

BEFORE THE
STATE OF CALIFORNIA
OCCUPATIONAL SAFETY AND HEALTH
APPEALS BOARD

In the Matter of the Appeal of:

SHERWOOD MECHANICAL, INC.
6630 Top Gun Street
San Diego, CA 92121

Employer

Docket No(s). 08-R3D2-4692 & 4693

**DECISION AFTER
RECONSIDERATION**

The Occupational Safety and Health Appeals Board (Board), acting pursuant to authority vested in it by the California Labor Code and having ordered reconsideration of the matter on its own motion, renders the following decision after reconsideration.

JURISDICTION

On May 19, 2008, the Division of Occupational Safety and Health (Division) commenced an inspection of a place of employment in San Diego, California maintained by Sherwood Mechanical, Inc. (Employer). On November 18, 2008, the Division issued four citations to Employer alleging violations of occupational safety and health standards codified in Title 8 California Code of Regulations.¹

Employer timely appealed each citation, and after administrative proceedings were held, an Administrative Law Judge (ALJ) of the Board issued a Decision on September 28, 2011, upholding Citation 1, and granting Employer's appeal as to Citations 2, 3 and 4.

The Board ordered reconsideration to address whether the record contained sufficient evidence to sustain the serious, accident-related violations in Citation 3 [3329(b): natural gas piping not installed in accordance with good engineering practice], and Citation 4 [5416(c): allowing natural gas to escape from piping and failing to test for its concentration]. The Division and Employer filed Answers to the Board's Order. After consideration of all evidence and arguments, we deny Employer's appeal as to both citations,

¹ Unless otherwise specified, all references are to California Code of Regulations, Title 8.

including the serious classification, as the record contains sufficient evidence to sustain the allegations therein.

ISSUE

Does the record contain sufficient evidence to sustain the violations alleged in Citations 3 and 4?

EVIDENCE

On May 19, 2008, an explosion occurred at the Hilton San Diego Convention Center Hotel (the hotel) which was under construction. Hensel Phelps Construction Co. was the general contractor, and Employer was the plumbing subcontractor responsible for installation of the hotel's gas and water lines.

Two of Employer's employees, Richard Brown and Stanley Solis (hereinafter, "Employees"), were in the 5th floor mechanical room (5th Floor MR) preparing to "light off," meaning to startup, the hotel's boiler system. To do so, Employees were using natural gas to purge air from the natural gas pipelines that fed into the boilers. This "purging" resulted in a natural gas build up in the 5th Floor MR. An explosion occurred. The Division concluded the buildup of gas and consequent explosion was caused by Employees failing to properly vent the gas to the outside atmosphere and failing to test for the concentration of gas while in a room that contained multiple sources of ignition.

The Division presented testimony from five different witnesses, as well as photographs and documents. Curtis Chriss (Chriss), a Measurement and Regulation System Manager for San Diego Gas and Electric (SDG&E), testified as to the accuracy of a pressure regulator/flow monitoring device readout (the readout). This particular flow monitoring device measured all natural gas supplied to the hotel. Chriss authenticated the readout, and explained that the readout depicted a flow of 4,000 cubic feet of natural gas into the hotel between 1:00 p.m. and 2:00 p.m. on the day of the explosion. Employer did not impeach Chriss or otherwise submit any evidence that would question the accuracy of the readout, and it was admitted into evidence without objection.

The Division also called Tony Anderson (Anderson), a supervisor for Far West Insulation Company. Far West Insulation was the fire-proofing and insulation sub-contractor. Anderson testified that he was waiting to pick up one of his employees, Jerry Baron (Baron), when suddenly Baron called him and said he had been burned and needed to be taken to the hospital. Anderson received the call right after the explosion, wherein Baron stated he was in the 5th Floor MR when two plumbers came in, then all of a sudden he

looked down and there was a ball of fire. (Decision, p. 6.) He got burned, fell off the ladder and ran out. (*Ibid.*) Anderson further testified that the plumbers at the jobsite were Sherwood Mechanical employees, he personally observed that Baron was burned from the explosion, and that Baron still (as of the hearing date) cannot drive himself, is on antibiotics, and can only eat bland food.²

Miguel-Angel San Martin (San Martin) also testified. He was the supervisor for the electrical subcontractor at the site, Dynalectric. On the day of the explosion, he was in charge of supplying correct voltage to various equipment loads located on levels 1 through 5 of the hotel. About an hour before the explosion, San Martin received a phone call from Employer's usual foreman³ who requested that San Martin supply electrical power to the boilers located in the 5th Floor MR. San Martin could not immediately stop what he was doing, but told the foreman that he would "head up there" and meet him. He also testified that the following electrical equipment in the 5th Floor MR was energized at the time of the explosion: a transformer, distribution board, at least 3 panel boards, a booster pump and 2 other non-designated pumps.

Division Associate Safety Engineers Kasthuri Ramesh (Ramesh) and Michelle Boswell (Boswell) testified regarding their investigation of the accident. Their testimony consisted of personal observations of the damage to the room, authentication of photographs of damage taken after the explosion, the likelihood of serious injury that would result from such an explosion, as well as the content of statements obtained during the investigation.

Ramesh conducted an interview with Employer's site-foreman, Bob Bridges (Bridges). The interview was conducted inside Employer's trailer located at the jobsite. Ramesh testified that Bridges told him Employees were in the 5th Floor MR on the day of the explosion, and were purging gas lines in preparation to light off the boilers. Bridges also told Ramesh that no gas meters were used to monitor for concentration levels, that Employees did not vent the gas to the outside atmosphere while purging, and that he closed a 3-inch natural gas supply valve in the 5th Floor MR the day after the explosion.

After the Division presented its case-in-chief, Employer rested and did not present any evidence.

² The Division did not attempt to establish whether Baron's injuries from the explosion were serious as defined under Labor code § 6302. Although Anderson's testimony regarding Baron's current condition appears to show lingering negative and potentially serious effects, the Division did not produce any evidence as to the length of Baron's hospitalization stay after the explosion or the extent of his injuries.

³ San Martin could not remember his name, but knew the person as Employer's usual foreman.

REASONS FOR DECISION AFTER RECONSIDERATION

In making this decision, the Board relies upon its independent review of the entire evidentiary record in the proceeding. The Board has taken no new evidence. The Board has also reviewed and considered the briefs and arguments of the parties.

The findings of the Administrative Law Judge are entitled to great weight and will not be set aside in the absence of contrary evidence of considerable substantiality. (*Johns-Manville Sales Corp.*, Cal/OSHA App. 77-339, Decision After Reconsideration (Dec. 28, 1983), citing *Garza v. Workmen's Comp. App. Bd.* (1970) 3 Cal.3d 312; *Lamb v. Workmen's Comp. App. Bd.* (1974) 11 Cal.3d 274.) The Division has the burden to prove by a preponderance of the evidence each element of an alleged violation.⁴ (*Howard J. White*, Cal/OSHA App. 78-741, Decision After Reconsideration (Jun. 6, 1983).) Additionally, evidence presented by one credible witness is sufficient to support any fact. (*People v. Allen* (1985) 165 Cal.App.3d 616, 623, citing *People v. Turner* (1983) 145 Cal.App.3d 658, 671 [absent physical impossibility or inherent improbability, testimony of a single witness is sufficient to support criminal conviction]; see also 3 Witkin, Cal. Evidence (4th ed. 2000) Presentation at Trial, § 89, p.123.)

The ALJ Was Incorrect In Concluding The Record Lacked Evidence That The Explosion Was Caused By Natural Gas

Before discussing the citations, it is necessary to analyze whether the explosion was caused by natural gas. The ALJ ruled that there was no evidence to prove that the 4,000 cubic feet of natural gas flowing into the hotel actually caused the explosion. (Decision, pp. 13, 15.) “While the explosion could be the result of natural gas, the evidence is insufficient to establish that ignition of natural gas was the actual cause of the explosion.” (*Id.*, p. 15.)

In support of this ruling, the ALJ reasoned that if natural gas really did reach its lower explosive limit (LEL)⁵ in the 5th Floor MR, then Employees should have been able to smell the odorant in the natural gas. She then inferred that because Employees did not *mention* anything about the odorant during their interviews with the Division inspectors, that this, in turn, meant that Employees did not actually smell any odorant. (*Id.*, p. 16.) This line of

⁴ “Preponderance of the evidence” is usually defined in terms of probability of truth, or of evidence that, when the quality of which is weighed with that opposed to it, has more convincing force and greater probability of truth. (See *Lesslie G. v. Perry & Associates*, 43 Cal.App.4th 472 [review denied]; see also 1 Witkin, Cal. Evidence (4th ed. 2000) Burden of Proof, § 35, p.184.)

⁵ “Lower explosive limit” (LEL) is used in fire science to mean the minimum concentration of vapor in air below which propagation of a flame does not occur in the presence of an ignition source. (See *Cal Energy Operating Corp.*, Cal/OSHA App. 09-3675, Denial After Petition for Reconsideration (Nov. 12, 2010), citing 8 CCR § 8354.)

reasoning is incorrect, and relies on an unsupported assumption that Employees would admit to smelling the odorant. If anything, the correct inference would be exactly opposite. Namely, Employees – whose Employer was cited with improper purging and causing an explosion with serious injuries – would not admit that they smelled odorant and failed to take remedial steps to avert the explosion. Furthermore, there is no evidence that Employees were *ever questioned in the first place* as to whether they smelled the odorant in natural gas, making it even less likely that they would volunteer such information.

Next, the ALJ reasoned that “other possible causes of explosion exist.” (Decision, p. 15, fn. 17.) While other causes are theoretically possible, they do not exist for purposes of judicial review without evidence to substantiate such possibilities. (*CA Transportation*, Cal/OSHA App. 08-2173, Decision After Reconsideration (Dec. 21, 2011) [Board would be speculating without evidence in the record]; *People v. Ramos* (1997) 15 Cal.4th 1133, 1157 [errant speculation of improper alteration when no evidence of alteration].) Here, Employer did not produce any evidence of an alternative source of explosion, nor did the Division’s case disclose any.

Rather, the record establishes that natural gas caused the explosion. First, an explosion occurred at the hotel on May 19, 2008, which caused extensive damage to the 5th Floor MR and surrounding areas. Second, the Division offered into evidence the SDG&E meter readout (Ex. 4), which depicted that 4,000 cubic feet of natural gas flowed into the hotel on the day of the explosion, between 1:00 p.m. and 2:00 p.m. The readout specifically recorded all natural gas supplied to the entire hotel, was properly authenticated by Mr. Chriss from SDG&E, and was admitted into evidence without objection. Employer did not challenge its accuracy at hearing, and there is no reason to question its evidentiary value. Therefore, the Division established that 4,000 cubic feet of natural gas flowed into the hotel the day of the explosion.

A large volume of natural gas flowing into a hotel, coupled with a large explosion that same day within the same hotel, is substantial evidence that supports the inference that such volume of explosive gas caused the explosion. This is even more so when, as here, there is absolutely no contrary evidence of any other source of explosion. (See 3 Witkin, Cal. Evidence (4th ed. 2000) Presentation at Trial, § 89, p. 123; see also *People v. Allen*, *supra*, 165 Cal.App.3d at p. 623 [absent inherent improbability, testimony of a single witness is sufficient to support fact asserted].)

Furthermore, there is additional evidence that points to natural gas being the source of the explosion. Ramesh testified that almost all of the 4,000 cubic feet of natural gas that flowed into the hotel specifically discharged into

the 5th Floor MR. He made this determination based on checking what other devices in the hotel were using natural gas, finding that only devices consuming minimal amounts of gas were online and located on the first floor. He also testified that no gas leaks existed, and the pipeline was “completely open” in the 5th Floor MR.⁶

It is therefore established that nearly all of the 4,000 cubic feet of natural gas that flowed into the hotel was discharged into the 5th Floor MR. This is further evidence from which to draw the inference that the explosion in the room was caused by the gas.⁷ Even if this were not enough, Ramesh also measured the room and calculated its volume to be 19,000 – 20,000 cubic feet. He testified that five percent (5%) of the room’s volume (950-1000 ft³) is twenty-five percent (25%) of the LEL for natural gas. Therefore, 100% LEL in the room equals 3800 – 4000 cubic feet, which corroborates the other evidence discussed above, namely that almost all of the 4,000 cubic feet of gas was released into the room and the explosion occurred.

Finally, by definition, an explosion of the type involved here can occur only when the atmosphere in question contains combustible gas at a concentration between the lower and upper explosive limits, and there is a source of ignition. (See § 8354.) As to the latter necessity, San Martin, the electrical supervisor, testified that numerous items of electrical equipment were energized in the room, including equipment that contained relays and contacts that “spark” as part of their normal operation. This is all uncontroverted evidence from independent sources that supports a finding that natural gas was released into the 5th Floor MR, reached its LEL, ignited, and caused the explosion.

To summarize: 4,000 cubic feet of natural gas was released into the hotel, the vast majority of which flowed into the 5th Floor MR. It was established that approximately 3,800 – 4,000 cubic feet of natural gas was

⁶ Employer did not rebut Ramesh’s testimony with any evidence. Rather, Employer argued that gas was being fed into locations other than the 5th Floor MR. The Board will not consider such speculation. (See *CA Transportation, supra.*; *People v. Ramos, supra*, 15 Cal.4th at p. 1157.)

⁷ Employer did not stipulate to the explosion occurring in the 5th Floor MR, but only that the explosion caused extensive damage to the hotel, *including* the room. (Employer’s Ans., p.3 [emphasis added].) Employer provided no evidence to support an alternate location. The Division presented photographs showing extensive damage within the 5th Floor MR, including burn damage that is clearly visible to pipe insulation and metal panel coverings. Division Inspectors Ramesh and Boswell testified as to their observation of the same. Additionally, Anderson (fire-proofing supervisor) testified that Baron (his employee) told him he was in the room when he saw two of Employer’s employees in the room and then a “ball of fire” come at him. Baron called Anderson right after being subjected to the explosion, stating he was burned and needed to be taken to the hospital immediately. Such burns were personally verified by Anderson. This is a sufficient showing that Baron was under stress when he made the phone call to Anderson. Therefore, although hearsay, Baron’s call is admissible under the spontaneous statement exception. (Evid. Code § 1240.) The above evidence establishes that the explosion occurred in the 5th Floor MR.

required to reach its LEL for the room.⁸ The explosion occurred in the 5th Floor MR as photographs and personal testimony clearly depict extensive damage within and projecting outward from the room. The location of the explosion is further established by Baron's testimony, via Anderson, that he was in the 5th Floor MR when he saw two plumbers of Employer and then a "ball of fire." And, we know that numerous equipment in the 5th Floor MR were energized at the time of the explosion.

Taken in aggregate, the above items constitute substantial evidence from which to infer that natural gas reached its LEL, ignited, and caused the explosion in the 5th Floor MR.⁹ Accordingly, the ALJ's ruling that no evidence exists as to where the gas was released, or whether it was released before or after the explosion, is overruled. (Decision, pp. 13, 16.)

Citation #3: § 3329(b)

Natural gas piping not installed in accordance with good engineering practice

Citation 3 alleged a violation of section 3329(b), which provides: "All pressure piping shall be designed, constructed, installed and maintained in accordance with good engineering practice. Piping which meets the requirements of the applicable ANSI B31 standard shall be considered as providing reasonable safety." For the applicable standard, the Division referenced ANSI/ASME B31.2-1968 (Fuel Gas Piping) and its associated Appendix E (Hot Taps, Purging and Clearing). (See Ex. 6.) The Division alleged that the safety order was violated because 1) piping being purged of air was not vented from the 5th floor MR to the outside atmosphere, and 2) the vent valve was not closed following purging of air from the piping.

In its defense, Employer contends that the Division presented no credible evidence to place Employees in the 5th Floor MR to begin with, let alone prove that they were purging. (Answer, p. 11.) This assertion lacks merit for several reasons.

First, Bridges told Ramesh that Employees were in the 5th Floor MR "purging the gas" in preparation to light off the boilers. We agree with the ALJ that this statement was an authorized admission under Evidence Code section 1222. (Decision, p. 8.) Employer argues otherwise, alleging there was no

⁸ This is a conservative estimate. The actual LEL was most likely less, due to the equipment and electrical panels in the room and associated displacement of air. (See pictures of room, Ex. 3.) This makes it even more likely that the LEL was exceeded.

⁹ Employer's assertion that other sources of explosion may have existed (Answer, pp. 3, 7, 12), is mere conjecture; it is not supported by any evidence to establish that some other source actually exploded.

independent, non-hearsay evidence to establish Bridges as a supervisor. However, Ramesh testified that the general contractor (GC) walked him over to Employer's site trailer, introduced him to Bridges, and identified Bridges as the site foreman for Employer. While the GC specifically labeling Bridges as "the person in charge" is hearsay (i.e., offered for the truth of the statement that he is a foreman), the GC *introducing* Ramesh to Bridges is not. Namely, the fact alone that the GC specifically took Ramesh to Employer's site trailer and introduced "Bridges," as opposed to someone else, is evidence which tends to show that Bridges was indeed the foreman Ramesh was looking for.¹⁰

As additional support of Bridges' supervisor status, Ramesh stayed and interviewed Bridges after being introduced by the GC. Bridges did not object or otherwise indicate he was not the supervisor or direct Ramesh to another individual. They discussed Employer's responsibilities, workflow at the site, and what exactly Employees were doing leading up to the explosion. Ramesh did not search out someone else to interview, which leads one to infer that Bridges was indeed the foreman he needed to speak with concerning the accident. This conversation between Ramesh and Bridges is not hearsay; it is not offered for the truth of the matter asserted during that conversation. (Evid. Code § 1200(a).)

Therefore, contrary to Employer's assertions, the above are examples of independent, non-hearsay evidence that support Bridges' supervisor status. This is fortified by the fact that Employer did not offer any rebuttal evidence contesting such status. (See Evid. Code § 413 [failure of a party to testify and defend against evidence entered against him may be used to support inference against party].) Therefore, it is established that Bridges was a foreman, and his statement that Employees were purging was properly admitted.

Returning to the issue of purging, Division Inspector Boswell next testified that Employee Brown told her that he was in the 5th Floor MR conducting "sniff tests" to check for gas on the day of the explosion. Although Brown's statement to Boswell is hearsay which does not qualify as an authorized admission,¹¹ his statement is nevertheless allowed under section 376.2 because it is probative as to purging, and thereby supplements Bridges' independent statement to Ramesh that Employees were purging gas in the

¹⁰ With this non-hearsay evidence admitted, the hearsay testimony of the GC stating Bridges was the person in charge is allowed as further corroborating evidence of Bridges' supervisor status. (§ 376.2 [hearsay may be used to supplement or explain other evidence]; *Isaac v. Dept. of Motor Vehicles* (2007), 155 Cal.App.4th 851, 863, citing Govt. Code §§ 11513(c),(d) [In administrative proceedings, all relevant evidence shall be admitted. Although not sufficient in itself to support a finding unless it would be admissible over an objection in civil court, hearsay may be used to supplement or explain other evidence.])

¹¹ Boswell interviewed Brown in the hospital months after the explosion. Although Boswell alleged that Brown admitted he was a foreman, the record does not contain any independent evidence of supervisor status.

room. (§ 376.2 [hearsay may be used to supplement or explain other evidence].)

Finally, Bridges stated to Ramesh that he closed a three inch supply valve in the 5th Floor MR the day after the explosion. Ramesh identified this valve as the one valve that controlled all natural gas flow into the 5th Floor MR. Ramesh further testified that the only other sources of gas consumption in the hotel were minimal and located on the first floor. Therefore, with no other equipment requiring gas consumption in the 5th Floor MR itself, it is reasonable to infer that the supply valve was open to conduct Employer's purging operations, as opposed to some other unknown activity. This is further evidence of the gas line being open and corroborates the testimony that Employees were purging the line with natural gas. Employer offered no alternate reason as to why else the valve would be open in that room.

Therefore, for the above reasons, it is established that Employees were purging natural gas pipelines in the 5th Floor MR prior to the explosion.¹²

With purging established, the violation will be sustained if Employer either failed to vent the gas to the outside atmosphere, or failed to close the vent valve after purging of air from the piping. Regarding the failure to vent to atmosphere, we know that the explosion in the room was caused by natural gas, and such an explosion is evidence that the LEL of a flammable gas had been reached. (*Cal Energy Operating Corp.*, Cal/OSHA App. 09-3675, Denial of Petition for Reconsideration (Nov. 12, 2010).) Thus, the fact that the natural gas accumulated to its LEL and exploded supports the inference that the gas was not properly vented outside, or "cleared to a safe location outside of the building." (App. E3.5, Ex. 6, p. 4.) Had the gas been so vented or cleared, the explosion would not have occurred.

Additionally, Ramesh testified that the gas line was open directly into the room and that he observed no venting to the outside. Employer attacks Ramesh's testimony regarding the lack of venting, since by the time Ramesh examined the room it had "been demolished" by the explosion. (Answer, p. 6.) Employer contends that absent compelling evidence of the conditions that existed prior to the explosion, Ramesh's testimony carries little weight. (*Ibid.*)

¹² Employer argues that purging cannot be shown to have occurred prior to the explosion. (Answer, p. 5.) This is not a valid argument. It is already established that natural gas flowed into the hotel from 1:00-2:00 p.m. and caused the explosion. Purging, by definition, requires a gas in order to displace the air already in the pipeline. Therefore, one can infer that this natural gas was the gas used during purging which eventually built up and exploded in the room. If some other type (or source) of gas was used for purging on the day of the explosion, Employer did not offer any evidence of such.

While Ramesh's testimony is somewhat weakened by the fact that the room was damaged, it nevertheless is sufficient, in itself, to prove that there was no venting to atmosphere. (See *Gaehwiler v. Occupational Safety and Health Appeals Board* (1983) 141 Cal.App.3d 1041, 1046 [where no contrary evidence is offered, mere fact that power line was marked "high voltage" is sufficient to prove that it was energized]; *People v. Allen, supra*, 165 Cal.App.3d at p. 623 [absent physical impossibility or inherent improbability, testimony of a single witness is sufficient to support fact].) Here, Employer failed to present any evidence of a ventilation system that was in place prior to the explosion. Furthermore, even if we were to totally disregard Ramesh's testimony in regards to the lack of venting, the record still contains significant circumstantial evidence to establish that Employer did not properly vent the gas to atmosphere. The Board therefore concludes that Employer violated section 3329(b) by purging and not venting natural gas to atmosphere.

We also find that the safety order was violated because Employer failed to close the vent valve following purging of air from the piping. Ramesh identified this vent valve¹³ as the only gas supply valve that fed natural gas into the room, and Ramesh testified that Bridges admitted to closing the valve the day after the explosion. Since this valve was open in order for gas flow and purging to occur in the first place, the testimony that Bridges closed the valve the day after the explosion tends to show that this valve was indeed left open after purging of air.

Employer argues that other valves may exist further downstream, and thus not closing this one valve does not prove that some "ultimate" downstream valve was not closed. (Answer, pp. 6, 7.) However, Employer offers no evidence showing or tending to show there was another valve downstream. Furthermore, even if Employer established such a downstream valve, there is no evidence that would tend to prove this valve was closed following purging. Without evidence, Employer is purely speculating. (See *CA Transportation, supra*; *People v. Ramos, supra*, 15 Cal.4th at p. 1157.)

Therefore, in addition to Employer violating section 3329(b) by failing to properly vent to atmosphere, the record establishes that Employer also violated the safety order by failing to close the vent valve following purging. The ALJ's ruling dismissing Citation 3 is reversed.

¹³ The "vent" valve at issue is the main gas line valve that would be required to be open in order for natural gas to flow into the 5th Floor MR and its associated piping.

Citation #4: § 5416(c)

**Allowing natural gas to escape from piping
and failing to test for its concentration**

Section 5416(c) states: “No source of ignition shall be permitted in any location, indoors or outdoors, where the concentration of flammable gases or vapors exceeds or may reasonably be expected to exceed 25 percent of the lower explosive limit. Tests shall be made to ascertain that this limit is not exceeded before a source of ignition is introduced into such location, and such tests shall be repeated frequently (or a continuous indicator used) as long as conditions giving rise to such concentrations of flammable vapors or gases continue and a source of ignition is present. If electronic or thermal testing equipment is used, it must be approved for use in such flammable conditions as required by section 2540.2.” The Division limited the violation to “Instance 2” which alleged that Employer allowed natural gas to escape from piping in the 5th Floor MR and failed to test for concentration of gas.

In dismissing the citation, the ALJ found that the Division failed to establish that Employees “started purging gas lines or otherwise caused or allowed the concentration of natural gas to reach the LEL.” (Decision, p. 16.) However, to establish a violation under section 5416(c), the Division need only prove that an employer, in the presence of a known flammable gas, failed to monitor for gas concentration levels. (*Cal Energy Operating Corp., supra*, citing *Petrolite Corp.*, Cal/OSHA App. 93-2083, Decision After Reconsideration, (Mar. 3, 1998).) It is irrelevant that Employees *started* purging the gas lines. Rather, purging the gas lines – in and of itself – is evidence that Employees allowed natural gas to build up in the room. Furthermore, the evidence suggests that Employees would have been the ones to have started their own purging operations in the first place, as no other equipment was online in the room that required natural gas, nor was there any evidence of someone else opening the valve for some other reason. (See *Valley Crest Landscape, Inc.*, Cal/OSHA App. 86-171, Decision After Reconsideration (Oct. 29, 1987) [proper to infer that employee opened valve which caused water to run into piping, as water was necessary for employee to perform the test].)

Bridges’ and Brown’s statements, obtained during their interviews with Ramesh and Boswell, respectively, is evidence that Employer did not use any devices to monitor for gas concentration levels.¹⁴ Employer did not produce

¹⁴ As explained previously, Brown’s statement to Boswell during the hospital interview is hearsay that does not qualify as an authorized admission. However, Brown’s statement is allowed under section 376.2. Specifically, when asked if he tested for gas that day, Brown only stated that he used the “sniff test” (using his nose) when checking for gas levels in the 5th Floor MR. He did not mention that he used any type of device that would be capable of measuring concentration levels, as required under § 5416(c)

any evidence to establish otherwise. Therefore, it is found that Employer failed to monitor for gas concentration levels in the presence of natural gas, violating section 5416(c). (*Cal Energy Operating Corp., supra.*) The ALJ's ruling dismissing Citation 4 is reversed.

The Serious Classification

Employer asserts the evidence is insufficient to support the serious classification of both violations in Citations 3 and 4. After review of the record, it is clear the evidence was sufficient to support the classification.

A serious violation exists when there is a substantial probability that death or serious physical injury could result from a violation. (Labor Code § 6432(a); § 334(c)(1).) "Substantial probability" refers not to the probability that an accident or exposure will occur as a result of the violation, but rather to the probability that death or serious physical harm will result assuming an accident or exposure occurs as a result of the violation. (Labor Code § 6432(c); § 334(c)(3).) Therefore, the Division must prove by credible evidence that a serious injury is more likely than not to occur as a result of the accident. (See *Benicia Foundry & Iron Works, Inc.*, Cal/OSHA App. 00-2976, Decision after Reconsideration (Apr. 24, 2003), citing *Abatti Farms/Produce*, Cal/OSHA App. 81-0256, Decision After Reconsideration (Oct. 4, 1985).)

The Division produced photographic evidence depicting extensive damage resulting from the gas explosion. Within the 5th Floor MR, damage included severely warped and disfigured metal panels and struts, as well as burns to piping insulation. Outside the room, the force of the explosion is further substantiated by large pieces of wall, wire mesh, and other building materials being thrown long distances onto adjacent building structures. Windows were completely blown out, including windows on adjacent floors, and a large Hilton "H-sign" was thrown onto the adjacent parking structure. This is sufficient evidence for the Board to conclude that someone exposed to the gas explosion in the 5th Floor MR would more likely than not suffer serious injury.

In addition to the physical evidence above, opinion evidence as to the probability of serious injury can be considered. (*R. Wright & Associates, Inc., dba Wright Construction & Abatement*, Cal/OSHA App. 95-3649, Decision After Reconsideration (Nov. 11, 1999).) When a Division witness provides an opinion, based on his experience in the field of safety, that an accident would more likely than not result in serious injury, and there is no evidence to controvert such testimony, nor is such testimony impeached or otherwise called into question under cross examination, the Division has met its burden

[tests shall be made to ensure limit not exceeded]. Brown's statement corroborates Bridges' statement to Ramesh that no gas measuring devices were used.

of proof to show the serious classification is correct. (*Forklift Sales of Sacramento, Inc.*, Cal/OSHA App. 05-3477, Decision After Reconsideration (Jul. 7, 2011).)

Here, the Division Inspectors testified that, in their experience in the field of safety, serious injury would more likely than not result from the explosion due to the resulting heat and displacement of objects. Such possible injuries included burns, broken bones, serious cuts, and head injuries from objects being thrown about. Inspector Boswell testified, based on her past investigations dealing with burn injuries, that the heat that caused the type of burn marks evidenced in the photos would lead to second and third-degree burns when subjected to human skin. Skin grafts would be required for second and third-degree burns as tissue cannot regenerate, and scarring would result. No evidence contradicted the witnesses' experience, or conclusions drawn from their experience. Therefore, the opinion evidence offered by the Division is sufficient to support the serious classification. (See *Joseph v. Drew* (1950) 36 Cal.2d 575, 579 ["It is the general rule that 'the uncontradicted testimony of a witness to a particular fact may not be disregarded, but should be accepted as proof of the fact.' (Citations.)"]; see also *Beck Dev. Co. v. Southern Pacific Transp. Co.* (1996) 44 Cal.App.4th 1160, 1206, citing *Krause v. Apodaca* (1960) 186 Cal.App.2d 413, 417 [where testimony is uncontradicted, unimpeached, and no rational reason for rejecting it appears, then the trier of fact may not arbitrarily reject it]; *People v. Turner, supra*, 145 Cal.App.3d at p. 671 [absent physical impossibility or inherent improbability, testimony of a single witness is sufficient to support criminal conviction]; *Forklift Sales, supra*.)

Employer argues that the Board cannot "presume" that any accident would more likely than not result in serious injury (Answer, pp. 14, 15), citing to *Architectural Glass and Aluminum Co., Inc.*, Cal/OSHA App. 01-5031, Decision After Reconsideration (Mar. 22, 2004) and *Ray Products, Inc.*, Cal-OSHA App. 99-3169, Decision After Reconsideration (May 20, 2002). These cases are readily distinguishable from the instant facts.

In *Architectural Glass*, the Division inspector merely recited the requirements of what constitutes a serious violation. The Board thus "[could] not, without more, make a finding that a serious violation existed..." (*Architectural Glass, supra*.) *Ray Products, Inc., supra*, involved photos showing pinch points on a machine, but no evidence was presented regarding the specific size and location of the various pinch points, or the types of injuries that would be sustained if an accident occurred in a pinch point. Thus, the Division inspector's statements regarding crushing, lacerations, or amputations were potential injuries that were not linked to the hazard depicted

in the photograph. The opinion of the inspector regarding the classification of the violation thus lacked evidentiary support. (*Ray Products, Inc., supra.*)

Here, the photographic evidence in the record carries much more weight than mere pictures of a static pinch point. These photos depict the result of the explosion, and therefore its force and the intensity of heat it generated, causing burns and displacing/damaging objects. From this evidence, a reasonable inference can then be drawn that serious injury would more likely than not result if someone was exposed to such an explosion in the 5th Floor MR. Furthermore, the Division Inspectors provided opinion testimony that serious injuries (such as burns, broken bones, deep cuts, and head trauma) would more likely than not result from the explosion due to the resulting heat and displacement of objects from the explosion. We will not reject uncontroverted testimonial evidence absent physical impossibility or inherent improbability, none of which we see here. (See discussion above.)¹⁵

In conclusion, the Board finds, based on the physical and testimonial evidence presented, that a worker who was exposed to the natural gas explosion while in the 5th Floor MR would more likely than not suffer a serious injury. The classification of the violations in Citations 3 and 4 are affirmed as serious.

ACCIDENT-RELATED CLASSIFICATION

A violation is “accident related” when there is a causal nexus between the violation and the serious injury. (*Obayashi Corporation, Cal/OSHA App. 98-3674, Decision After Reconsideration (June 5, 2001).* Employer stipulated that both Employees suffered serious injuries as a result of “an event” that occurred at the hotel that day, but did not stipulate that the injuries resulted from the explosion in the 5th Floor MR.¹⁶

There is, however, no evidence of any other “event” that caused Employees any injuries that day. Employees were in the 5th Floor MR conducting purging operations which lead to the accumulation of gas and resulting explosion. Additionally, Baron’s call to Anderson placed two employees of Employer in the 5th Floor MR when he saw a “ball of fire” erupt. This is uncontroverted evidence in which to infer that Employees were in the 5th Floor MR when the explosion occurred. Therefore, it is established that the serious injuries stipulated to by Employer resulted from the explosion in the 5th Floor MR.

¹⁵ To the extent *Architectural Glass* and *Ray Products* demonstrate the Board or an ALJ rejecting opinion testimony without first finding such to be inherently improbable, we consider them erroneously decided and instead follow generally accepted principles of evidence articulated in this decision.

¹⁶ The Division accepted the stipulation as is.

It follows, then, that the accident-related classification is proper for both citations. As for Citation 3, but for improper ventilation, gas would not have built up in the room and exploded, causing Employees' serious injuries. Regarding Citation 4, but for the lack of a proper measuring device to alert workers to dangerous concentration levels, gas would not have been allowed to accumulate and explode, likewise causing serious injuries.

THE PENALTY CALCULATION

The Division must offer evidence in support of its penalty calculations. Absent such evidence, the Appeals Board will assume that employer is entitled to the maximum available credits and adjustments. (*Plantel Nurseries*, Cal/OSHA App. 01-2346, Decision After Reconsideration (Jan. 8, 2004); *RII Plastering, Inc.*, Cal/OSHA App. 00-4250, Decision After Reconsideration (Oct. 21, 2003).)

An initial penalty of \$18,000 is assessed for all serious violations. (§ 336(c).) When the violation results in a serious injury, as the case is here, the only downward adjustment allowed is for employer size. (Labor Code § 6319(d); *Dennis J. Amoroso Construction Co., Inc.*, Cal/OSHA App. 98-4256, Decision After Reconsideration (Dec. 20, 2001).) Ramesh testified that Employer was a large employer for which no adjustment was allowed. Employer did not rebut this testimony. Therefore, it is established that Employer was a large employer and ineligible to receive any penalty reduction per section 336(d)(1). (See *Krause v. Apodaca*, *supra*, 186 Cal.App.2d at p. 417; *People v. Allen*, *supra*, 165 Cal.App.3d at p. 623 [absent inherent improbability, testimony of a single witness is sufficient to support fact asserted].)

As for penalty increases, the Division Inspectors testified to the existence of an additional boiler room on the 1st floor. They alleged that Employer conducted the same violative actions when purging gas previously in this additional boiler room, and thus rated Severity and Probability as "high." This resulted in two 25% additions (\$4500 each) to the base penalty of \$18,000, for a final assessed penalty of \$27,000 for each citation.¹⁷

The Board finds this latter testimony insufficient to warrant increasing the penalty. First, Ramesh testified that he rated Severity as high, even though all serious violations are considered to have a high Severity factor regardless. (§ 335(a)(1)(B).) Next, Ramesh stated he gave a high Probability factor since Employer previously "did it" in the 1st floor boiler room, to which Division counsel responded, "Okay ... now what about Likelihood?"

¹⁷ Per section 336(c)(1) & (c)(3), the highest penalty allowed for a serious violation is \$25,000.

Besides this erroneous distinction between “Probability” and “Likelihood” (see § 335(a)(3) [likelihood is the probability that injury will occur]), the Division did not establish what exactly Ramesh was referring to when he stated Employer “did it.” Even if we assume this to mean that Employer previously committed the same violative acts as alleged in the instant citations, there is no evidence at all that Employer did these same acts in a different boiler room on the 1st floor.

With no credible evidence to establish Likelihood as high, and the Division not presenting any evidence with regards to Extent, increases to the initial base penalty are not warranted. Therefore, the correct penalty for each citation is \$18,000.

However, the Board has long recognized that it is proper to assess one penalty for multiple violations involving the same hazard where a single means of abatement is needed. (See *A & C Landscaping, Inc.*, Cal/OSHA App. 04-4795, Decision After Reconsideration (Jun. 24, 2010), citing *Western Pacific Roofing Corp.*, Cal/OSHA App. 96-529, Decision After Reconsideration (Oct. 18, 2000); *San Francisco Newspaper Agency*, Cal/OSHA App. 93-0319, Decision After Reconsideration (Dec. 20, 1996).) While multiple citations involving a single hazard are appropriate and typically will be upheld, the same is not true for duplicative penalties. (*West Valley Construction Co., Inc.*, Cal/OSHA App. 01-3017, Decision After Reconsideration (May 16, 2008).)

Here, section 3329(b) [not venting gas to atmosphere, not closing vent valve following purging] and section 5416(c) [failing to test for concentration of natural gas] both guard against the hazard of an explosion, and a single form of abatement would have eliminated this hazard. Therefore, while we affirm both serious, accident-related violations, we vacate the \$18,000 penalty assessed for section 5416(c).

DECISION

The Board reverses the Decision of the ALJ dated September 28, 2011, to the extent that the appeals of the serious, accident-related violations in Citations 3 and 4 are hereby denied. A civil penalty of \$18,000 is assessed for Citation 3, only.

ART R. CARTER, Chairman
ED LOWRY, Member

OCCUPATIONAL SAFETY AND HEALTH APPEALS BOARD
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