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.

OSHRC Docket No. 13-0821

Florida LeMark Corporation,

Respondent.

Appearances:

Dane L. Steffenson, Esquire, U.S. Department of Labor, Office of the Solicitor, Atlanta, Georgia For the Secretary

Angelo M. Filippi, Esquire, Kelley Kronenberg, P.A., Fort Lauderdale, Florida For the Respondent

BEFORE: Administrative Law Judge Heather A. Joys

DECISION AND ORDER

Florida LeMark Corporation (LeMark) is a construction company incorporated in the State of Florida. On October 10, 2012, an Occupational Safety and Health Administration (OSHA) Compliance Safety and Health Officer (CSHO) began an inspection of a construction site at 3800 N.W. 115th Avenue, in Doral, Florida, on the campus of Miami Dade College at which LeMark was a subcontractor. The inspection was initiated following an accident that occurred that day in which a portion of a precast concrete parking garage under construction collapsed, injuring several individuals - four fatally. As a result of the inspection, the Secretary issued a serious citation to LeMark on April 9, 2013.

The serious citation alleges LeMark violated the general duty clause set out at § 5(a)(1) of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 651-678 (2014) (the Act) by failing to grout certain precast concrete columns of the structure, thereby exposing employees to the hazards associated with a collapse of the structure. The Secretary proposed as a feasible means of abatement that LeMark follow the grout application instructions in the erection

drawings which called for grouting as soon as possible or within 48 hours of the column being erected. The Secretary alleged, at the time of the collapse, the columns had been in place 26 days without having been grouted. The Secretary proposed a penalty of \$6,300.00 for this alleged violation.

LeMark timely contested the citation. It contends the Secretary did not meet his burden of proof for the alleged general duty clause violation. LeMark argues the Secretary¹ failed to define the hazard in a manner that gave it fair notice of the condition that constituted a hazard. LeMark further argues the Secretary failed to meet his burden to establish the cited columns had not been grouted, thus failing to establish employees were exposed to a hazard of collapse due to lack of grouting. LeMark goes on to contend even if the Secretary could meet his burden to prove the cited columns had not been grouted, he failed to establish either it or the industry recognized the condition as a hazard. Finally, LeMark contends the Secretary failed to establish LeMark knew of the violative condition.

I held a hearing in this matter on June 3 through June 5, 2014, in Miami, Florida. The parties filed post-hearing briefs on October 1, 2014.²

For the reasons discussed below, the citation is affirmed and a penalty of \$6,300.00 is assessed.

Jurisdiction

At the hearing, the parties stipulated jurisdiction of this action is conferred upon the Commission pursuant to § 10(c) of the Act (Tr. 11). The parties also stipulated at the hearing that at all times relevant to this action, LeMark was an employer engaged in a business affecting interstate commerce within the meaning of § 3(5) of the Act, 29 U.S.C. § 652(5) (Tr. 11). The parties further stipulated employees performing grouting and secondary pours at the worksite were employees of LeMark (Tr. 11).

¹ In its brief, LeMark repeatedly refers to the Secretary's arguments as those of the Commission. I interpret this as a technical oversight and construe references of this type to the Commission as referring to the Secretary.

 $^{^{2}}$ To the extent either party failed to raise any other arguments in its post-hearing brief, such arguments are deemed abandoned.

Background

LeMark is a construction company primarily engaged in performing construction of precast concrete structures. LeMark is incorporated in the State of Florida and is family owned (Tr. 11). At the time of the inspection, it employed approximately 190 employees (Tr. 11). In 2012, LeMark was one of several companies constructing a six-story, precast garage structure (the garage project) on the campus of Miami Dade College (the College) in Doral, Florida (Tr. 12). On October 10, 2012, it had at least 10 employees working at the site (Tr. 12).

The College contracted with Ajax Building Corporation (Ajax) to perform overall construction management of the project (Tr. 39). According to Marc Reeves, director of risk management for Ajax, Ajax had overall safety responsibility for the worksite (Tr. 39). It performed site visits, but did not have employees performing construction work on the site (Tr. 41, 78). The contractor responsible for overall construction of the structure was MAR Contracting, Inc. (MAR) (Tr. 61). MAR's only onsite work, however, was construction of the foundation (Tr. 347). The structure was to be constructed of precast concrete members, consisting of columns, beams, double-tees and wall panels (Tr. 61, 135). The precast concrete members were supplied by Core Select Structures Miami, Inc. (Coreslab) (Tr. 314). Erection of the precast members was subcontracted to Solar Erectors (Solar) (Tr. 61, 135). Solar's supervisor on site was Robert White (Tr. 239). LeMark was responsible for work done after these precast members were erected such as grouting, secondary or wash pours, caulking, and installing certain railings or cables (Tr. 62, 138). LeMark's work was performed under a purchase order rather than a subcontract (Tr. 351). LeMark's supervisor on site daily was David Rosario (Tr. 12). Juan Patrone also served as a roving supervisor for LeMark and visited the site one to two times per week (Tr. 353).

Construction of the Garage Project

There was little factual dispute as to the process by which the garage project was to be constructed. The concrete footers or foundation for the structure were poured onsite (Tr. 41, 137). All the remaining parts of the structure (with the exception of the elevator towers) were cast off site, trucked in, and then erected onsite (Tr. 41, 149). These included the supporting columns, as well as the double-tees which form the floors of the various parking levels.

Supporting columns measured 24 inches by 42 inches and were placed on the footers by crane. These columns had metal base plates cast into them during the casting process (Tr. 319, 324). A column was secured to a footer by four anchor bolts attached to the metal base plate (Tr. 243, 319). When placed, the column also sat on a shim stack creating a gap between the base of the column and the footer (Tr. 97, 324).

Once erected, secured, plumb, and braced, the column was released from the crane (Tr. 150, 165-70). At this point, the gap between the base plate and the footer was ready to be grouted (Tr. 150). LeMark employees were responsible for grouting this gap (Tr. 353-54). Most columns consisted of two sections (Tr. 265; Exh. C-4 p. 13). If a second section of the column was erected, the joint was also subsequently grouted or "dry packed" by LeMark employees (Tr. 266). According to Richard Burke, vice president and general manager for Solar, it would not place the second section of a column until the lower section of the column had been grouted (Tr. 174).

The upper portion of a column contained corbels at each floor level (Exh. C-4 p. 13). Double-tees rested on the corbels to make the floor (Exh. C-4 p. 10). A floor consisted of seven pieces (Tr. 264). According to Mr. White, it was not atypical for the crews to work 12 to 14 hour days on the project (Tr. 263). He testified in a typical day, 25 to 30 pieces could be erected with one to two of those being columns (Tr. 263). He testified a column took, on average, 30 to 45 minutes to erect (Tr. 244). The grouting process took less than 30 minutes to complete.

Grouting is the process by which the space between the base plates of the column and the footer is filled with grout material (Tr. 325). Grout is a stronger material than the precast concrete of the column itself (Tr. 483; Exh. C-4 p. 14). The grout serves two purposes - to fill the void between the column and the footer and to distribute the load placed on the column across the entire area of the column and off the smaller area of the anchor bolts and shim stack (Tr. 115, 139, 373; Exhs. C-4 p. 58; R-10). According to Theodore Wolfsthal, general manager of Coreslab, all of its shim stacks had the same design and could support only the column's deadweight, i.e., the weight of the column itself (Tr. 341). It was largely undisputed a load should not be placed on the column until the grout is in place because failing to do so could

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result in structural failure (Tr. 140, 168, 266, 275, 318-19, 481).³

The erection drawings for this project contain notes that call for a column to be grouted within 48 hours of being erected (Exh. C-5; Tr. 316). A column is considered "erected" when the column is in position, aligned, level and braced if necessary (Tr. 317-18). In conjunction with the erection drawings, Solar had a site-specific manual titled "Erection Procedures." (Tr. 147; Exh. C-6). This manual required grouting be performed in a timely manner or as soon as possible unless otherwise specified in the erection drawings (Exh. C-6 p. 3). Moreover, any deviation from that procedure required approval by the precast engineer (Exh. C-6 p. 3). According to Wolfsthal, who was involved in development of the notes to the erection drawings, the rule was intended to ensure the column would not be loaded without the greater weight bearing capacity afforded by the grout because within the normal course of construction, a column would not be loaded within 48 hours of erection (Tr. 141, 318; Exh. C-4 p. 52). This assessment was made by The Consulting Engineering Group, Inc. (CEG), an engineering firm hired by Coreslab to design the precast members and prepare erection drawings (Tr. 315; Exh. C-4 p. 50).

The parties stipulated LeMark employees grouted when directed to do so by Solar Erectors and this was accomplished by Mr. White verbally advising LeMark employees when and where to place the grout (Tr. 12, 591). According to Mr. White, two LeMark employees would work along with his erection crew (Tr. 240). Neither had supervisory authority (Tr. 272). Once erected and plumb, a column was ready to be grouted and he would direct those LeMark employees working with his crew to grout the column (Tr. 241, 256).

Reports for the Garage Project

Several documents were completed daily by employees of the various contractors to show progress on the job. Mr. White, or another Solar supervisor, made a daily written report

³ Marcus Rodriquez, one of the owners of LeMark, testified at the hearing. He was the only witness to testify there would be no risk of failure if a column was loaded without having been grouted (Tr. 373, 378). He specifically testified he had heard an engineer make a statement that a different garage could "stand for an undetermined amount of time with no grout." (Tr. 373). I find this testimony lacks probative value. In addition to being self-serving, it was based on unreliable hearsay. Specifically, Mr. Rodriquez testified he heard this statement made by an unnamed engineer at an unspecified meeting and in reference to another project. Moreover, it is in direct contradiction of the more reliable testimony of Mr. Wolfsthal that Coreslab's shim stacks are designed to hold only the deadweight of the column and a building is "never" built "on shims." (Tr. 341). As such, I give Mr. Rodriquez's testimony on this issue no weight.

(Tr. 283). These reports indicated the work performed, the number of employees on the job, and the weather conditions (Exhs. C-12, C-13). Mr. White testified he created these throughout the day (Tr. 290). After he completed the reports, Mr. White placed them in "the general contractor's box" (Tr. 290). LeMark also had its supervisors create a daily report (Tr. 362). However, these reports only specified who was working on a particular day for LeMark and only contained a generalized description of the work performed (Tr. 364; Exh. C-8).

The Florida building code requires projects over a specified size (either physical size or building occupancy) must be inspected by a "special inspector" to ensure "compliance with the permitted documents." Florida Stat. Annot. § 553.79(5)(a). Under this provision of the building code, the owner of the building is to select and pay the cost of the special inspector. Section 553.79(5)(b). The garage project fell within the requirements of this portion of the building code and, consequently, the College contracted with MEP Structural Engineering and Inspection, Inc. (MEP) to conduct the duties of the special inspector (Tr. 63-67, 190-95). The special inspector's inspection was initiated by a request from Ajax, either on a "request to inspect" form or orally via phone (Tr. 197-99, 223). Most requests on the project were phoned in (Tr. 199). Mr. Rosario also testified once grouting was completed, he would inspect it and then notify the special inspector who would then inspect it as well (Tr. 590).

According to Otto Letzelter, director of engineering for MEP, the special inspectors employed by MEP on the garage project completed handwritten reports of their inspections (Tr. 196). In addition, the special inspectors made notations on permits and plans and took photographs of finished work (Tr. 196). The reports completed by the special inspectors indicated which columns were inspected by the special inspector and the stage in the process at which he or she had made the inspection (Tr. 204-06; Exh. C-9). MEP used code numbers for different types of inspections – code 110 indicated inspection of erection of precast elements only and code 101 indicated inspection of the grout (Tr. 206-07). If grout was not in place at the time of the inspection, the report so indicated (Tr. 206; Exh. C-9).

The October 10, 2012, Accident

On October 10, 2012, a portion of the garage structure collapsed.⁴ At the time of the

⁴ Other than the October 10, 2012, collapse, the only other incident of note in the record is one in which a crane boom struck column B2 on October 8, 2012 (Tr. 248; Exh. C-4 p. 29). Following this incident, the job was shut

collapse, approximately 98 percent of the project was completed and erection was ongoing in bays 2 and 3 (Tr. 42-43). According to uncontested testimony, approximately 15 to 20 percent of the erected garage collapsed due to "catastrophic failure" of one of the precast members (Tr. 42-43). The record contains photographs of the area of collapse both before and after the accident (Exhs. C-1, C-4 pp. 17-20). Four individuals working on the site died in the collapse and several others received injuries (Tr. 57). At the time of the collapse, several LeMark employees, including Mr. Rosario, were working in the elevator tower near the area that collapsed (Tr. 579-82). Although the elevator tower remained intact, one of LeMark's employees working in that area did sustain a broken leg (Tr. 588).

The OSHA Investigation

OSHA became aware of the accident that same day via a news report (Exh. J-1 p. 9⁵). The OSHA area director for the Fort Lauderdale, Florida office assigned Francisco Garcia to be the lead investigator for a team of three compliance safety and health officers investigating the accident. At the time, CSHO Garcia had been a CSHO for approximately two years (Exh. J-1 p. 5).

CSHO Garcia arrived at the site at 1:00 pm on October 10, 2012 (Exh. J-1 p. 10). The accident had occurred several hours earlier – around 11:30 am. Initially, CSHO Garcia was not allowed inside an area controlled by emergency personnel near the collapse (Exh. J-1 p. 11). Emergency personnel maintained control of the area for nine days until all of the victims were recovered (Exh. J-1 p. 12). During those nine days, CSHO Garcia was able to observe rubble and debris being removed from the area both by hand and machinery (Exh. J-1 p. 12). Once allowed in the controlled area, CSHO Garcia took photographs (Exh. J-1 p. 34). He did not conduct any independent engineering study nor make any analysis of the material in the area of the collapse (Exh. J-1 p. 34, 56).

Mohammad Ayub of OSHA's Directorate of Construction also conducted an

down for some period of time (Tr. 248). The record is not clear on how long work was ceased. However, it is undisputed that by October 10, 2012, work had commenced (Tr. 249).

⁵ The parties stipulated CSHO Garcia, who was deployed to Guatemala at the time of the hearing, was unavailable to testify in person and submitted his testimony via excerpts from his deposition testimony pursuant to Commission Rule 2200.56(f). The deposition was marked and admitted as Exhibit J-1. Only those portions highlighted have been admitted into the record. The hearing transcript contains rulings on the parties' objections (Tr. 27-38).

investigation of the accident. Mr. Ayub is a forensic structural engineer licensed as a professional engineer in Maryland and Virginia (Tr. 474). He was qualified as an expert in the field of forensic structural engineering (Tr. 470). Mr. Ayub has worked with the OSHA Directorate of Construction for 22 years, having investigated 79 structural collapses, approximately 12 of which involved precast concrete structures (Tr. 471-72).

Mr. Ayub's investigation consisted of a review of the construction plans, a "structural analysis," a review of the methods used to construct the structure, and forensic engineering (Exh. C-4 p. 7). Mr. Ayub and his team spent several days at the site after being allowed to enter the controlled area. He admitted much of the debris had been removed from the site prior to his beginning his investigation (Tr. 481). Mr. Ayub's investigation revealed at the time of the collapse, erection of the sixth floor between columns A2 and A3⁶ was ongoing (Exh. C-4 p. 6). Photographs taken after the accident show the greatest damage was to column B3, one of the supporting members of bays 2 and 3 (Exh. C-4 p. 36 figures 43 and 44). As photographs in Mr. Ayub's report show, the lower portion of column B3 appears to have disintegrated (*Id.*). Mr. Ayub testified the upper portion of column B3 and its base plates and anchor bolts were still onsite when he was given access to the area. He testified he was able to examine them at that time (Tr. 476-78).

Mr. Ayub concluded, based on his examination, column B3 had not been grouted (Tr. 475). He testified he spent two days doing "nothing but to examine the base of column B3." (Tr. 475). Among his methods of examination, Mr. Ayub compared columns with less damage that had remnants of grout to the remains of column B3, including the base plate of column B3 (Tr. 487-501).

Mr. Ayub also examined the area around column A3.3 and concluded it had not been grouted (Tr. 475). Column A3.3 was intact when Mr. Ayub examined it (Exh. C-4 p. 41). Because of its proximity and condition to column A3, which had been grouted, Mr. Ayub was able to conclude column A3.3 had not been grouted based on comparison of the two (Exh. C-4 p. 41-42).

According to records provided to OSHA during its investigation, column B3 had been erected on September 13, 2012 (Exh. C-9 p. 6). There is no corresponding record for column

⁶ Each column had a unique letter and number assigned to it denoting its location by bay.

A3.3 in the record. Mr. Ayub's review of the special inspector's inspection reports revealed no inspection report for the grout at the lower portion of columns B3 or A3.3 (Exh. C-4 p. 49). Further, no report of inspection of grout for 16 other columns were found (*Id*.). Mr. Letzelter of MEP testified MEP reviewed its files and found no reports of inspections for grouting of column B3 (Tr. 212, 236-37).

At the conclusion of the investigation, CSHO Garcia recommended LeMark be issued a citation under the general duty clause for failure to ensure that columns B3 and A3.3 had been grouted. His recommendation was based on the findings of Mr. Ayub.

The Citation

The citation alleges a serious violation of the general duty clause, § 5(a)(1) of the Act. Section 5(a)(1) requires each employer to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." 29 U.S.C. § 654(a)(1). The citation alleges a violation of § 5(a)(1) as follows:

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 when they were exposed to struck-by and caught-inbetween hazards:

On or about 10/10/2012, at the above addressed jobsite, employees were exposed to the hazard of being struck-by and caught-in-between collapsing pre-cast structural members due to not performing grouting of the bases of columns B-3 and A-3.3.⁷

⁷ At the hearing, the Secretary moved to amend the citation to allege the hazard was created by the LeMark's failure to "properly" grout the cited columns. The Secretary asserted this amendment did not alter his theory of the violation. Rather, the Secretary was moving to amend the citation in an "abundance of caution" to prevent any confusion that the existence of grout anywhere in the area of the cited columns might constitute "grouting." The Secretary further stipulated the amendment in no way altered its theory of the violation to allege, for example, that the grout placed under the columns was not properly mixed or an inadequate amount had been used, conceding this would constitute a change in theory of which LeMark would not have had proper notice. LeMark objected on the grounds that if the amendment did not change the theory of the violation, it was unnecessary and, if not, it did not have proper notice. I denied the Secretary's motion on the grounds the original citation needed no clarification, i.e., the Court's understanding of the original allegations was consistent with the Secretary's "clarification," and to allow the amendment could serve to broaden the allegations beyond that for which the LeMark had adequate notice (Tr. 302-311).

As a feasible means of abatement, OSHA proposed:

Among other methods, one feasible and acceptable abatement method to correct this hazard is to follow the grout application instructions as per Coreslab Erection drawings E0.0 General Notes, Section 3.4 Grout and Solar Erector's erection procedure in the column section, item #4.

DISCUSSION

Elements of a § 5(a)(1) Violation

Section 5(a)(1) of the Act mandates that each employer "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." 29 U.S.C. § 654(a)(1). To establish a violation of the general duty clause, the Secretary must show that: (1) a condition or activity in the workplace presented a hazard; (2) the employer or its industry recognized the hazard; (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. *Pegasus Tower*, 21 BNA OSHC 1190, 1191, 2005 CCH OSHD ¶ 32,861, p. 53,077 (No. 01-0547, 2005).

Erickson Air-Crane, Inc., 2012 WL 762001 at *2 (No. 07-0645, 2012).

In addition to the above-quoted elements of a § 5(a)(1) violation, the Secretary must also establish the employer had either actual or constructive knowledge of the hazardous condition. *Deep South Crane & Rigging Co.*, 23 BNA OSHC 2099 (No. 09-0240, 2012), *aff'd Deep South Crane & Rigging Co.*, 25 BNA OSHC 2099 (No. 09-0240, 2012), *aff'd Deep South Crane & Rigging Co.*, *Seth D. Harris*, 24 BNA OSHD 1089 (5th Cir. 2013).

Whether an Activity or Condition at the Site Constituted a Hazard

The Commission has held that as part of his burden of proving a § 5(a)(1) violation, the Secretary "must define the cited hazard in a manner that gives the employer fair notice of its obligations under the Act by specifying conditions or practices over which the employer can reasonably be expected to exercise control." *Otis Elevator Co.*, 21 BNA OSHC 2205, 2206 (No. 03-1344, 2007).

The Secretary defined the hazard in this case as "struck-by and caught-in-between collapsing pre-cast structural members due to not performing grouting of the bases of columns B-3 and A-3.3." Numerous witnesses testified the process of grouting involves placing grout material between the column base and the footer in order to distribute the load of the column,

and any additional load placed on the column, across the entire base of the column. There was no factual dispute on this issue. Moreover, the credible evidence establishes failure to perform this process could result in collapse of the column. It was also undisputed grouting was done exclusively by LeMark. Thus, the description in the citation adequately informed LeMark of the conditions over which it exercised control alleged to be dangerous.

LeMark contends the evidence is inconclusive as to the exact point at which the load placed on the ungrouted column was sufficient to cause the collapse. Therefore, LeMark argues, the Secretary has failed to meet his burden to define the conditions creating the hazard. I disagree. First, it is well recognized the Act is "designed to encourage abatement of hazardous conditions themselves,[] rather than to fix blame after the fact for a particular injury..." *Chaplin Petroleum Co. v. OSHRC*, 593 F.2d 637, 642 (5th Cir, 1979). Therefore, the Secretary's burden is to establish the cited conditions posed a hazard to employees, regardless of whether these conditions were the cause of or resulted in an injury. Indeed, the purpose of the Act is to prevent the first injury. *Mineral Industries & Heavy Constr. Co. V. OSHRC*, 639 F.2d 1289, 1294 (5th Cir. 1981). The preponderance of the credible evidence establishes failure to place grout under load bearing precast concrete columns could result in collapse of the column. In fact, each witness familiar with the process explained the very purpose of the grout is to provide the necessary load bearing capacity.

The Commission has held the Secretary has the obligation to define the hazard in terms of the preventable consequences of the work operation, not by the method of abatement. *Otis Elevator*, 21 BNA OSHC at 2208, *citing Morrison-Knudsen Co./Yonkers Contracting Co.*, 16 BNA OSHC 1105, 1121-22 (No. 88-572, 1993); *see also Arcadian Corporation*, 20 BNA OSHC 2001, 2009 (No. 93-0628, 2004). Put another way, the Secretary must define the hazard "in terms of the physical agents that could injure employees rather than the means of abatement." *Arcadian Corporation*, 20 BNA OSHC at 2009, *quoting Chevron Oil Co.*, 11 BNA OSHC 1329, 1331 n. 6 (No. 10799, 1983). The adequacy of LeMark's work practice to reduce the risk of or prevent the occurrence of the hazard, i.e., ensuring a column is grouted within a certain timeframe or before a specified load is added, is a separate issue from the definition of the hazard and to be addressed in an analysis of the Secretary's burden to establish the existence of feasible means of abatement. *Id. citing Wiley Organics, Inc.*, 17 BNA OSHC 1587, 1592-93 (No. 91-

3275, 1996) *aff'd without published opinion* 124 F.3d 201 (6th Cir., 1997). Here the Secretary has defined the hazard as being struck-by or caught-in-between the collapsing structure due to failure to grout supporting columns. I find the Secretary has met his burden.

Having defined the hazard, the Secretary must also show the existence of the hazard at the worksite. In this case, the Secretary has the burden to show the cited columns were not grouted. I find the preponderance of the evidence establishes that columns B3 and A3.3 were not grouted as alleged. Based upon his investigation, Mr. Ayub concluded columns B3 and A3.3 had not been grouted (Tr. 475; Exh. C-4 p. 49). He testified he did a thorough search for any signs of grout and found none (Tr. 475-77). Although his investigation was performed after the cleanup of the area was largely complete, he did compare conditions under those columns that had been grouted and the cited columns (Tr. 504; Exh. C-4 pp. 31-32, 34, 36, 40-42). The conditions were dissimilar enough for him to conclude that columns B3 and A3.3 had not been grouted (Tr. 504; Exh. C-4 p. 41).

I do not find it fatal to Mr. Ayub's conclusion that OSHA did not perform laboratory testing of the material under column B3. It is undisputed the grout is a different color than the precast concrete, both when wet and dry (Tr. 162, 360). It is of a different material. Therefore, Mr. Ayub would have been able to make that assessment by visual inspection (Tr. 476; Exh. C-4 p. 40).⁸ Mr. Ayub has considerable expertise in forensic structural engineering, having investigated approximately 79 structural collapses (Tr. 471). No witness with similar expertise, or who performed a similar evaluation, testified in contradiction of Mr. Ayub. I credit Mr. Ayub's testimony.

Moreover, there is no other credible evidence that contradicts Mr. Ayub's conclusions and testimony. No witness was called to state either column had been grouted. Mr. Rosario and Mr. White testified "as far as [he] knew," LeMark employees grouted every column Mr. White told them to grout (Tr. 273). Mr. Rosario admitted, however he had no list of elements that had been grouted on any given day (Tr. 597). Nor did any daily reports indicate where grouting had been performed. Thus, Mr. Rosario could not definitively testify columns B3 or A3.3 had been grouted. Mr. White's testimony was similar. LeMark did not call any of its employees onsite

⁸ I am not persuaded by LeMark's argument suggesting Mr. Ayub conceded there was material depicted in Exhibit C-2 that could have been grout. Rather, Mr. Ayub testified he had seen grout under other columns and it did not look like the material in the photograph (Tr. 570).

engaged in grouting operations to testify the cited columns had been grouted. LeMark's failure to call such witnesses who would be under its control raises an inference their testimony would not support its position. *Capeway Roofing Systems, Inc.*, 20 BNA OSHC 1331 (No. 00-1968, 2003) (citations omitted); *see also Regina Contr. Co.*, 15 BNA OSHC 1044, 1049 ((No. 87-1309, 1991).

MEP's special inspector records show the special inspector inspected column B3 on September 13, 2012 (Tr. 206-07; Exh. C-9, p. 6). According to this report, grout was to be inspected at a later date (Exh. C-9, p. 6). There is no indication, either through documentary evidence or testimony, a request had been made to inspect the grout on columns B3 or A3.3 or that such an inspection had been performed (Tr. 212, 236-37).

The only evidence contradicting Mr. Ayub's testimony is unreliable hearsay statements testified to by Mr. Reeves. Mr. Reeves testified testing done by Ajax's engineer revealed the presence of some grout (Tr. 109-10). Mr. Reeves did not reveal the name or qualifications of that engineer, the nature of the testing performed, nor the specifics of the engineer's conclusion. Moreover, he repeatedly stated the report was not finalized (Tr. 109-10, 114). I found Mr. Reeves to be a reluctant witness, often hesitant before providing an answer. Given the unreliable nature of the testimony and the witness' demeanor, I do not credit Mr. Reeves's testimony on this matter.

Based upon the foregoing, I find the Secretary has met his burden to establish the existence of hazard at LeMark's worksite over which it exercised control.

Whether the Activity or Condition was a Recognized Hazard

A recognized hazard is a practice, procedure or condition under the employer's control that is known to be hazardous by the cited employer or the employer's industry. *Pelron Corp.*, 12 BNA OSHC 1833, 1835 (No. 82-388, 1986). I find the preponderance of the evidence establishes the hazard of structural collapse due to failure to grout supporting columns was recognized by LeMark and by the precast concrete construction industry.

The erection drawings for the garage project contain instructions calling for grouting to be performed within 48 hours of the erection of a column (Exh. C-5). Mr. Wolfsthal testified these instructions were developed 20 years ago and have been used on many similar projects (Tr.

315-16). ⁹ He went on to testify the purpose of the instruction is to ensure "not too many pieces get loaded on the column without it being grouted." (Tr. 318). Solar's manual for the job also specified grouting was to be performed as soon as possible "unless otherwise noted in the erection drawings." (Exh. C-6 p. 3). LeMark familiarized its supervisors with these documents (Tr. 389-90). Mr. Rodriguez admitted he was familiar with the above-referenced site specific documents, as well as the requirement in general, testifying the requirement to grout within 48 hours was "a standard note that's in every precast garage." (Tr. 374, 397-81). LeMark's supervisor on site, Mr. Rosario also admitted he was aware of the requirement to grout within 48 hours of the column being erected, having been given the erection drawings (Tr. 592, 598). Moreover, he admitted he knew a column could tilt if it was loaded prior to being grouted (Tr. 596).¹⁰ Based upon this evidence, I find LeMark was aware of the hazard posed by failing to grout a supporting column.

Every witness with experience in construction of precast concrete structures, with the exception of Mr. Rodriguez and Mr. Rosario, testified loading a column prior to grouting could result in structural failure (Tr. 140, 168, 266, 275, 318-19, 481). Although reluctant, Mr. Rodriguez did concede grout provides stability to the structure (Tr. 376) and, as previously noted, Mr. Rosario admitted he was aware a column could tilt if loaded prior to being grouted (Tr. 596). I find most persuasive the testimony of Coreslab's representative, Mr. Wolfsthal. He testified such buildings are never built on shims alone, but are designed such that grouting is to follow shortly after the column is erected (Tr. 481), suggesting to proceed otherwise would be contrary to accepted practice in the industry.

In addition, the record contains a document published by the Precast/Prestressed Concrete Institute (PCI), a trade group of the precast concrete construction industry, titled "Precast Prestressed Concrete Parking Structures: Recommended Practices for Design and Construction" (Exh. R-10). The document was identified by Mr. Burke of Solar as a reference for design of

⁹ Mr. Rodriquez further testified the rule is consistently violated (Tr. 374-75). I note Mr. Rodriguez was the only witness to testify the rule is consistently violated. LeMark had ample opportunity to ask other witnesses familiar with the industry to corroborate this statement but failed to do so. Therefore, I give it no weight.

¹⁰ I found Mr. Rosario to be a somewhat reluctant witness. However, I also note Mr. Rosario did not speak English as a first language and was, understandably, upset by and reluctant to discuss the events he witnessed. Notwithstanding these considerations, I found Mr. Rosario appeared rehearsed to provide the same answer repeatedly and was evasive when answering questions he had previously answered in deposition (Tr. 593-96).

precast concrete garages (Tr. 182). In this document, it is noted grout is used for load transferring and column base plates should be grouted before loading with decking (Exh. R-10 pp. 115-16). In two other locations, the document more generally refers to grouting "directly behind erection" (Exh. R-10 p. 110) or as proceeding "as members are erected." (Exh. R-10 p. 113). I find this industry document establishes recognition in the industry of the need for grouting prior to the loading of supporting members.

Based upon the foregoing, I find the preponderance of the evidence establishes both LeMark and the precast concrete construction industry recognized the hazard of collapse due to failure to grout a supporting column prior to loading.

Whether the Hazard Caused or was Likely to Cause Death or Serious Physical Harm

There is no question, and the facts of this case demonstrate, the hazard cited in this case caused death. That is, collapse of the precast members could result in employee death. This is true regardless of whether the collapse **in this instance** was the direct result of the failure to grout. The inquiry is neither whether collapse is likely nor whether this particular violation caused this particular collapse. *Safeway Inc. v. OSHRC*, 382 F.3d 1189, 1195 n.5 (10th Cir. 2004) *citing Dye Construction v. OSHRC*, 698 F.2d 423, 426 (10th Cir. 1983). Rather, the salient inquiry is whether the hazard of collapse could cause death, of which there is no factual dispute.

Whether Feasible Means Existed to Eliminate or Materially Reduce the Hazard

Having established LeMark and the precast concrete industry recognize a hazard exists if structural members are not grouted prior to being loaded, the issue then is whether feasible means of abatement exists to eliminate or materially reduce the hazard. Another way to frame the issue is: What could LeMark do to ensure columns are not loaded prior to being grouted? The Secretary asserts LeMark could materially reduce the hazard by ensuring supporting columns were grouted within 48 hours of the column being erected. The evidence discussed herein establishes the industry has long recognized implementing this 48 hour rule accounts for normal timing of the construction process and is recognized as significantly reducing the likelihood that a supporting member would be loaded beyond the capacity of the shim stacks and anchor bolts prior to being grouted. Therefore, compliance with this rule would materially reduce the hazard.

However, the Secretary has not met his burden by simply showing such a rule would reduce the hazard. Rather, the Secretary must also demonstrate methods of communication and enforcement of that rule exist, other than those implemented by LeMark that would materially reduce the hazard. *See Chaplin*, 593 F.2d 637, 641 (5th Cir. 1979). At the outset, the Secretary must show the methods undertaken by LeMark to address the hazard were inadequate. He must then establish a reasonable safety expert, familiar with the industry, would include in a safety program other methods of communication and enforcement. I find the Secretary has met his burden.

Mr. Rodriguez testified LeMark had no rule or procedure for tracking and determining grouting had been done (Tr. 365, 381). Rather, Mr. Rodriguez testified LeMark relied on reports from either Solar or the special inspector to bring to LeMark's attention any deficiencies in the grouting (Tr. 368-69). Despite this, Mr. Rodriguez admitted he was aware of no one from LeMark reviewing the reports of either Solar or the special inspector (Tr. 369). Nor did LeMark train its employees what to do should an ungrouted column stand for more than 48 hours without being grouted (Tr. 380-81). Moreover, Mr. Rodriquez admitted it is recognized in the construction industry to inspect grout prior to loading a column (Tr. 362). The evidence establishes LeMark did not undertake adequate measures to ensure these inspections were completed and, consequently, grouting had been done. I also find the testimony establishes the industry recognizes the need for such measures, most significantly the need to inspect areas that were to have been or had been grouted (Tr. 274; 361-62).

I am unpersuaded by LeMark's argument that because it required direction from the erector to grout a supporting member, it had no obligation to ensure grouting was performed. The issue is whether LeMark was ensuring timely grouting. Mr. Rosario admitted it was his responsibility to see that grouting was completed in 48 hours of a column being erected (Tr. 596). He testified if he observed ungrouted column he could inform the erector (Tr. 597). He could also remove his employees from the area until the column was grouted. Thus, the fact LeMark's employees could not grout a column until the erector directed them to do so did not prevent LeMark from protecting its employees.

Whether LeMark had Knowledge of the Violative Condition

An essential requirement for meeting the Secretary's burden of proof is establishing the employer had knowledge of the hazard. "As part of the Secretary's *prima facie* case, [he] must show that the employer had actual knowledge of the violation or could have discovered it with the exercise of reasonable diligence." *Otis Elevator Co.*, 21 BNA OSHC at 2207. The Secretary concedes LeMark did not have actual knowledge of the cited condition.¹¹ Therefore, the Secretary must establish LeMark had constructive knowledge of the condition, i.e., it could have discovered the condition with the exercise of reasonable diligence.

The record establishes column B3 was erected on September 13, 2012 (Exh. C-9 p. 6). It is not clear on this record when column A3.3 was erected, but it was erected and loaded by at least October 10, 2012. There is no evidence in the record that either was grouted prior to the October 10, 2012 accident. Therefore, at least column B3 stood ungrouted for more than 20 days. LeMark's employees worked in and around the columns during this time period (Tr. 265-66). Moreover, LeMark knew which elements were being erected each day. Mr. White testified he met with Mr. Rosario daily to discuss the day's work and there was never an occasion on which Mr. Rosario was unaware of columns being erected (Tr. 255-56). In addition, Mr. Rosario was given the drawings of the project so that he would "know what elements are to be grouted." (Tr. 390). Finally, LeMark had three individuals onsite with supervisory authority either daily or on a regular basis (Tr. 577-78, 586).

As discussed herein, the evidence establishes LeMark conducted no routine inspections of the work its employees performed. Rather, LeMark relied on Solar and the special inspector to conduct such inspections. However, a review of the inspection records of both shows significant gaps, most notably a lack of any report of inspections of grout for columns B3 and A3.3. Although Mr. Rosario testified LeMark inspected the work area for safety, he conceded he had no list of what such inspection was to address (Tr. 597). "Reasonable diligence" includes the employer's "obligation to inspect the work area, to anticipate hazards to which employees may be exposed, and to take measures to prevent the occurrence." *Frank Swidzinski Co.*, 9 BNA

¹¹ Mr. White testified much of the time after it was erected, column B3 was under water (Tr. 273). He did not say the same of column A3.3. I found Mr. White less than fully credible on this issue. No other witness, most notably Mr. Rosario, corroborated this statement and documentary evidence fails to support it (See Exhs. C-1, C-2, C-4, and C-6).

OSHC 1230, 1233 (No. 76-4627, 1981). The Commission has held that "[r]easonable steps to monitor compliance with safety requirements are part of an effective safety program." *Southwestern Bell Tel. Co.*, 19 BNA OSHC 1097, 1099 (No. 98-1748, 2000 (citations omitted), *aff'd without published opinion*, 277 F.3d 1374 (5th Cir. 2001). I find the evidence establishes LeMark failed to take any such steps, and constructive knowledge is established.

LeMark's reliance on the Eleventh Circuit's holding in *ComTran Group v. U.S. Dept. of Labor*, 722 F.3d 1304 (11th Cir. 2013) is misplaced.¹² In *ComTran*, the Eleventh Circuit held knowledge by a supervisory employee of his own unsafe conduct cannot be imputed to the employer where that conduct was not foreseeable, but the Secretary can meet her burden to establish constructive knowledge of a supervisory employee's own misconduct through a showing the employers' safety policy, training, and discipline were so lax that the misconduct was foreseeable. The Eleventh Circuit held, however, its decision in *ComTran* did not apply to the ordinary case in which constructive knowledge is established because the supervisory employee should have known through reasonable diligence of the exposure of his subordinates to the hazardous conditions. *ComTran*, 722 F.3d at 1308 n. 2.

Respondent's reliance on *ComTran* ignores its inapplicability to the facts of the instant case. At issue in *ComTran* were two violations of specific safety standards addressing trench safety. The supervisory employee in *ComTran* not only created the hazard addressed by the standard (dug the trench), but was also the exposed employee. *Id.* at 1309. The Secretary attempted to impute knowledge to the employer through the actual knowledge of the supervisor of his own misconduct. In the instant case, it was the two employees working alongside the erection contractor who created the hazard by failing to grout the columns, not knowing misconduct on Mr. Rosario's part. I have found Respondent had constructive knowledge of the hazard created by the non-supervisory employees because Mr. Rosario should have known through reasonable diligence of the exposure of his subordinates to the hazardous conditions. Thus, the case falls outside of the standard set out in *ComTran* as the Eleventh Circuit explicitly stated. *ComTran*, 722 F.3d at 1308 n. 2.

¹² LeMark also relies on *Stewart Electric Co., Inc.*, 2013 WL 7172422 (No. 13-0850, 2013), an unreviewed ALJ decision. Such unreviewed ALJ decisions are not binding. Moreover, I find it inapplicable for the same reasons the Eleventh Circuit's decision in *ComTran* is inapplicable.

Penalty Determination

The Secretary proposed a penalty of \$6,300.00 in this case. The Commission, in assessing an appropriate penalty, must give due consideration to the gravity of the violation and to the size, history and good faith of the employer. *See* § 17(j) of the Act. The Commission is the final arbiter of penalties. *Hern Iron Works, Inc.*, 16 BNA OSHC 1619, 1622, (No. 88-1962, 1994), *aff'd*, 937 F.2d 612 (9th Cir. 1991) (table); *see Valdak Corp.*, 17 BNA OSHC 1135, 1138 (No. 93-0239, 1995) ("The [OSH] Act places limits for penalty amounts but places no restrictions on the Commission's authority to raise or lower penalties within those limits."), *aff'd*, 73 F.3d 1466 (8th Cir. 1996). In assessing a penalty, the Commission gives due consideration to all of the statutory factors with the gravity of the violation being the most significant. OSH Act § 17(j), 29 U.S.C. § 666(j); *Capform Inc.*, 19 BNA OSHC 1374, 1378 (No. 99-0322, 2001), *aff'd*, 34 F. App'x 152 (5th Cir. 2002) (unpublished). "Gravity is a principal factor in a penalty determination and is based on the number of employees exposed, duration of exposure, likelihood of injury, and precautions taken against injury." *Siemens Energy and Automation, Inc.*, 20 BNA OSHC 2196, 2201 (No. 00-1052, 2005).

As to the gravity of the violations, CSHO Garcia testified the violations were rated as high in severity and high probability because of the significance of the possible injury and because employees were exposed to the hazard of structural collapse for the 20-day period during which column B3 was ungrouted while construction commenced (Exh. J-1 p. 113). CSHO Garcia also testified that a reduction of 10% was given for LeMark's size but that no reductions or increases were given for either LeMark's history of violations or good faith (Exh. J-1 p. 114). I agree both the gravity of the violation and the probability of injury are high, taking into consideration the potential for injury and the duration of the exposure. I also agree no reduction in penalty for good faith is appropriate. The record contains scant evidence of any safety program for its worksite or safety training provided by Respondent. Considering all of the statutory factors, it is determined that a penalty of \$6,300.00 is appropriate.

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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:

Citation 1, Item 1, alleging a violation of § 5(a)(1) is affirmed, and a penalty of \$6,300.00 is assessed.

/s/

Date: November 3, 2014

HEATHER A. JOYS Administrative Law Judge Atlanta, Georgia