was no barricade around the crane (Tr. 16-17).

The swing radius barricade for the Mantis crane had been broken for approximately one week (Tr. 24; Exh. C-4). Both the crane operator and the safety manager previously had conducted inspections of the crane and documented that the swing radius barricade for the Mantis crane was broken and needed repair (Tr. 24-25). The foreman on the work site, Tracey Brown, testified he also had known the swing radius barricade for the crane had been broken since the Friday before the date of the inspection (Tr. 81-82). The swing radius of the crane was not barricaded while the crane was in use (Tr. 88). Brown directed the employees to use the crane to move the cylinders (Tr. 81-82). He testified he ordered the crane to be used even though the swing radius barricade was broken because he believed no one would be exposed (Tr. 82). Brown further testified he was inside the trailer ("shack") on a conference call while the employees were moving the cylinders with the crane (Tr. 82).

Two employees were involved in moving the cylinders. One was the crane operator, Jonathan Conn, and the other was Travis Lynn, who rigged the cylinders and signaled the crane operator (Tr. 100, 112). Conn testified he was in the cab moving the last bottle ("cylinder") when Burns arrived at the work site (Tr. 112). According to Conn, Burns was over by his car when Conn landed the last bottle (Tr. 113). Conn testified he was out of the crane before the foreman came through the walkway (Tr. 113).

Lynn testified he was the only person on the ground at the work site when the cylinders were being moved, and that moving the cylinders took five minutes (Tr. 103, 105). He testified he remained in front of the Mantis crane at all times while it operated (Tr. 108). Lynn further testified that the Compliance Officer "drove up as we were moving the last bottle," and that they finished swinging the bottle over and sat the bottle down (Tr. 104). Lynn tied the bottles off and went to get

the foreman to let him know the Compliance Officer was there. Lynn testified that Conn put the crane into position, shut it off, and then they continued doing what they were doing that morning (Tr. 104). Brown testified that when he came out of the trailer to meet the Compliance Officer, the crane was not in operation and there was no one in the cab of the crane (Tr. 83). Brown walked through the accessible area, between the crane and the walkway, when he met Burns (Tr. 88; Exh. C-8).

The Mantis crane was located in front of the blue trailer (Tr. 25, 27; Exh. C-5). Between the front of the trailer and the back of the Mantis crane was an area used as a walkway to move to and from the trailer (Tr. 22-23; Exh. C-3). As employees walked across the walkway, they could come into an area within the swing radius of the Mantis crane (Tr. 50, 51; Exhs. C-3, C-8). Burns observed the foreman walking across the walkway from the trailer in between two pieces of steel in the area where the crane was operating (Tr. 17, 31, 52; Exh. C-8). Burns also observed Lynn walking in this same area as he was moving the cylinders (Tr. 31). There was no barricade or other barrier to prevent the employees from entering into the area where the crane was located (Tr. 34).

Brown testified that Chicago Bridge has a policy precluding employees from walking around the crane when it is running. Pursuant to the policy, employees are instructed not to come near the crane while it is in use (Tr. 86).

Discussion

The Secretary has the burden of establishing the employer violated the cited standard.

To prove a violation of an OSHA standard, the Secretary must show by a preponderance of the evidence that (1) the cited standard applies; (2) the employer failed to comply with the terms of the cited standard; (3) employees had access to the violative condition; and (4) the cited employer either knew or could have known with the exercise of reasonable diligence of the violative condition.

JPC Group Inc., 22 BNA OSHC 1859, 1861 (No. 05-1907, 2009). There is no dispute here as to the applicability of the standard; that Chicago Bridge violated the standard; and that it knew of the violative condition. At issue, however, is whether the Secretary has proven that employees had access to the violative condition.

Item 1: Alleged Serious Violation of 29 C. F. R. § 1926.550(a)(9)

The citation alleges, “On the site where a water tower was being constructed, the swing radius of the Mantis crane was not barricaded where employees were walking between the steel sections and the rear of the crane.”

Section 1926.550(a)(9) provides:

Accessible areas within the swing radius of the rear of the rotating superstructure of the crane, either permanently or temporarily mounted, shall be barricaded in such a manner as to prevent an employee from being struck or crushed by the crane.

(1) Applicability of the Cited Standard

Section 1926.550 addresses “Cranes and Derricks.” Chicago Bridge used a Mantis crane to transfer cylinders from one location to another on the work site (Tr. 30, 78, 84, 103, 112). Further, the crane operator testified he rotated the crane’s superstructure when relocating the cylinders (Tr. 112). The cited standard applies to the cited condition.

(2) Compliance with the Terms of the Standard

The Secretary contends the swing radius of the Mantis crane was not barricaded. Respondent’s foreman testified the swing radius protection for the crane was broken and the crane was not barricaded (Tr. 81-82, 88). This admission establishes Chicago Bridge failed to comply with the terms of § 1926.550(a)(9).

(3) Employer Knowledge

Chicago Bridge had actual knowledge the swing radius of the rear of the rotating superstructure of the Mantis crane was not barricaded. Brown was the foreman on the site. He testified he had known the swing radius protection for the crane had been broken since the Friday before the OSHA inspection, and he had known it was broken when he ordered the crane to be used to move the cylinders on the day of the inspection (Tr. 81-82). Further, Brown testified he knew the swing radius was not barricaded at the time the employees operated the crane, rotating the crane’s rear superstructure (Tr. 88). As foreman, his knowledge is imputed to Chicago Bridge. “[W]hen a supervisory employer has actual or constructive knowledge of the violative conditions, that knowledge is imputed to the employer, and the Secretary satisfies [her] burden of proof without having to demonstrate any inadequacy or defect in the employer’s safety program.” *Dover Elevator*

Co., 16 BNA OSHC 1281, 1286 (No. 91-862, 1993). The Secretary has established Chicago Bridge knew the swing radius of the Mantis crane was not barricaded while the crane was in use.

(4) Employee Access

The Commission's test for determining access to a violative condition includes a requirement that such access be "reasonably predictable." This requirement entails a demonstration that employees will be, are, or have been in a "zone of danger." The zone of danger is the area surrounding the violative condition that presents the danger to employees which the standard is intended to prevent. To show employee exposure, the Secretary must show either that the employees were actually exposed to the violative condition or that it is reasonably predictable by operational necessity or otherwise (including inadvertence) that employees have been, are, or will be in the zone of danger.

In this case, the zone of danger is the area within the swing radius of the rear of superstructure of the crane. The evidence shows this area contained a walkway which was used to access Chicago Bridge's trailer on the work site. Although there were no measurements taken, the photographs taken by the Compliance Officer show the walkway was close to the crane's rotating superstructure (Exhs. C-3, C-8). There is no dispute this area was within the swing radius of the crane. As employees traveled along the walkway, they could come within the swing radius of the crane's rotating superstructure. The walkway was between the rear of the crane and the trailer. (Exh. C-8). Brown testified this trailer was used as his office, and that he was in his office on a conference call during the time the crane was in operation relocating cylinders. Lynn used the walkway when he went to the trailer to inform the foreman that Burns was onsite. The area where the cylinders were located was in proximity to the walkway (Tr. 29, Exh. C-5).

Compliance Officer Burns testified he observed the foreman and Lynn use the walkway located behind the superstructure of the crane, and that the crane was in operation when he observed these employees. Burns testified the employees came into the swing radius of the crane when they walked along the walkway. It appears that Burns's observations of the work site activities were made while he was approaching the work area from his car. The undersigned observed Burns during the hearing and concludes that his recollection of his observations was trustworthy. Based on his demeanor during the hearing, the undersigned finds that Burns's testimony was credible. Both the

crane operator and Lynn testified that when they observed Burns he had not yet approached the work area (Tr. 104, 112, 112). They contend however, they had completed relocating the cylinders and shut off the crane by the time Burns was on site, and that when the foreman came out to speak with Burns, the crane was not operating.

Whether or not the crane was in operation at the time Burns arrived on the site is not determinative, as Chicago Bridge admits that on the day of the inspection, the Mantis crane was used to move two cylinders from one location to the next and that the swing radius of the crane was not barricaded during this operation. Further, the evidence is clear that both Brown and Lynn were performing work activities in proximity to the swing radius of the crane. The job trailer used for work and lunch was accessible via the walkway described herein. It is undisputed the walkway was accessible and travel along the walkway was within the swing radius. Indeed, at the time of the inspection, both Brown and Lynn had used that walkway, and the compliance officer's observations show that this use was while the crane was operating. Therefore, it is reasonably predictable the walkway could have been used by anyone, including the foreman, while the crane was operating, as there were no barricades to preclude such use.

Chicago Bridge argues that no employees were actually exposed and therefore the Secretary has not established this element of her case. The undersigned disagrees. Respondent's employees worked both on top of the tower and on the ground (Exh. C-2). Exposure to a violative condition may be established either by showing actual exposure or that access to the hazard was reasonably predictable. Although disputed by Chicago Bridge, Burn's testimony reveals two employees were actually exposed. In addition, the evidence clearly shows the employees had access to the "zone of danger" of the hazardous condition. The foreman for Chicago Bridge was working in the trailer. Although Chicago Bridge asserts the foreman would not have come out of the trailer to access the walkway because he was on a lengthy conference call, this is mere speculation. Further, despite Chicago Bridge's assertion that Lynn remained in the front of the crane at all times and that he never accessed the walkway while relocating the cylinders, there was nothing to prevent Lynn from accessing the area of the swing radius of the crane if he chose to. The superstructure of the crane extended out 6 to 7 feet (Tr. 85). There was no barricade, no caution tape, nothing to put the employee on notice that there was a hazardous area. The employee could have tripped, fallen,

misjudged the distance, or simply walked right into the vicinity of the hazard, as he was in proximity to the zone of danger. Indeed, these are some of the reasons why the swing radius must be physically barricaded. While it is disputed that any of the employees actually entered the area while the rotating superstructure was operating, the purpose of the standard is to prevent such an entry. Therefore, employees in the vicinity who might inadvertently enter the “danger zone” are exposed to the hazard covered by the standard. See e.g. *Seyforth Roofing Co.*, 16 BNA, OSHC 2031, 2033, n.4 (No. 90-0086, 1994). Here, at least two employees were in the vicinity of the danger zone.

Chicago Bridge also argues that its employees were trained to avoid areas where they could come into contact with the rotating superstructure of the crane. This argument has no merit. Compliance with the cited standard cannot be achieved through employee training; the standard requires the installation of a physical barricade. There was none here.

The Secretary has established that Chicago Bridge’s employees had access to the zone of danger of the unbarricaded swing radius of the rotating superstructure. It is reasonably predictable that employees could have come into the zone of danger. Accordingly, the Secretary has established a *prima facie* violation of the standard.

The Secretary has proven each of the elements of the alleged violation. She classified Item 1 as serious. Under § 17(k) of the Act, a violation is serious “if there is a substantial probability that death or serious physical harm could result from” the violative condition. Being struck by the swing radius of the crane could cause serious injury or death. The Secretary properly classified the violation as serious.

Penalty Determination

The Commission is the final arbiter of penalties in all contested cases. *Secretary v. OSHRC and Interstate Glass Co.*, 487 F.2d 438 (8th Cir. 1973). The Commission must determine a reasonable and appropriate penalty in light of § 17(j) of the Act and may arrive at a different formulation than the Secretary in assessing the statutory factors. Section 17(j) of the Act requires the Commission to give “due consideration” to four criteria when assessing penalties: (1) the size of the employer's business, (2) the gravity of the violation, (3) the good faith of the employer, and (4) the employer's prior history of violations. 29 U.S.C. § 666(j). Gravity is the primary consideration and is determined by the number of employees exposed, the duration of the exposure, the precautions

taken against injury, and the likelihood of an actual injury. *J. A. Jones Construction Co.*, 15 BNA OSHC 2201 (No. 87-2059, 1993).

In arriving at the proposed penalty, Burns assessed the severity at low, however he testified that it should have been high. He determined the probability to be low. Because Chicago Bridge employed in excess of 1,000 employees, no reduction for size was given (Tr. 37-39; Exh. C-2). Burns also testified that no reduction for history was given because the company had received a prior citation.² Chicago Bridge benefitted from a 15% penalty reduction for good faith because the company has a good safety program (Tr. 37-39).

The undersigned finds that a high gravity is appropriate here because two employees were in the vicinity of the hazardous condition and if they had been struck or crushed, they could have been seriously injured. However, Chicago Bridge has no history of prior violations. This factor weighs in favor of a reduction in the proposed penalty. Further, Chicago Bridge had a good safety program and acted in good faith during the hearing and there is no evidence that Chicago Bridge failed to cooperate with the investigation. These good faith factors weigh against a large penalty. Considering these facts and the statutory elements, a proposed penalty of \$1,500.00 is appropriate.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Rule 52(a) of the Federal Rules of Civil Procedure.

ORDER

Based upon the foregoing decision, it is ORDERED that Item 1 of Citation No. 1, alleging a serious violation of 29 C. F. R. § 1926.550(a)(9), is affirmed, and a penalty of \$1,500.00 is assessed. It is further ORDERED that Respondent's Motion to Dismiss is DENIED.

/s/

SHARON D. CALHOUN
Judge

Date: May 16, 2011
Atlanta, Georgia

² The undersigned left the record open for the introduction of evidence of prior violations. Upon representation by counsel for the Secretary that no prior contested citation was issued by OSHA to Chicago Bridge within the past five years, and the Secretary was no longer asserting that there was a prior violation, the undersigned closed the record, by Order issued April 19, 2011.