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.	
Standard Concrete Products,	
Respondent.	

OSHRC Docket No. 07-1958

Appearances:

Christopher D. Helms, Esq., Office of the Solicitor, U. S. Department of Labor,, Atlanta, Georgia For Complainant

Kirk C. Shaw, Esq., Armbrecht Jackson, LLP, Mobile, Alabama For Respondent

Before: Administrative Law Judge Nancy J. Spies

DECISION AND ORDER

Standard Concrete Products, Inc. (Standard), manufactures precast concrete girders and piling for bridges, docks, and factories with heavy loading requirements. On June 14, 2007, Standard employee Treveor Holcomb was killed when he was struck by a breaking girder loaded on a barge docked next to Standard's Theodore, Alabama, facility. The Occupational Safety and Health Administration (OSHA) assigned compliance officer Melissa Bice to inspect the fatality. As a result of OSHA's inspection, the Secretary issued a citation to Standard on December 7, 2007, alleging violations of two standards of the Occupational Safety and Health Act of 1970 (Act).

Item 1 alleged a serious violation of § 1910.106(b)(2)(vii)(A) for failing to provide adequate drainage or dikes for areas surrounding tanks containing flammable or combustible liquids. The Secretary proposed a penalty of \$2,500.00 for this item. Prior to the hearing, the parties resolved item 1 by agreeing the Secretary would reclassify the item and assess the full penalty.

The only item at issue here is item 2, which alleges a serious violation of § 1918.32(a), for failing to ensure the temporary surface on which Standard's girders were placed was sufficient in size and strength to permit Standard's employees to work safely. The Secretary originally proposed a penalty of \$7,000.00 for this item. Upon review, the Secretary realized she had incorrectly

calculated one of the factors used to determine the penalty. In her post-hearing brief, the Secretary changes the proposed penalty to \$6,300.00.

The undersigned heard this case on April 8 and 9, 2008, in Mobile, Alabama. The parties have filed post-hearing briefs. Standard argues the Secretary incorrectly cited § 1918.32(a), which is part of the longshoring standards and is inapplicable to the cited conditions. Standard contends the applicable standard is found in part 1917, which addresses marine terminals.¹ Standard also argues it had no actual or constructive knowledge the temporary surface on which it loaded girders was deficient in strength.

Based upon the record, the undersigned finds § 1918.32(a) does apply to the cited conditions, but Standard had no actual or constructive knowledge of the hazardous conditions. Item 2 is vacated.

Facts

On August 29, 2005, Hurricane Katrina destroyed the Biloxi Bay Bridge, which carried U. S. Route 90 between Biloxi and Ocean Springs, Mississippi. Four major construction companies (Massman Construction Company, Kewait Southern, Trailer Brothers, Inc., and Parsons Transportation Group, Inc.) formed a joint venture called GC Constructors (GCC) to build a new bridge, now completed. The new bridge accommodates a six-lane highway plus pedestrian and biking paths, and was originally budgeted at more than a third of a billion dollars. It opened with great fanfare on November 1, 2007 (Tr. 19).

Standard operates four plants located in Atlanta, Georgia; Savannah, Georgia; Tampa, Florida; and Theodore, Alabama,² and employs more than 600 workers. In 2006, GCC issued a purchase order to Standard for more than 500 prestressed concrete girders of varying lengths for use

¹ At the hearing, the undersigned granted Standard's motion for leave to amend answer, allowing the company to add a fourth affirmative defense alleging § 1918.32(a) is not applicable to the cited conditions. The Secretary argued she was prejudiced by the last minute filing of this motion (it was filed on Friday, April 4, but not seen by the Secretary until April 6, two days before the hearing). The undersigned left the record open for 20 days after the hearing to allow the Secretary to further respond or move to submit information related to this defense. The Secretary filed a response in opposition to Standard's motion on April 29, 2008. Standard filed a reply on May 7, 2008. In an order closing the record, the undersigned reiterated Standard's original motion was granted. Applicability of the cited standard is not actually an affirmative defense but a part of the Secretary's *prima facie* case.

 $^{^2}$ At the hearing and in the briefs, the location of Standard's Alabama facility was sometimes stated as Mobile, Alabama. Theodore, Alabama, is located a short distance from Mobile. The citation alleges the fatality occurred in Theodore, Alabama.

in the bridge construction. Standard manufactured the girders at its plants in Tampa and Theodore, then loaded them on barges to be transported to the worksite in Biloxi (Tr. 208, 210, 218). GCC owned the tug and the six barges used to transport the girders from Theodore, plus the tie-downs and "dunnage" used on the barges.

Dunnage refers to the steel I-beam pedestals (also referred to as cradles) specifically placed to hold the girders and to the wooden "mats" on which the pedestals are placed. GCC workers created each pedestal by welding an I-beam across two supporting I-beams. Each I-beam is approximately 14 inches wide by 14 inches high. The finished steel pedestal is approximately 3 feet wide and $3\frac{1}{2}$ feet long and is attached to the wooden barge mat (Tr. 232). The pedestals each weigh several hundred pounds and cannot be lifted manually; a crane or forklift was used to move the pedestal (Tr. 106, 111, 232).

The wooden mat which supports the pedestals, and eventually the girders, is comprised of individual mats. Each individual mat is made up of a series of parallel oak timbers. The timbers are each approximately 12 inches high by 12 inches wide and are 5 feet long, laid side-by-side and secured together by a long metal rods run through the timbers and tightened at the ends. Because the mats are too heavy to lift manually, two notches or openings are cut in the timber mats to expose part of the metal rods which the crane uses to lift the mats. The full dunnage mat may include a number of the individual mats of different sizes and configurations (Exh. C-4, C-5; Tr. 32, 49, 210, 224-225).

Before the barges left for Standard's facility, GCC workers positioned the dunnage on the barge deck in accordance with a plan designed by a naval architect. The number of barge trips varied from two to five per week. The number and size of the girders transported on each barge trip also varied, so GCC rearranged the dunnage from trip to trip. GCC furnished Standard with a loading diagram for the girders provided by a naval architect for each load (Tr. 122, 211, 224).

When a barge arrived at Standard's facility, it docked in an adjacent boat slip. Standard used two shuttle lift cranes to move each girder from the land to the barge. The support legs of each crane sit on opposite sides of the shore with overhead beams spanning the boat slip. Each crane connected two shackles to one end of a girder being moved. The two cranes lifted the girder in tandem, attached by a total of four shackles, and moved it to its assigned location on the dunnage. Standard workers present for this procedure included two crane operators and a crane foreman, three workers on the barge, and two riggers on the side (Tr. 234-235). The cranes landed the girder on the dunnage so that each end of a girder was supported by a separate pedestal (and separate portion of the underlaid mat) (Tr. 99). It took approximately one hour to transfer one girder (Tr. 241).

On June 14, 2007, Standard was landing its girders on a 195 foot long and 35 foot wide MC 904 barge. The barge had arrived earlier that day, between 10:00 and 11:00 a. m. As usual, the dunnage was already in place on the barge. The loading diagram called for five girders to be landed on the barge (Exh. R-10; Tr. 116, 249, 251). The girders were 78 inch BT prestressed concrete. They were T-shaped at one end and bulb shaped at the other (Tr. 172, 208). Each girder weighed approximately 86 tons and was approximately147 feet long (Tr. 98, 112).

Standard landed three girders without incident. It landed the fourth girder, and Standard's riggers began to unshackle the crane lines. The riggers and crane foreman heard a cracking noise. The timber onto which the pedestal support and one end of the now-landed girder had failed. Standard crane foreman Henry Jackson instructed the riggers to reconnect the shackles to the girder. While they were doing so, the concrete girder began to tilt. The pre-stressed girder cracked and swung outward. Rigger Jackie Bridge, who was positioned at the west end of the girder, jumped to the next girder. Treveor Holcomb, positioned at the east end of the girder, also attempted to jump to the next girder, but he fell and was struck and pinned by the broken girder. Holcomb died from his injuries (Tr. 37, 55, 71, 93, 96).

At approximately 8:00 that night, compliance officer Melissa Bice received word she was to investigate the fatality. She arrived at the Theodore facility at approximately 9:00 p.m. and took written statements from several employees. Bice was unable to take photographs of the barge due to darkness. She did not board the barge (Tr. 27-28, 34).

Bice returned the next day accompanied by OSHA safety engineer Brian Smith. The compliance officers took photographs of the barge from the shore, but did not board the barge. They took additional employee statements (Tr. 36, 40).

On June 20, 2007, six days after the fatality, Bice made a third visit to the facility, this time accompanied by OSHA assistant area director Robert Vazzi. On this day, Bice and Vazzi boarded the barge. The broken girder had been removed. Standard had removed the pedestal from the piece

of dunnage containing the cracked timber, after first outlining the feet of the pedestal with orange paint. Bice and Vazzi examined the dunnage and took additional photographs (Tr. 40-41, 84, 244). On December 7, 2007, the Secretary issued the citation to Standard that gave rise to this case.

The Citation

The Secretary has the burden of proving the violation by a preponderance of the evidence.

In order to establish a violation of an occupational safety or health standard, the Secretary has the burden of proving: (a) the applicability of the cited standard, (b) the employer's noncompliance with the standard's terms, (c) employee access to the violative conditions, and (d) the employer's actual or constructive knowledge of the violation (*i.e.*, the employer either knew or, with the exercise of reasonable diligence could have known, of the violative conditions).

Atlantic Battery Co., 19 BNA OSHC 2131, 2138 (No. 90-1747, 1994).

Item 2: Alleged Serious Violation of § 1918.32(a)

The Secretary alleges Standard committed a serious violation of § 1918.32(a), which provides:

Temporary surfaces on which loads are to be landed shall be of sufficient size and strength to permit employees to work safely.

Applicability of Cited Standard

The cited standard appears in part 1918, "Safety and Health Regulations for Longshoring,"

of OSHA's regulations. Section 1918.1(a) addresses the "scope and application" of the part (emphasis added):

(emphasis added):

The regulations of this part apply to longshoring operations and related employments aboard vessels. All cargo transfer accomplished with *the use of shore-based material handling devices* is covered by part 1917 of this chapter.

Part 1917 applies to "Marine Terminals." Its "scope and applicability," as addressed in

§ 1917.1(a), provides:

The regulations of this part apply to employment within a marine terminal as defined in § 1917.2, including the loading, unloading, movement or other handling of cargo, ship's stores or gear within the terminal or into or out of any land carrier, holding or consolidation area, any other activity within and associated with the overall operation and functions of the terminal, such as the use and routine maintenance of facilities and equipment. All cargo transfer accomplished with the use of shore-based material handling devices shall be regulated by this part. Standard argues the plain meaning of §§ 1917.1(a) and 1918.1(a) dictates that part 1917 applies in this case because Standard's cranes are indisputably land-based. Under Standard's interpretation, the location of the "material handling device" is dispositive. If cargo is moved with a shore-based crane, part 1917 applies. If cargo is moved with a vessel-based crane, part 1918 applies. A review of the history of parts 1917 and 1918 demonstrates Standard's interpretation is incorrect.

Prior to 1983, part 1918 covered most aspects of maritime cargo handling, whether it was shore based or vessel based. The preamble to the final rule states, "On July 5, 1983, OSHA published its final rule for Marine Terminals (48 FR 30886) (Ex. 1-101). OSHA issued the Marine Terminals rule to address the shoreside segment of marine cargo handling operations." (62 FR 40141). On January 21, 1998, OSHA's rewrite of the Longshoring and Marine Terminals parts became effective. OSHA made a substantive change to part 1917, clarifying the scope and applicability of the Marine Terminal standards by eliminating a geographical test in favor of a functional test. In the Summary and Explanation of Final Rule, OSHA states (*Id.*):

The Marine Terminal Standard (part 1917) covers all shoreside activities taking place within a marine terminal (48 FR 30891) except those that are specifically exempted in 1917.1(a)(1) and 1917.2(u). It is OSHA's intent that the marine cargo handling standards (part 1917 for shoreside and part 1918 for shipboard) apply to all functions that are associated with the movement of cargo.

The preamble explicitly states the longshoring regulations found in part 1918 "apply from the foot of the gangway up to the vessel and address all activities related to cargo handling aboard the vessel." (62 FR 40147). OSHA reiterated this application in a Standard Interpretation issued on April 11, 2000, in which OSHA directorate of enforcement programs Richard Fairfax states, "[T]he longshoring regulations found in 29 C. F. R. Part 1918 are the appropriate regulations for employee cargo handling activities occurring on vessels or barges docked at marine terminals" (Exh. R-2, p.1).

The final sentences of §§ 1917.1(a) and 1918.1(a) refer specifically to "cargo transfer," and apply only when cargo is being transferred. In its brief, Standard argues the use of the past tense in "accomplished" supports its position that once cargo has been transferred by use of a shore-based crane, it is always subject to the regulations found in part 1917 (Standard's brief, p. 12; emphasis in original):

"Accomplished" implies no temporal requirement as would, say, the words "being accomplished" or "having been accomplished."... Section 1918.1(a) uses the past tense verb, "accomplished," which encompasses activity *before, during,* and *after* the completion of landing, to exclude from its coverage those cargo transfers made by shore-based material handling devices.

Under Standard's interpretation, if a shore-base crane was used to transfer cargo to a vessel, then part 1917 would always apply to that cargo. Even if the transfer had occurred hours before, or the previous night, the regulations in part 1917 would apply. This interpretation runs counter to that of the preamble, which states part 1918 addresses "all activities related to cargo handling aboard the vessel." While cargo is actually being transferred, the location of the material handling device determines whether the marine terminal or the longshoring standards apply. Once the cargo transfer is complete, the location of the material handling device is immaterial; it is the location of the cargo that determines whether part 1917 or part 1918 applies.

In the instant case, the fourth girder had been landed and was being unshackled when the dunnage failed. Standard foreman Jackson and Standard crane operator James Wallace both testified the girder was landed at the time of the accident (Tr. 96, 132). The hazard was created by the rotten dunnage; it had nothing to do with the transfer of the load.

The transfer of the girder had been completed and the girder was now on the barge. Accordingly, the longshoring standards in part 1918 apply to the cited conditions. The Secretary correctly cited the applicable standard, § 1918.32(a).

Noncompliance with Terms of the Standard

Standard does not dispute the portion of the dunnage lacked sufficient strength to permit employees to work safely. It concedes "that the piece of dunnage in question did not support the weight of the concrete girder" (Exh. C-11, p. 5, response to request no. 9) and "the piece of dunnage supporting one leg of the pedestal holding the girder in question failed, resulting in the girder tilting to the side and breaking" (Exh. C-11, p. 7, response to request no. 13).

Bice observed deep cracks in the timbers of the failed dunnage. The wood of the failed timber was soft enough for her to push a ballpoint pen into it. The timber on which one of the pedestal feet was located was compressed from 12 inches to 11 inches (Exhs. C-6, C-8, C-9; Tr. 50-51, 86, 88). Vazzi testified regarding the failed timber (Tr. 155): "It was soft to the touch, it was wet,

there were loose fragments of wood. It basically–it would give to my touch. If I put pressure on it, it would give slightly." Foreman Jackson conceded the timber was "rotted" (Tr. 86, 105).

The configuration of the portion of the failed mat on which the pedestal and girder rested exacerbated the hazardous condition created by the rotten timber(s). With the exception of the pedestal on the failed mat, all of the other pedestals the compliance officers observed were placed so that the pedestal base was perpendicular to the length of the mat timbers. With two supports resting crosswise to the timbers, the weight of the pedestal (and later, the girder) would be distributed across three timbers (Exh. C-10; Tr. 159-160; 191).

As GCC configured the wooden mats on the barge at issue, an approximate 5 foot by 5 foot section of mat needed to be filled. Rather than place a mat with timbers running perpendicular to the pedestal base, as were the timbers of the rest of the individual mats, GCC fitted in a 5 foot by 5 foot mat turned so the timbers ran parallel with the pedestal base. At least one of the timbers in this 5 foot by 5 foot mat was rotted. The pedestal on the failed timber of the mat was placed so that each support sat completely lengthwise on one timber. The rotten timber supported half the weight of one end of the 86-ton girder, rather than sharing the load with its adjacent timbers. In addition, the rotted timber was placed next to a cut out for the crane pick-up. Had this piece of dunnage been configured like those in the other individual mats, the redistribution of the weight of the girder may have forestalled the collapse of the rotten timber.

The record establishes, as Standard concedes, the terms of § 1918.32(a) were not met.

Employee Exposure

A total of eight employees were present a the time of the accident (Tr. 234-235). Their work duties required riggers Jackie Bridges and Treveor Holcomb to come in direct contact with the girders as they rested on the dunnage. Bridges had to leap out of the way to escape being crushed by the fourth girder when the dunnage failed. Holcomb was not so fortunate.

Standard's employees were exposed to death or serious physical injury caused by the faulty dunnage. The Secretary has established employee exposure.

Knowledge

The Secretary does not contend Standard had actual knowledge of the rotten timber. She does, however, contend Standard should have known of the hazardous condition through the exercise of reasonable diligence. The Secretary argues Standard had constructive knowledge for the following reasons:

(1) The piece of dunnage was in plain view. At the time the barge docked, there were no girders on the pedestals to obstruct the view. The barge was docked at least two hours before Standard began loading the girders, affording Standard enough time to inspect the dunnage. Standard had at least eight employees present during the loading, any one of which could have inspected the dunnage.

(2) Nothing prevented Standard from inspecting the dunnage. Even though Standard asserts the condition of the dunnage was GCC's responsibility, Standard was in a position to inspect it.

(3) Standard could have removed the pedestals to inspect the timbers underneath them.

(4) Even without removing the pedestals, Standard could have seen visible damage to the timbers. Bice and Vazzi both commented the wood was wet and was soft to the touch.

The Secretary overemphasizes Standard's opportunities for discovering defects in the dunnage. GCC configured the dunnage on the barges in accordance with a navel architect's plan before the barges reached Standard's facility. GCC placed the pedestals on the timbers as specified by the navel architect. Standard was not provided with these plans, but was given plans for how to load the girders.

Standard has an obligation to inspect the dunnage for flaws which could affect the safety of its employees. Because some reliance is properly placed on GCC's asserted expertise in the design of the dunnage, Standard's obligation is tempered by what it could reasonably be expected to ascertain. Crane foreman Jackson had the authority to refuse to load the girders if he determined a hazard existed. He visually inspected the mat from his position on shore, 14 to 15 feet away. Nothing appeared to him to be rotted or problematic with the subject dunnage (Tr. 97, 104, 108). Even if the timber was unsuitable for the mat, there is no evidence a close visual inspection of the dunnage would have revealed it. Vazzi testified, "[I]f the appearance of the wood indicates that there are stress fractures or there are fractures in the wood, I said that they should probably reinspect that

or inspect that crane [mat] a little more closely" (Tr. 198). The pedestal obstructed a clear view of the timber, and the fact the timber was defective was not in plain view even before the girders were loaded. Nor is there evidence that before the failure inspecting the12-inch ends of the timbers could demonstrate a difference between the rotted timber and others which were sound.

The Secretary's suggestion that Standard use its cranes to remove the pedestals in order to inspect the timbers underneath is not realistic. It goes beyond the terms of § 1918.32(a) to require an employer to disassemble a temporary surface that has been configured according to architectural plans in order to inspect its individual components.

There is no record of what the dunnage looked like prior to the accident. Bice and Vazzi inspected the dunnage six days after the accident occurred. They testified the wood was wet and cracks were obvious, but since employees present during the accident testified they heard a cracking noise, it is reasonable to assume some, if not all, of the cracks may have appeared at that time. Bice and Vazzi observed what the dunnage looked like *after* the 86-ton girder was placed on it. The evidence is unclear whether visible fractures in the dunnage existed prior to the accident.

The dunnage mats had openings between timbers used as attachment points for the crane lines when GCC needed to lift the dunnage mats. GCC assembled the dunnage mats, moved them by crane, set them on the barges, and then placed the pedestals on top of them. GCC employees physically handled the timbers used to assemble the dunnage. GCC was in the best position to discover any deficiencies in the timbers of the mats or in their configuration in the individual mats. Once the barges arrived at Standard's facility, it was much more difficult to detect any such deficiencies.

The Secretary did not establish that Standard failed to exercise reasonable diligence or that it should have known the dunnage lacked sufficient strength to permit its employees to work safely. Item 2 is vacated.

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 the citation, alleging a violation of § 1910.106(b)(2)(vii)(A), is affirmed as other than serious, and a penalty of \$2,500.00 is assessed; and

Item 2 of the citation, alleging a violation of § 1918.32(a), is vacated, and no penalty is assessed.

/s/ NANCY J. SPIES Judge

Dated: November 4, 2008 Atlanta, Georgia