BEFORE THE NORTH CAROLINA OCCUPATIONAL SAFETY & HEALTH REVIEW COMMISSIO 国 RALEIGH, NORTH CAROLINA COMMISSIONER OF LABOR FOR THE STATE OF NORTH CAROLINA. NC OCCUPATIONAL SAFETY & HEALTH COMPLAINANT, REVIEW COMMISSION **INSPECTION NO. 313603011** v. CSHO ID. A8319 CB&I CONSTRUCTORS, INC., and its OSHANC NO. 2010-4966 successors, RESPONDENT.

ORDER

These matters came on to be heard and were heard before the undersigned Administrative Law Judge on September 27, 2010, in Winston-Salem, North Carolina. Complainant was represented by Daniel D. Addison, Special Deputy Attorney General, Labor Section, North Carolina Department of Justice. Also present for complainant were: Dan Kavanaugh, CEHT, Safety Compliance Officer with the North Carolina Department of Labor (NCDOL), OSHA Division (NCOSH); Doug Jones, District Supervisor, NCDOL. Respondent was represented by Carl Carruth and Andrew Lax, McNair Law Firm, P.A., Columbia, South Carolina and Charlotte, North Carolina, respectively. Also present for respondent was Chad Clark, respondent's superintendent/foreman.

AFTER REVIEWING the record file; hearing and weighing the evidence; judging the credibility of witnesses; hearing the arguments of counsel; considering the post-hearing briefs¹; and, reviewing other relevant legal authorities, the undersigned makes the following:

FINDINGS OF FACT

1. Complainant is charged by law with responsibility for compliance with and enforcement of the provisions of N.C. Gen. Stat. §95-126 et. seq., the Occupational and Safety and Health Act of North Carolina (hereafter "the Act").

¹At the September 27, 2010 hearing, a briefing schedule was set so that the case would be with the undersigned for decision by January 30, 2011. Due to personal matters beyond the court reporter's control, the transcript of the hearing was not actually completed and delivered to the parties' counsel until April 25, 2011. In accordance with a new schedule, the final brief was filed with the Review Commission on September 6, 2011.

- 2. Respondent CB&I is a North Carolina Corporation, duly organized and existing under the laws of the State of Texas, which does business in the State of North Carolina, and at the time of the inspection was doing business in High Point, North Carolina. It is in the business of constructing water towers, among other things. It is subject to the jurisdiction of the Commission.
- 3. At the time of the safety inspection which is the subject of this case, CB&I was constructing a one million gallon water tower at 1404 Cedrow Drive, High Point, North Carolina (hereafter, "the work site").
- 4. On December 1, 2009, Dan Kavanaugh, a safety compliance officer with NCDOL, OSH Division, (hereafter, "the CO"), was driving past the work site. He observed a water tower under crane-construction. Pursuant to crane emphasis programs, he stopped to conduct an inspection.
- 5. At the time of the inspection, respondent employed in excess of 251 employees. Seven employees were at the work site, including its job superintendent, foreman Chad Clark.
- 6. Two city employees had also entered the job site for engineering inspection activities.
- 7. The CO properly presented his credentials and informed Mr. Clark of the reason for and the scope of his inspection. He held an opening conference with Mr. Clark and obtained permission to inspection.
- 8. During the permitted inspection, the CO took notes and photographs and interviewed employees Chad Clark, Dante Morales and Casimir Morales.
- 9. The CO conducted a closing conference with Mr. Clark on December 1, 2009.
- 10. To enforce the Act, on December 23, 2009, complainant issued the following citations:

<u>Citation 1, Item 1: Serious</u>: 13 NCAC 07F.0909(4)(h): Belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, and other parts or components that reciprocate, rotate or otherwise move were not guarded where contact by employees was possible in the performance of normal duties:

a) job site, the CET Foreman (competent person) did not ensure that drums and wire ropes on the T-4 Derrick Crane were guarded to protect the operator and employees during their normal duties.

<u>Citation 1 Item 2: Serious</u>: 13 NCAC 07F.0915(d)(1): During each shift and prior to the commencement of crane operations the competent person did not complete a visual inspection for apparent deficiencies:

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a) job site, the competent person failed to conduct a shift inspection of the three drums and cables mounted on the T-4 Derrick Crane body.

CITATION 1, ITEM 1 13 NCAC 07F.0909(4)(h): SERIOUS (Guarding Reciprocating, Rotating or Other Moving Parts or Components)

- 11. Paragraphs 1-10 are incorporated by reference as if fully set forth herein.
- 12. Respondent was using a custom-designed derrick crane for constructing the circular, concrete base of the water tower.
- 13. The crane's primary power and operator's control unit was housed in a 2-ton, metal-framed cab (Complainant's Exhibit #1, 3).
- 14. The cab contained 3 cable drums (also called reels or spools) (C#3; R#3²).
- Each drum held a tightly wound wire hoisting cable, which was strung along the 25-yard gap between the cab and into holes at the base of the water tower ("cable field") (C#5).
- 16. When the crane was engaged, the drums rotated forward or backward, moving the cables back and forth across the cable field between the cab and the base of the tower (C#4-5).
- 17. One cable moved over and back across the cable field only inches from the ground, while the other cables were about 2 feet to 4 feet from the ground, respectively (C#4; R#3).
- 18. Respondent erected a mast in the center of the base, such that the crane's three cable wires came up through the hollow mast to a towering boom (C#6).³
- 19. The boom was affixed to the mast by use of an iron collar, allowing the boom to revolve 360° above any portion of the circular wall under construction (C#6, R#1).
- 20. One cable moved the boom vertically along the mast; one cable rotated the boom around the circumference of the wall; and, the third cable traveled along the boom, through the block and tackle system and to a hook used for hoisting materials (hoist hook) and workmen between the ground and the elevated working area.

²Respondent tendered a photograph of a hoist similar to, but not the same one as it was using on the date of the inspection (R#3) for illustrative purposes.

³ After completion of the job, respondent would leave the mast behind as the central pipe of the tower.

- 21. Respondent staged construction so that each section of completed circular wall, supported the scaffolding for the next higher section of the wall to be built (R#1)⁴.
- 22. Inside the operator's metal cab, the drums were situated to the left side of the operator's chair/controls (C#1-2; R#3):
 - a. One of the drums was located in the lower part of the cab and was not physically accessible to the operator while sitting at his control panel (R#2);
 - b. The other two drums were positioned above the lower drum, one in back of the other and slightly elevated to cause separation between the cables (C#3; R#3);
 - c. Nip points existed where the cables being reeled in, touched the drum and flanges (i.e. rims of the drum that keep the cable on the spool) (C#3; R3);
 - d. Between the operator's control station and the nip points, there was no guarding (C#1, 3; R#3)
 - e. Neither the cab, the drum assembly/housing, nor the flanges effectively blocked the cab operator's access to that portion of the cable wire nearest the drum reels; and,
 - f. The foreman communicated to the CO that the operator needed to place his hands on the cable close to the drums in order to judge the tautness or the movement needed to lower or raise the boom hoist.
- 23. Respondent initially erected orange plastic safety netting along both sides of the cable field to prevent employees from coming into contact with moving cables of various heights.
- 24. Respondent left an 18-24" gap between the end of the barrier and the base of the water tower. Respondent's foreman indicated to the CO that the opening near the tower was deliberate to allow employees to cross the cable field, when the cables were not moving.
- 25. At the time of the inspection, some of the safety barriers were also disconnected and lying on the ground, one about 8 feet long.
- 26. The unguarded moving parts created the possibility of an accident, to wit: respondent's employees' fingers/hand could be pulled into the pinch points, the substantial probable result of which would be crushed or amputated fingers/hands.

⁴Respondent tendered these photographs after more work was completed on the High Point water tower, illustrating the growing number of levels being constructed.

- 27. The failure to maintain the cable field barriers between the operator's cab to the tower wall created the possibility of an accident, to wit: respondent's employees crossing perpendicular to the cable field could trip over the moving cables and fall, the substantial probable result of which would be lacerations or bruising.
- 28. Respondent knew or should have known of the hazards because:
 - a. The foreman told the CO that it was necessary for the operator to place his hand on the cables where they were winding around the drums in order to test their tension and movement;
 - b. The 18-24 inch section nearest the tower was purposely left unguarded so that respondent's employees could traverse the cable field; and,
 - c. The unguarded drums and downed barriers were in plain sight, where the foreman could or should have observed them.
- 29. The CO properly calculated the amount of Respondent's penalty of \$3,850 (Three Thousand, Eight Hundred and Fifty Dollars) according to the Operations Manual as follows:
 - a. The probability of an accident occurring was great because the operator placed his hand in the danger zone to check the movement and tension of the cables and because employees actually traversed the cable field;
 - b. The severity was high because fingers and hands could be crushed and/or amputated;
 - c. The gravity based penalty (GBP) for an accident of great probability and high severity is \$7,000 (Seven Thousand Dollars);
 - d. No reduction in the GBP was given for size, due to respondent's number of employees;
 - e. A 25% reduction in the GBP was given for respondent's health and safety program;
 - f. A 10% reduction in the GBP was given for respondent's cooperation with the CO;
 - g. A 10% reduction in the GBP was given for respondent's OSHA compliance history;
 - h. The adjustment factors totaled 45%; and,
 - I. The adjusted penalty was properly calculated as \$3,850.

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CITATION1, ITEM 2 13 NCAC 07F .0915(d)(1) INSPECTIONS: SERIOUS

- 30. Paragraphs 1-29 are incorporated by reference as if fully set forth herein.
- 31. Respondent's foreman, Mr. Clark, was not a "competent person" as defined by the Act because he was unfamiliar with North Carolina's State-specific crane standards, and, as a result, he failed to conduct a pre-operation inspection for "all apparent deficiencies" in accordance those standards.
- 32. Respondent knew or should have known of the unsafe conditions because its foreman:
 - a. Created them (i.e. 24" space between the tower wall and barricades to the cable field);
 - b. Believed that it was necessary for the cab operator to place his hand(s) on the cable close to the drums in order to judge the tautness or the movement needed to lower or raise the boom hoist); and/or,
 - c. Saw the violations in plain view.

CONCLUSIONS OF LAW

- Paragraphs 1-34 are incorporated by reference as if fully set forth herein as Conclusions of Law to the extent necessary to give effect to this Order.
- 34. Respondent is subject to the provisions and jurisdiction of the Act.
- 35. Complainant properly proved that respondent committed a serious violation of 13NCAC 07F .0909 (4)(h) and that Citation 1, Item 1 should be affirmed and respondent should pay a penalty of \$3,850 (Three Thousand, Eight Hundred and Fifty Dollars).
- 36. Complainant properly proved that respondent committed a serious violation of 13NCAC 07F .0915(d)(1) and that Citation 1, Item 2 should be affirmed and respondent should pay a penalty of \$3,850 (Three Thousand, Eight Hundred and Fifty Dollars).

Discussion

"In all proceedings commenced by the filing of a notice of contest, the burden of proof shall rest with the Commissioner to prove each element of the contested citation by the greater weight of the evidence." Rule .0514(a) of the Rules of Procedure of the Safety & Health Review Board of North Carolina.

In order to prove that the respondent committed a serious violation of a specific standard, the Commissioner of Labor must prove by a preponderance of the evidence the following elements:

- (1) A hazard existed;
- (2) Employees were exposed;
- (3) The hazard created the possibility of an accident;
- (4) The substantial probable result of an accident would be death or serious physical injury; and,
- (5) The employer knew or should have known (applying the reasonable man test developed by the Court of Appeals in Daniel Construction Co., 2 OSHANC 311, 73 N.C. App. 426 (Ct. of Appeals 1984)) of the condition or conduct that created the hazard.

As outlined in paragraphs 1-36 above, complainant successfully presented *a prima facie* case on each element necessary to affirm Citation 1, Items 1 and 2.

Credibility:

Respondent presented site supervisor/foreman, Chad Clark. Mr. Clark denied having told the CO that it was necessary for the operator to place his hand on the cables where they were winding around the drums in order to test their tension and movement. The essence of his testimony was that the derrick operator never uses the controls in the stationary cab to move the cables. Instead, he uses only a remote control, and only while standing up on the highest scaffolding where the wall is under construction. He testified that, in respondent's operation, the derrick operator never causes the cables to move until all of respondent's employees, save one, are either up on the highest scaffolding where the wall is under construction, or inside the structure, reinforcing the core by tying re-bar and/or setting mesh. He testified that the only employee ever on the ground while the cables are moving is the tank lineman, who remains at the hoist hook at all times. The hoist hook is 180° on the other side of the water tower from the moving parts of the cable assembly.

Respondent argues that - during their normal duties - it was not possible for any employee to come into contact with the moving cable lines nor the drum nip points. Thus, respondent argues that the citation items were not hazards; none of respondent's employees were exposed to the alleged hazards; and, there were no hazards of which it's supervisor/foreman should have been aware.

Respondent's evidence and arguments are unpersuasive. The CO testified in detail about his conversation with Mr. Clark, corroborating his recollections with his written report. His testimony is credible and consistent with the other credible evidence in the case. The photographs also tend to support complainant's case, in that they were taken at the time of the inspection and the hazards are in plain view.

Although he testified that he never would have told the CO that the operator needed to touch the moving cables, Mr. Clark's memory of the initial conference was lacking in important details. The photographs Mr. Clark used to illustrate his testimony were taken three to six weeks after the inspection and after the tower had reached the 5th and 8th levels (R#2 and R#1, respectively). Respondent did not present its own measurements or photographs at or around

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the time of the inspection to rebut the CO's understanding that the cab operator could keep the cables engaged, while also physically placing his hand on the cables to test their tension and movement.⁵

No Employee Exposure:

Respondent argues that it was not possible for any employee to come in contact with the crane cables where they wound onto the drums, where the cables crossed the cable field, or where the cables came in and out of the water tower. Respondent argues not that it was impossible for employees to make contact with the cables at those places, but rather, that employees were not in those locations while the crane was in operation.

It is not complainant's duty to prove that an employee is actually and immediately exposed to the hazard during the inspection. Brennan v. Occupational Safety & Health Rev.Com'n. (Underhill Construction Co.), 513 F.2d 1032 (2d Cir. 1975) The issue is whether employees in the course of their work, while on the job, or going from work are reasonably likely to be in the immediate zone of danger. Maxton Hardwood Corporation, OSHANC No. 79-563, 2-7-81, 2 NCOSHD 277, 282 (1981).

In Underhill Construction, the Second Circuit said it need only be proved "that a hazard has been committed and that the area of the hazard was accessible to the employees of the cited employer or those of other employers engaged in a common undertaking." Underhill Construction, 513 F.2d at 1038. See also, Commissioner of Labor v. Weekley Homes, 169 N.C. App. 17, 25, 609 S.E.2d 407, 414 (2005) (N.C. Court of Appeals, quoting that same holding from Underhill Construction). It is the possibility of exposure that is at issue. B&E Auto Paint Co., Inc./Maaco Auto Painting, OSHANC No. 79-449, 1 NCOSHD 449, (April 6 1979); See also, Budd-Piper Roofing Co., Inc., OSHANC No. 80-639, 2 NCOSHD 323, 327 (1983).

Respondent argues that unless an employee's normal duties require or routinely involve contact with the moving cables, there is no requirement that the cables be guarded. This interpretation is restrictive, and not in accordance with the standard. The standard does not say that guarding is required only where an employee's duties allow access to the moving crane parts. The standard provides that guarding is required where employee contact is 'possible." This includes the possibility of occasional, casual, or even inadvertent contact. See, Budd-Piper Roofing, 216 NCOSHD at 327 ("[T]he Commission's access test is predicated on the recognition that employees may not be restricted to specific paths or movements about their workplace. . . . Some carelessness and negligence is anticipated and expected.")

By a preponderance of evidence, the complainant proved that the zones of danger were accessible to employees during crane operations, and that contact was therefore possible.

⁵ R#2 shows that as much as three weeks after the OSHA inspection and citations, respondent had not repaired the downed safety netting to the left of the cab/hoist (or had neglected it again after the repair). R#3 is a photograph of an "identical" cab or hoist used at a Minnesota job. Yet, the photo corroborates a total lack of guarding at the nip points and at least a portion of the cable field.

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The undersigned finds as a fact and concludes as a matter of law that complainant's evidence and arguments were more credible than respondent's evidence and arguments. The other issues raised in respondent's brief either turn on credibility or merit no further discussion.

BASED UPON the foregoing FINDINGS OF FACT and CONCLUSIONS OF LAW, IT IS HEREBY ORDERED as follows:

- 1. Citation 1, Items 1 and 2 are hereby affirmed and respondent shall pay the penalties as set forth in the Findings of Fact and Conclusions of Law above; and,
- 2. The penalties shall be paid within ten (10) days of the filing date of this Order.

This the $12^{\frac{th}{d}}$ day of December, 2011.

Ellen R. Gelbin

Administrative Law Judge

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this date served a copy of the foregoing ORDER upon:

ANDREW W LAX
McNAIR LAW FIRM PA
TWO WACHOVIA CENTER
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DANIEL ADDISON
NC DEPARTMENT OF JUSTICE
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by depositing a copy of the same in the United States Mail, First Class;

NC DEPARTMENT OF LABOR LEGAL AFFAIRS DIVISION 1101 MAIL SERVICE CENTER RALEIGH NC 27699-1101

by depositing a copy of the same in the NCDOL Interoffice Mail.

THIS THE 15th DAY OF Alcember 2011

OSCAR A. KELLER, JR.

CHAIRMAN

Nancy D. Swaney

Docket and Office Administrator

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