UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

SECRETARY OF LABOR, Complainant, v. KEYSTONE CONSTRUCTION CORP., Respondent.	DOCKET NO. 97-1521

Appearances: For Complainant: William Staton, Esq., Office of the Solicitor, U. S. Department of Labor, New York, NY.; For Respondent: Ralph Pernick, Esq. and Debra Hopke, Esq., Goldberg & Connolly, Rockville Centre, NY.

Before: Judge Covette Rooney

DECISION AND ORDER

This proceeding is before the Occupational Safety and Health Review Commission pursuant to Section 10(c) of the Occupational Safety and Health Act of 1979 (29 U.S.C. §651, *et seq.*)("the Act"). Respondent, Keystone Construction Corp., at all times relevant to this action maintained a worksite at the Smithtown Avenue Reservoir, Ronkonkoma, NY., where is was engaged in the removal and repair of reservoir/tank. Respondent admits that it an employer engaged in a business affecting commerce and is subject to the requirements of the Act.

Respondent was contracted to clean, repair and repaint the interior and exterior of two one-million gallon concrete water tanks - the Northport tank and the Smithtown tank (Tr. 160-61, 363; Ex. C-1).[1] The work involved the removal of certain areas of spalled/deteriorated concrete from the dome roofs, the application of "coatings " and sealants to the areas where concrete had been removed and the painting of the tanks. On March 7, 1997, while Respondent's employees were in the process of sounding the roof of the Smithtown tank in order to identify areas of decayed concrete, and erecting scaffolding in the center of the tank roof. While engaged in this activity, the roof of the

[1]The term "Tr" refers to the official trial transcript. The term "Ex." refers to exhibits introduced into evidence at trial.

Smithtown tank collapsed, causing the foreman and two employees to fall 35 feet to the floor of the concrete tank (Tr. 26, 122-23). In response to notification of an accident, OSHA Compliance Safety and Health Officer ("CO") Norm Sebbesse commenced an investigation on March 7, 1997. As a result of this inspection, August 5, 1997, Respondent was issued a serious citation alleging a violation of 29 C.F.R. §1926.501(a)(2)[2] or in the alternative Section 5(a)(1) of the Act, with a proposed penalty of $4,200.00. By timely Notice of Contest Respondent brought this proceeding before the Review Commission. The contested violation was the subject of the hearing held before the undersigned. The hearing was held in New York City, New York on June 23-24 and September 9,1998. Counsel for the parties have submitted post hearing briefs and this matter is ready for disposition.

The Accident

The two employees who were involved in the accident testified about their observations of the roof of the Smithtown tank. Walter Fernandez testified that a couple of days prior to the accident, he had observed that there were more holes in the roof of the Smithtown tank than there had been in the just completed Northport tank. He believed that there were more than 10 holes in the roof of the Smithtown tank . He could not recall how large the holes were, but testified that in certain areas he could see exposed wire mesh (Tr. 106-07). On day of accident, he received orders from the foreman, Loukas Papadopoulos to take materials to the tank. Loukas had informed him that they were going to put the roof scaffolding up in the same position as they did the Northport tank (Tr. 107, 110). He testified that after lunch he was told to hit the cement with a hammer where it was in bad condition so that it could be corrected (Tr.108). He started hammering at various previously marked locations in the center and east side of the roof (Tr. 110-112; Ex. C- 8). He stated that once he removed the concrete, he could see through the roof. The largest hole was about 2 feet by 2 feet, and another was 1 by 3 ½feet. Another employee, Mr. Urbina also worked on holes in other areas on the roof (Tr. 115-17). Mr. Urbina informed Mr. Fernandez that he felt something move after

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[2] 29 C.F.R. §1926.501(a)(2)
The employer shall determine if the walking/working surfaces on which its employees are to work have the strength and structural integrity to support employees safely. Employees shall be allowed to work on those surfaces only when the surfaces have the requisite strength and structural integrity.

having hit a hole, and went to tell Loukas. As Loukas and Urbina attempted to level out the center scaffolding in order to secure the scaffolding the fall occurred (Tr.119, 121-23). Mr. Fernandez testified that they did not use lifelines or harnesses to protect against falls while on the tank (Tr. 125). As a result of his fall he was hospitalized (Tr. 126). Nativo Urbina testified that he had broken up concrete in three areas that day (Tr. 133). These areas measured approximately 2 feet by 1 foot, 3 feet by 2 feet, and 4 feet by 5 feet. He also testified that in addition to the holes he made, there were holes all over the roof. He also stated that there were more holes in the roof of the Smithtown tank than the Northport tank - where he did not observe very many holes. He testified that some holes revealed exposed wire (Tr. 135-39). As they were adjusting the legs of the scaffold, he heard something and saw a large crack (Tr. 140). The fall occurred shortly thereafter.

Background

Respondent was awarded a contract with Suffolk County Water Authority for the rehabilitation of two dome-roof, prestressed concrete water tanks or reservoirs (Tr. 160, 365). Although the tanks had the same water capacity and were of the same type of construction, there were differences between the two tanks. The first tank where Respondent's employees performed these tasks- the Northport Avenue Reservoir - was 96 feet in diameter and was situated above grade (Tr. 220). The second tank - the Smithtown Avenue Tank - was 107 feet in diameter, 35 feet in height with only three feet of the tank exposed above grade (Tr. 179, 220). The area of the dome roof on the Smithtown tank was 40% larger (Tr. 288).

In preparation for the bidding process for the rehabilitation projects, Suffolk County Water Authority ("SCWA") hired an engineering firm, Tank Industry Consultants ("TIC") to evaluate the project. In preparation of the contract, the firm prepared pre-bid inspection reports of the tanks and developed the contract specifications. Once the contract was executed, TIC conducted the pre-construction meeting and provided a Field Technician onsite during the actual repair work (Tr. 23, 365-67, 377; Exs. C-10, C-11, C-12, C-13, C-24). The contract required the contractor to erect a containment system over each tank during the rehabilitation work to prevent the migration of blasting agents and paint to the surrounding atmosphere (Tr. 58, 164,174). Respondent's Project Manager, Sigmund Jordan, developed its system. The containment system consisted of scaffolding, OSHA approved planking, cables and tarps. As part of the bidding process, Respondent submitted this

containment plan along with drawings. Mr. Jordan testified that he developed the containment system for both tanks (T.164, 196; Ex. C-9, Northport plan). The plan was approved with some modifications by TIC(Tr. 165-68). The contract contained several provisions which pertain to the loads imposed upon the tank by the containment system and the contractor's responsibility for maintaining these loads. The contract requirements as set forth in Ex. C-1, pages SR-3, DTS-9 and DTS-13 provide:

> 7.11 The provisions of the Federal Occupational Safety and Health Administration's (OSHA) "Occupational Safety and Health Standards" and "Safety and Health Regulations for Construction" shall be observed.. . .
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> 23. Safety and Health: . . . The CONTRACTOR shall comply with . . . all health and safety regulations and requirements of Federal OSHA specifically OSHA standard for construction Industry. . . All rigging attachments present on the tank shall be carefully evaluated by the CONTRACTOR immediately prior to use for the type and magnitude of loads which CONTRACTOR intends to impose on them.
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> . . .
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> 34. Containing Cleaning Debris and Overspray: . . . The enclosure will place additional loads on the tank which the tank was not originally designed for. The CONTRACTOR shall reinforce the tank as necessary to assure no damage occurs to the tank. . . Neither the ENGINEER or the OWNER assume any responsibility for the structural integrity of the tank to support the enclosure system. . . Review of the enclosure system for containing the cleaning debris and overspray shall not warrant the structural integrity of the enclosure system and shall not warrant the structural integrity of the tank to support the enclosure system.

Mr. Jordan testified that he was involved in the bidding process for the subject contract. He was the estimator for the process, he obtained the contract documents, evaluated them and established the price to undertake the project. He testified that the Northport job began in early 1997. His first visit to the site was in December to attend a preconstruction meeting. At that time he

inspected the Northport tank. He testified that it looked good, and had some delamination. [3] He did not notice any full- depth spalling in the roof of the Northport tank (Tr. 161-63). He testified that his employees created full-depth spalling or holes in the roof during their course of work (Tr. 171). He recalled that 3 to 5 full-depth areas had been created - the largest was about 10 feet by 15 feet. The containment system was installed according to the plan, and the remainder of job took place without incident.

Mr. Jordan acknowledged that the Smithtown tank also required a containment system. He did not develop a separate plan for the Smithtown tank (Tr. 174-75). Mr. Jordan also acknowledged that prior to preparing the bid for the Smithtown tank, he did not visit the site. He testified that about a week before they started work on the tank he visited the site. At that time he remained on the outside of a chain link fence, some 40 to 50 yards away. He viewed the tank to determine if they needed to make any adjustments to their "game plan"- method and sequence of construction. He was not able to view the entire roof of the tank. Prior to the accident, he never had the opportunity to get any closer to the tank (Tr. 175-77). However, he testified that Foreman Loukas, and the Superintendent George Kokinakis had inspected the roof about a month prior to the start of work and informed him that the tank was the same as the first tank except it was below grade. There was no discussion about any spalling on the roof (Tr. 178-79). However, he testified that several days prior to the accident, he received notification from the Foreman that they would have to perform more full-depth repair than they did at the Northport tank - he did not specify how much more repair had to be done (Tr. 207). The Smithtown contract contained an estimate of 10 feet full-depth spall roof repair (Tr. 187, 206-07; Ex. C-1, p. BF-15). Mr. Jordan testified that he never made a determination as to where the 10 square feet of full-depth spall repair was located and never determined how much more full-depth repair was required (Tr. 187).

Joseph McCarthy, the Field Technician for TIC for the Smithtown tank testified that he had visited the jobsite on March 6, 1996. He and the former technician for the job site walked around the job so that he could familiarize himself with the job site. He observed that there were areas of spalled

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[3] Mr. Jordan explained the term "delamination" meant decomposed concrete, concrete which could not sustain the strength that it was designed for, He explained that "spalling" is a delamination of concrete usually caused by the infiltration of water (Tr. 159).

concrete in the roof, and in one area a hole had been made so that you see into the tank. He recalled that there were also other holes which permitted one to see inside the tank (Tr. 27-28). The holes ranged in size from one inch in diameter to 5-6 inches in diameter. He also observed that when viewing the floor on the inside of the tank, one could see the holes. He recalled two areas where the reinforcing mesh could be seen from the inside and outside (Tr. 29). He further testified that on March 7, he observed Respondent's employees removing spalled concrete. He observed that the employee had removed an area of spalled concrete which measured 36 inches wide and 15 to 20 feet long (Tr. 44-47).

Secretary's Burden of Proof

The Secretary has the burden of proving his case 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 (the employer either knew or with the exercise of reasonable diligence could have known, of the violative conditions). *Atlantic Battery Co.*, 16 BNA OSHC 2131, 2138 (No. 90-1747, 1994). To satisfy the element of knowledge, the Complainant must prove that a cited employer either knew, or with the exercise of reasonable diligence could have known of the presence of the violative condition. *Seibel Modern Manufacturing & Welding Corp.*, 15 BNA OSHC 1218, 1221 (No. 88-821, 1991); *Consolidated Freightways Corp.*, 15 BNA OSHC 1317, 1320-1321 (No. 86-351, 1991). "Because corporate employers can only obtain knowledge through their agents, the actions and knowledge of supervisory personnel are generally imputed to their employers, and the Secretary can make a prima facie showing of knowledge by proving that a supervisory employee knew of or was responsible for the violation." *Todd Shipyards Corporation*, 11 BNA OSHC 2177, 2179 (No. 77-1598, 1984). *See also Dun Par Engineered Form Co.*, 12 BNA OSHC 1962 (No. 82-928, 1986)(the actual or constructive knowledge of an employer's foreman can be imputed to the employer). In *Pride Oil Well Service*, 15 BNA OSHC 1809 (No. 87-692, 1992), the Review Commission set forth criteria to be considered when evaluating reasonable diligence.

> Reasonable diligence involves several factors, including an 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 OSHC 1230, 1233 (No. 76-4627, 1981) . . . Other factors indicative of reasonable diligence include adequate supervision of employees, and the formulation and implementation of adequate training programs and work rules to ensure that work is safe. (citations omitted).

Id. at 1814.

The Violation

The fall protection standards found at Subpart M - §1926.500 *et al* direct employers to design and develop systems and procedures to prevent employees from falling, off, onto, or through working levels. 59 Fed. Reg. 40672 (1994). The subject standard imposes an obligation on employers to assess the workplace to determine if the walking or working surfaces on which employees are to work have the strength and integrity to safely support workers. Employees are not to permitted to work on those surfaces until it has been determined that the surfaces have the requisite strength and integrity to support the workers. A walking/working surface is defined at §1926.500(b) as any surface on which employees walk or work including floors and form work. There is no dispute that the roof of the Smithtown tank was a walking/working surface within the meaning of the standard, and thus, the cited standard is applicable. The issue presented is whether or not Respondent assessed the roof to determine if the walking or working surfaces on which employees were required to set up scaffolding and perform full-depth spalling had the strength and integrity to safely support workers.

The undersigned finds that the standard as well as the contract between Respondent and Suffolk imposed upon Respondent an obligation to ensure that the required containment system had the strength and integrity to safely support Respondent's workers. The record establishes that an additional load was to be imposed upon the working surface of the tank. The record also reveals that there were holes in the working surface which would affect the integrity and strength of the working surface upon which the containment system was installed. Mr. Jordan testified that at the time the work began on the Smithtown, he had not developed a separate containment plan nor had he personally inspected the roof of the Smithtown tank (Tr. 176). He acknowledged that during the bidding process, he had made a determination as to the load that would be imposed on the roof by

the containment system. He testified that he determined the load to be imposed upon the roof by the containment system by calculating the "weight of each employee, the weight of the scaffolding system, [and] the weight of the rope"(Tr. 193). He did not write down these calculations. In responding to the question of how he determined that the roof could support the load he had calculated, he testified that he knew what the "codes" required, and evaluated what the loads were imposing on per square foot as opposed to what the structure could take. However, he stated that he did not know whether the roof could take it or not, and he could not recall what his calculations indicated.[4] Furthermore, he acknowledged that he did not discuss with anyone outside of Respondent, the loads that would be imposed upon the roof. He further testified that he was knowledgeable of the fact that Respondent's employees would create holes in the roof surface during the course of their work. He acknowledged that with respect to this factor, he made no determination as to how that activity would affect the structural integrity of the roof surface (Tr. 193, 195-96). The undersigned, assuming Mr. Jordan did make certain calculations, finds that in view of his testimony, the alleged calculations he made at the time the contract was entered into, do not meet the criteria set forth in the standard. His testimony establishes that these alleged calculations did not take into consideration the actual condition of the walking/working surface which employees worked upon on March 7, 1996. The record undisputedly establishes that there were holes in the roof at the time the employees commenced work, and additional openings were created as they worked. Mr. Jordan acknowledged that he only knew what the roof could have taken based on what he had available at the time he prepared the contract. He did not know what the roof was capable of taking at the time of the accident. He made no determination of how the openings affected the strength and structural integrity of the roof . The fact that the roof collapsed is a clear indication that the roof was not capable of supporting the exposed employees.

The undersigned finds that the record established employer knowledge of the violation. The Respondent had actual knowledge and could have known of the cited condition with the exercise of reasonable knowledge. The contract - the terms of which Mr. Jordan admitted that he was fully aware placed Respondent on notice that approval of the containment system under the contract did

[4] See Attached Appendix A Tr. 193-95

not warrant the structural integrity of the tank to support the system (Tr. 174). Mr. Jordan also admitted that he knew that Respondent's employees would be creating holes, and had observed the creation of holes or full-depth spalling in the first tank (Tr.171, 185, 187, 195-96). He knew that Respondent was responsible for the safety of its employees by the terms of the contract, He was had been informed that his employees were required to do full-depth spalling during the course of their work. He was informed that there were holes in the roof. The testimony of the employees with regard to their observations of the roof establishes that had Respondent exercised reasonable diligence the Respondent would have known that the Smithtown tank contained several holes and was more deteriorated than the Northport tank (Tr. 106, 141). Additionally, the foreman had informed him on March 5 or 6 that the Smithtown tank required more extensive repair work than indicated in the contract. He never inquired how much more repair work had to be done (Tr. 195, 206-07). Without having ever personally observed the condition of the Smithtown roof, he advised the superintendent and foreman to follow the drawings from the first tank. Had he exercised reasonable diligence, he would have anticipated the hazards created by the openings which he had been informed of were present in the roof, and taken steps to ensure that the roof could safely support his employees. He never made any determination as to how that activity would affect the structural integrity of the roof surface in spite of the information which he had been given and which was available to him (Tr. 195).[5]

In view of the above, the undersigned finds that Respondent had actual and constructive knowledge of the cited hazard. Mr. Jordan's knowledge is imputed to the Respondent.

Classification

The undersigned finds that this violation was appropriately classified as serious. Section 17(k) of the Act, 29 U.S.C. §666(k), provides that a violation is serious if there is a "substantial probability

[5] The Secretary presented the expert testimony of Dr. Theodore Crom, a retired former CEO of Crom Corporation, the largest manufacturer in the country of prestressed concrete tanks. He provided testimony with respect to the types of inspections which an employer in the industry should have performed in order to ensure the strength and structural integrity of the tank (Tr. 283-84, 302). Such evaluation would have started with a thorough visual inspection, followed by sounding the roof with a hammer or the taking of core samples - a task Mr. Jordan admitted familiarity (Tr. 208-11, 215, 283-84).

that death or serious physical harm could result" from the violation. The undersigned finds that as stipulated by counsel, a fall from 35 feet can cause death or serious injury (Tr. 126).

Penalty

Once a contested case is before the Review Commission, the amount of the penalty proposed by the Complainant in the Citation and Notification of Proposed Penalties is merely a proposal. What constitutes an appropriate penalty is a determination which the Review Commission as the final arbiter of penalties must make. In determining appropriate penalties "due consideration" must be give to the four criteria under Section 17(j) of the Act, 29 U.S.C., §666(j). These "penalty factors" are: the size of the employer's business, the gravity of the violation, the employer's good faith, and its prior history. *J.A. Jones Construction Co.*, 15 BNA OSHC 2201, 2213-14 (No. 87-2059, 1993).

The record reflects that gravity of the violation established a high severity because of the serious nature of expected injuries. The probability was assessed as high because only three employees were involved in the accident. The gravity based penalty was assessed at $7,000.00 because of the high gravity. A 40% reduction was applied to the penalty because of the Respondent's small size. No reduction was applied for "good faith" because of the high gravity serious violation. No reduction was applied for "history" because a final order existed against the Respondent for at least one serious violation within three years prior to the issuance of the instant citation. *See* Secretary's Post-Trial Brief, Exhibits A and B.[6] Accordingly, a penalty in the amount of $4,200.00 is appropriate.

Findings of Fact and Conclusions of Law

All findings of fact and conclusions of law relevant and necessary to a determination of the contested issues have been found specially and appear in the decision above. See Rule 52(a) of the Federal Rules of Civil Procedure.

ORDER

Based upon the foregoing decision, it is hereby ORDERED that:

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[6] The undersigned finds that the affidavit of the Assistant Area Director of the Bayside Area Office and accompanying identifying information submitted by the Secretary, establishes that the citation issued on June 2, 1995 for a violation of §1926.152(b)(1) involved the instant employer. Respondent has produced no evidence to rebut this finding.(Tr. 461).

Citation 1, Item 1, alleging a serious violation 29 C.F.R. §1926.501(a)(2), is AFFIRMED with a penalty of $4,200.00. The alternative allegation of a violation of Section 5(a)(1) of the Act is not applicable in view of the instant finding.

Covette Rooney
Judge, OSHRC

Dated:

Washington, D.C.

APPENDIX A

By MR. STATON

Q Did you ever make any determination as to the load that would be imposed on the roof by the containment system?

A Yes.

Q And, how did you do that?

A By basic calculations, just by basically taking the weight of each employee, the weight of the scaffolding system, the weight of the rope and see what kind of load I would be imposing on the dome.

Q What load did you come up with?

A I can't remember.

Q You can't remember?

A No.

Q Were these written calculations?

A No, not really.

Q These are calculations you did in your head?

A Well, not in my head, but you have a calculator and you'll go though certain calculations; it's not required or necessary to write it down.

Q So, you never made any written record of this load?

A That's correct.

Q How did you determine that the roof could support the load that you calculated?

A Well, there's certain codes in certain criteria on the roof and around any kind of self supporting structure, so you're basically evaluating what the loads are imposing basically on per square foot as opposed to what the structure can take.

Q Well ...

JUDGE ROONEY: Excuse me, Mr. Staton; Mr. Jordan, the court stenographer is indicating that he's having some problem picking up your voice. So, I'm going to have to ask you to try as best as you can to speak a little bit more clearly and loudly.

THE WITNESS: Okay, I will.

JUDGE ROONEY: Thank you.

BY MR. STATON:

Q Mr. Jordan, based on the information you had available to you, can you tell us even today as we sit here in this courtroom what kind of load the roof was capable of supporting before work began on March 7, 1997?

A That the roof was capable of supporting?

Q Yes.

A No. Like I said before, I know what the codes demand and based on what is stipulated in the contract documents, I evaluated what the roof could have taken at that point in time.

Whether the roof could have took it or not, I don't know.

Q You've been in the courtroom for the testimony in this case yesterday; is that right?

A That's correct.

Q And, you heard testimony from employees and from Mr. McCarty from TIC describing how holes were made in the roof surface on March 7 prior to the accident?

A Yes, I did.

Q Did you know that the work was going to involve that kind of activity on the Smithtown tank?

A Would you mind just repeating the question?

Q Did you know before March 7th that the work your employees were going to do on the Smithtown tank would involve creating these openings in the roof surface?

A Yes.

Q Did you ever make any determination as to how that activity would affect the structural integrity of the roof surface?

A No.

Q Did you have any involvement in the design of the containment system that was used at the Smithtown tank?

A Yes.