

**BEFORE THE**  
**STATE OF CALIFORNIA**  
**OCCUPATIONAL SAFETY AND HEALTH**  
**APPEALS BOARD**

In the Matter of the Appeal  
of:

**CALIFORNIA FORESTRY AND FIRE  
PROTECTION DBA CAL FIRE**  
P.O. Box 944246  
Sacramento, CA 94244

Employer

DOCKETS 13-R3D3-3561  
and 3562

**DECISION**

**Statement of the Case**

California Forestry and Fire Protection dba Cal Fire (Employer) provides firefighting services. Beginning November 15, 2013, the Division of Occupational Safety and Health (the Division) through Associate Safety Engineer May Layfield conducted an accident inspection at a place of employment maintained by Employer at 16902 Bundy Avenue, Riverside, California (the site), also known as the Ben Clark Training Center. On November 15, 2013 the Division cited Employer for failure to effectively implement the heat illness prevention provisions of their Injury and Illness Prevention Program<sup>1</sup> (IIPP), and for failure to allow employees to take cool-down rests in the shade.

Employer filed timely appeals contesting the existence of the alleged violations, the classification of Citation 2, and the reasonableness of the proposed penalties. Employer alleged multiple affirmative defenses<sup>2</sup>.

This matter came on regularly for hearing before Dale A. Raymond, Administrative Law Judge (ALJ) for the California Occupational Safety and Health Appeals Board, at Riverside, California on June 23, 2015, December 10, 2015, December 11, 2015, March 3, 2016, and March 4, 2016. Bruce Crane, Senior Staff Counsel, represented Employer. Tuyet-Van Tran, Staff Counsel, represented the Division. The matter was submitted on May 9, 2016.

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<sup>1</sup> Unless otherwise specified, all references are to sections of California Code of Regulations, title 8.

<sup>2</sup> The affirmative defenses for which no evidence was presented are not discussed. They are deemed waived.

## **Issues**

1. Did Employer effectively permit its employees to loosen their clothing or take rest breaks in the shade when they felt the need to do so, according to the heat illness prevention procedures in its Illness and Injury Prevention Program (IIPP)?
2. Was the proposed penalty for Citation 1 reasonable?
3. Did Employer violate section 3395, subdivision (d)(3) by failing to permit employees to have access to shade when they felt the need to do so?
4. Did the Division establish a rebuttable presumption that Citation 2 was properly classified as serious?
5. Was Citation 2 correctly characterized as accident-related?
6. Was the proposed penalty for Citation 2 reasonable?

## **Findings of Fact**

1. Employer conducted one-week re-hire training academies at the site for seasonal firefighters.
2. Employer correctly identified heat illness as a job hazard at the re-hire academy and developed methods and procedures to address the hazard. Procedures included taking cool down breaks in the shade of no less than five minutes with removal of all safety gear. The methods and procedures were incorporated into Employer's written IIPP.
3. On May 16, 2013, Firefighter I, Laurence Nelson (Nelson), was a cadet at a Firefighter I re-hire academy<sup>3</sup>. During physical training outdoors, Nelson felt overheated. Denied permission from his instructor, Captain John Smith (Smith), to open his jacket<sup>4</sup> so he could cool off, Nelson hid in the third floor of the training tower, and secretly took off his helmet, put water on his face, and opened up his jacket to cool off.
4. Later, Nelson asked another instructor, Captain John May (May), if he could open his jacket, but was denied.
5. At about 11:30 a.m., Nelson felt physically sick and went to sit down. An instructor directed him to sit in the sun. Employer allowed Nelson to rest, but required him to sit in the sun. Shade was available at the site.
6. An ambulance took Nelson to the emergency room. He was admitted to the hospital for over 24 hours for treatment.
7. Nelson suffered from heat illness.
8. Overheating was more likely than not a cause of Nelson's illness.
9. The proposed penalties are reasonable.

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<sup>3</sup> Firefighter I is a seasonal employee who is required to undergo a re-hire training academy every year.

<sup>4</sup> Nelson was wearing full personal protective equipment (PPE). His PPE included a fire resistant jacket, fire resistant pants, protective boots, a helmet and breathing apparatus. It weighed approximately 40 to 60 pounds.

## Analysis

### **1. Did Employer effectively permit its employees to loosen their clothing or take rest breaks in the shade when they felt the need to do so, according to the heat illness prevention procedures in its Illness and Injury Prevention Program (IIPP)?**

The Division cited Employer for a violation of section 3203, subdivision (a), which requires employers to establish, implement, and maintain an effective IIPP. Among other things, employers must effectively implement and maintain methods and/or procedures for correcting unsafe or unhealthy conditions, work practices and work procedures in a timely manner<sup>5</sup>.

Merely having a written IIPP is insufficient to establish implementation. (*Los Angeles County Department of Public Works*, Cal/OSHA App. 96-2470, Decision After Reconsideration (Apr. 5, 2002).) Proof of implementation requires evidence of actual responses to known or reported hazards. (*Bay Area Rapid Transit District*, Cal/OSHA App. 09-1218, Decision After Reconsideration and Order of Remand (Sep. 6, 2012), citing *Los Angeles County Department of Public Works*, *ibid.*)

The alleged violation description is as follows:

On or about May 16, 2013, the employer did not have an effective Injury and Illness Prevention Program with regards to their heat illness prevention. Rest breaks, and safe practices such as, but not limited to, loosening and/or removing their personal protective equipment were not implemented during their training exercises.

To prove the above violation, the Division must establish that Employer did not effectively implement its Illness and Injury Prevention Program (IIPP)<sup>6</sup> as it did not permit its employees to loosen their clothing or take rest breaks in the shade when they felt the need to do so due to heat. The parties agreed that the IIPP required that employees to be provided rest in shade, and that they be encouraged to remove their personal protective safety gear. Nelson testified that his instructors (Smith and May) did not allow him to remove his jacket and rest in the shade when he felt the need, and that he was forced to sit in the sun when he did take a break; but his instructors testified to the contrary.

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<sup>5</sup> Section 3203, subdivision (a)(6)(A), which provides that the IIPP shall, at a minimum, "Include methods and/or procedures for correcting unsafe or unhealthy conditions, work practices and work procedures in a timely manner based on the severity of the hazard: (A) When observed or discovered."

<sup>6</sup> Exhibits 6, D

Nelson's testimony at hearing was straightforward and not evasive. Employer has terminated Nelson for cause.<sup>7</sup> Nelson had nothing to gain from his testimony, but he had something to lose. Nelson hopes to be hired as a firefighter again; his testimony in this matter could hurt his chances. Additionally, Nelson's testimony corroborated Goldman's hearsay statements<sup>8</sup>.

On the other hand, Smith and May are permanent employees who have much to lose. They were responsible for ensuring that Employer's heat illness provisions were properly carried out. Smith's and May's body language, tone of voice, manner of answering questions, and overall demeanor was rigid and overbearing. Smith was hostile and short-tempered. When it came to crucial points, counsel put words in their mouths by asking leading questions and not allowing them to use their own words. It raised the inference that if they did use their own words, it would hurt Employer and weaken the weight that could be given to their testimony.

Additionally, Employer did not interview Nelson at any time regarding the incident, nor did they call any of Nelson's fellow cadets to testify. The cadets were percipient witnesses who trained beside Nelson and could better observe him. All the witnesses that Employer called were management employees who could face negative consequences if they, through their testimony, revealed that Employer's heat illness prevention measures were not being implemented. Evidence Code section 412 provides, "If weaker and less satisfactory evidence is offered when it was within the power of the party to produce stronger and more satisfactory evidence, the evidence offered should be viewed with distrust." Thus, the testimony of Employer's management witnesses is viewed with distrust.

Accordingly, Nelson's testimony is found more credible than Smith's and May's testimony, and it is credited. It is found that Nelson felt hot, twice asked to loosen his jacket, went to a place to hide so he could cool down, and was not placed in the shade to rest when he took a cool down break. A preponderance of the evidence established that Employer did not effectively implement its IIPP with respect to its heat illness provisions.

Therefore, the Division, by a preponderance of the evidence, established a general<sup>9</sup> violation of section 3203, subdivision (a).

## **2. Was the proposed penalty for Citation 1 reasonable?**

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<sup>7</sup> Exhibit B

<sup>8</sup> Employer objected to the hearsay statements. Under § 376.2, hearsay evidence may be used for the purpose of supplementing or explaining other evidence, but over timely objection is not sufficient in itself to support a finding unless it would be admissible over objection in civil actions.

<sup>9</sup> Employer did not appeal the classification. It is established by law.

Penalties calculated in accordance with the penalty setting regulations (sections 333-336) are presumptively reasonable. (*Stockton Tri Industries, Inc.*, Cal/OSHA App. 02-4946, Decision After Reconsideration (Mar. 27, 2006).)

Labor Code section 6319, subdivision (c) sets forth the factors which the Director of the Department of Industrial Relations must include when promulgating penalty regulations: size of the employer, good faith, gravity of the violation, and history of any previous violations. (sections 333-336) In *M1 Construction*, Cal/OSHA App. 12-0222, Decision After Reconsideration (July 31, 2014), the Board held that if the Division introduces the proposed penalty worksheet and testifies that the calculations were completed in accordance with the appropriate regulations and procedures, it has met its burden to show the penalties were calculated correctly, absent rebuttal by the Employer.

Using the proposed penalty worksheet<sup>10</sup>, Mayfield testified that she calculated the proposed \$560 penalty in accordance with the Division's policies and procedures. Employer did not present any rebuttal.

Therefore, the proposed \$560 penalty for Citation 1, Item 1 is found reasonable.

**3. Did Employer violate section 3395, subdivision (d)(3) by failing to permit employees to have access to shade when they felt the need to do so?**

The Division cited Employer for a violation of section 3395, subdivision (d)(3), which provides as follows:

(d) Access to shade.

(1)...

(2)...

(3) Employees shall be allowed and encouraged to take a cool-down rest in the shade for a period of no less than five minutes at a time when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times.

[Exceptions omitted]

The alleged violation description reads as follows:

On or about May 16, 2013, the employer did not ensure that employees were allowed and encouraged to take a cool-down rest in the shade for a period of no less than five minutes at a time when they feel the

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<sup>10</sup> Exhibit 3

need to do so to protect them from overheating. Access to shade was not permitted to employees while on training for structural fire exercises. As a result, on May 16, 2013, one of its employees fell seriously ill with heat-related illness.

As discussed above, there was a conflict in the evidence about whether Nelson was allowed to loosen his jacket and take a rest break when he felt the need to do so, and it was found that he was not allowed to take a rest break. He finally sat down when he felt so ill that he did not care if he got in trouble. Nelson also testified that he was afraid to ask for breaks and an instructor directed him to sit in the sun while waiting for the paramedics. Nelson's testimony was credible and is credited for the reasons stated above.

Consequently, the Division established a violation of section 3395, subsection (d)(3) by a preponderance of the evidence.

**4. Did the Division establish a rebuttable presumption that Citation 2 was properly classified as serious?**

Labor Code § 6432, subdivision (a) states:

(a) There shall be a rebuttable presumption that a "serious violation" exists in a place of employment if the division demonstrates that there is a realistic possibility that death or serious physical harm<sup>11</sup> could result from the actual hazard created by the violation. The actual hazard may consist of, among other things:

...

(2) The existence in the place of employment of one or more unsafe or unhealthful practices that have been adopted or are in use.

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<sup>11</sup> Labor Code section 6432, subdivision (e), provides as follows:

"Serious physical harm" as used in this part, means any injury or illness, specific or cumulative, occurring in the place of employment or in connection with any employment that results in any of the following:

(1) Inpatient hospitalization for purposes other than medical observation.

(2) The loss of any member of the body.

(3) Any serious degree of permanent disfigurement.

(4) Impairment sufficient to cause a part of the body or the function of an organ to become permanently and significantly reduced in efficiency on or off the job, including, but not limited to, depending on the severity, second-degree or worse burns, crushing injuries including internal injuries even though skin surface may be intact, respiratory illnesses, or broken bones.

“Realistic possibility” is not defined in the safety orders. However, the Appeals Board has defined “realistic possibility” to mean a prediction that is within the bounds of human reason, not pure speculation. (*Bellingham Marine Industries, Inc.*, Cal/OSHA App. 12-3144, Decision After Reconsideration (Oct. 16, 2014), citing *Janco Corporation*, Cal/OSHA App. 99-565, Decision After Reconsideration (September 27, 2001), citing *Oliver Wire & Plating Co., Inc.*, Cal/OSHA App. 77-693, Decision After Reconsideration (April 30, 1980).)

Opinions about possibility must be based on a valid evidentiary foundation, such as expertise on the subject, reasonably specific scientific evidence, experience-based rationale, or generally accepted empirical evidence. (*California Family Fitness*, Cal/OSHA App. 03-0096, Decision After Reconsideration (Mar. 20, 2009); *R. Wright & Associates, Inc. dba Wright Construction & Abatement*, Cal/OSHA App. 95-3649, Decision After Reconsideration (Nov. 29, 1999).)

Labor Code section 6432, subdivision (g), provides, “A division safety engineer or industrial hygienist who can demonstrate, at the time of the hearing, that his or her division-mandated training is current shall be deemed competent to offer testimony to establish each element of a serious violation, and may offer evidence on the custom and practice of injury and illness prevention in the workplace that is relevant to the issue of whether the violation is a serious violation.”

Layfield testified that she classified Citation 2 as serious because, in her opinion, serious physical harm was a realistic possibility in the event of a heat illness accident caused by failure to allow a cool down period in the shade. The hazard associated with the violations is that an employee will suffer a heat illness. Heat illness is a continuum that ranges from heat rash, heat exhaustion, heat stroke, to death.

Layfield is current in her Division-required training. In addition, she has conducted inspections involving heat illness. Prior to her employment with the Division, she was employed in the field of industrial hygiene for 21 years by a private company. She has conducted about 15 accident investigations involving heat illness, including three fatalities. Her opinion was based upon her education, training, and experience. Employer did not offer any evidence in rebuttal. Layfield’s opinion is credited. Thus, the Division has met its burden of proof that there is a realistic possibility that serious physical harm would result from the actual hazard created by not allowing the employee to take rest breaks when he felt the need.

Therefore, the Division established a rebuttable presumption that Citation 2 was properly classified as serious.

## **5. Was Citation 2 correctly characterized as accident-related?**

A violation is accident-related where there is a causal nexus between the violation and the injury. (*MCM Construction, Inc.*, Cal/OSHA App. 13-3851, Decision After Reconsideration (Feb. 22, 2016) p. 11.) “The violation need not be the only cause of the accident, but the Division must make a ‘showing [that] the violation more likely than not was a cause of the injury. (*Mascon, Inc.*, Cal/OSHA App. 08-4278, Denial of Petition for Reconsideration (Mar. 4, 2011); *Siskiyou Forest Products*, Cal/OSHA App. 01-1418, Decision After Reconsideration (Mar. 17, 2003); *Davey Tree Surgery Company*, Cal/OSHA App. 99-2906, Decision After Reconsideration (Oct. 4, 2002).” (*Id.* pp. 11-12)

Here, the injury resulted in serious physical harm because Nelson was hospitalized for over 24 hours for more than observation.

Dr. Paul J. Papanek (Papanek) opined that Nelson suffered from heat illness, but Dr. David R. Duncan (Duncan) testified that Nelson did not suffer from heat illness. Neither doctor examined Nelson. Both doctors based their opinions on the same medical records<sup>12</sup> and the same weather data. Both doctors had excellent credentials. Both had an equal bias, as Papanek is employed by the Division and Duncan is employed by Employer.

The doctors at the hospital diagnosed Nelson with rhabdomyolysis and hypokalemia. Dr. Papanek testified that both conditions can be the result of overheating, but Dr. Duncan denied the possibility. Dr. Papanek’s opinion that heat illness causes rhabdomyolysis and hypokalemia is backed by a recent February 2016 publication from the National Institute for Occupational Safety and Health<sup>13</sup>. Hypokalemia, or low potassium, can result from heavy sweating, as potassium is excreted in sweat<sup>14</sup>. Heavy sweating is a sign of an overheated body<sup>15</sup>. Risk factors for rhabdomyolysis, or muscle breakdown, include elevated core body temperature from heat<sup>16</sup>. Although the temperature was in the high 60s, both Dr. Papanek and Dr. Duncan agreed that Nelson’s heavy personal protective equipment trapped body heat and could cause him to feel hot. There is no reason to disbelieve Nelson’s testimony that he felt hot. His actions were consistent with someone who felt hot. Hence after taking all the facts and the testimony of both doctors into consideration, the weight of the evidence supports a conclusion that that Nelson suffered from heat illness.

The record supports a finding that Employer failed to permit Nelson to have access to shade when Nelson felt the need to do so to protect him from the hazard of heat illness. The record also supports a finding that if Employer

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<sup>12</sup> Exhibit 11

<sup>13</sup> Exhibit 12, *Criteria for a Recommended Standard Occupational Exposure to Heat and Hot Environments, Revised Criteria for 2016*, Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, (Feb. 2016), pp. 29, 51-56

<sup>14</sup> *Id.* p. 29

<sup>15</sup> *Id.* p. 29

<sup>16</sup> *Id.*, p. 54

had provided Nelson shade when he felt the need, Nelson would not have developed heat illness. The Division has met its burden to demonstrate that the violation of section 3395, subdivision (d)(3), was more likely than not a cause of Nelson's heat illness. Therefore, the accident-related characterization of the violation is sustained.

**6. Was the proposed penalty for Citation 2 reasonable?**

Where a serious violation causes a serious injury, the only downward penalty adjustment allowable is for size. (Labor Code § 6319, subdivision (d); *Dennis J. Amoroso Construction Co., Inc.*, Cal/OSHA App. 98-4256, Decision After Reconsideration (Dec. 20, 2001).)

Here, a serious violation caused a serious injury. Employer had over 100 employees, so no downward adjustment was available for size. Therefore, the \$18,000 penalty was properly calculated and is found reasonable.

**Conclusions**

Employer did not implement its IIPP with regard to heat illness prevention. Employer did not effectively permit its employees to loosen their clothing or take rest breaks in the shade when they felt the need to do so. As a result, overheating was a cause of an employee's serious illness.

**Order**

Citation 1, Item 1, and the proposed \$560 penalty are affirmed.

Citation 2 and the proposed \$18,000 penalty are affirmed.

It is further ordered that the penalties indicated above and set forth in the attached Summary Table be assessed.

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**DALE A. RAYMOND**  
Administrative Law Judge

DAR: ao

Dated: June 2, 2016

**APPENDIX A**

**SUMMARY OF EVIDENTIARY RECORD  
CA FORESTY AND FIRE PROTECTION**

Dockets 13-R3D3-3561 and 3562

Dates of Hearing:

June 23, 2015, December 10-11, 2015, March 3-4, 2016.

**Division's Exhibits**

<b>Number</b>	<b>Description</b>	<b>Admitted</b>
1	Jurisdictional Documents	Yes
2	Notice of Intent to Issue Serious Violation	Yes
3	Proposed Penalty Worksheet	Yes
4	Photo-four story tower	Yes
5	Photo-four story tower with two story attachment	Yes
6	Heat Illness Program	Yes
7	Climatological data-Riverside Municipal Airport	Yes
8	Weather History for Riverside, CA	Yes
9	Quality Controlled LCD Improvements	Yes
10	Paul Papanek Curriculum Vitae	Yes
11	Medical Records for Laurence Nelson	Yes
12	Occupational Exposure to Heat and Hot Environments	Yes
13	Article—Can We Stand the Heat?	Yes

**Employer's Exhibits**

<b>Letter</b>	<b>Description</b>	<b>Admitted</b>
A	Declaration of Fire Captain David Anderson	Yes
B	Termination Letter	Yes

C	Injury/Illness Detail Report	Yes
D	Heat Exposure Plan	Yes
E	Photo - front of tower	Yes
F	Photo – broad view of entire training center	Yes
G	Photo – northeast corner of main drill site	Yes
H	Photo – Four Story Tower. Same as Exhibit 4	Yes
I	Photo – main drill tower in use on May 16, 2013	Yes
K	Photo - Four Story Tower with two story attachment Same as Exhibit 5	Yes
L	Photo – different view of main drill tower	Yes
M	David R. Duncan Curriculum Vitae	Yes

**Witnesses Testifying at Hearing**

1. Laurence L. Nelson II
2. Gloria Nelson
3. May Layfield
4. Paul J. Papanek
5. William John Smith
6. David R. Duncan
7. John May
8. Anthony Carniglia
9. Ben Forqueran

**CERTIFICATION OF RECORDING**

*I, Dale A. Raymond, the California Occupational Safety and Health Appeals Board Administrative Law Judge duly assigned to hear the above matter, hereby certify the proceedings therein were electronically recorded. The recording was monitored by the undersigned and constitutes the official record of said proceedings. To the best of my knowledge, the electronic recording equipment was functioning normally.*

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**DALE A. RAYMOND**

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**DATE**

## SUMMARY TABLE DECISION

In the Matter of the Appeal of:

### CALIFORNIA FORESTRY AND FIRE PROTECTION DBA CAL FIRE Dockets 13-R3D3-3561 and 3562

Abbreviation Key: Reg=Regulatory	
G=General	W=Willful
S=Serious	R=Repeat
Er=Employer	DOSH=Division

IMIS No. 316212026

DOCKET	CITATION	ITEM	SECTION	TYPE	MODIFICATION OR WITHDRAWAL	AFFIRMED	AVOIDED	PENALTY PROPOSED BY DOSH IN CITATION	PENALTY PROPOSED BY DOSH AT HEARING	FINAL PENALTY ASSESSED BY BOARD
13-R3D3-3561	1	1	3203(a)	G	ALJ affirmed violation	X		\$560	\$560	<b>\$560</b>
13-R3D3-3562	2	1	3395(d)(3)	S	ALJ affirmed violation	X		\$18,000	\$18,000	<b>\$18,000</b>
<b>Sub-Total</b>								\$18,560	\$18,560	<b>\$18,560</b>

**Total Amount Due\***

**\$18,560**

(INCLUDES APPEALED CITATIONS ONLY)

NOTE: *Please do not send payments to the Appeals Board.*

**All penalty payments should be made to:**

Accounting Office (OSH)  
Department of Industrial Relations  
P.O. Box 420603  
San Francisco, CA 94142

\*You will owe more than this amount if you did not appeal one or more citations or items containing penalties.

Please call (415) 703-4295 if you have any questions.

ALJ: DR/ao  
POS: 06/02/2016