Occupational Safety and Health Standards Board

Public Meeting and Business Meeting

August 15, 2024

County Administration Center
Room 310
1600 Pacific Highway
San Diego, California

AND

Via teleconference / videoconference

Occupational Safety and Health Standards Board

Meeting Agenda

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833 (916) 274-5721 www.dir.ca.gov/oshsb



MISSION STATEMENT

The mission of the Occupational Safety and Health Standards Board is to promote, adopt, and maintain reasonable and enforceable standards that will ensure a safe and healthy workplace for California workers.

<u>AGENDA</u>

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD BOARD MEETING

PLEASE NOTE: In accordance with section 11123 of the Government Code, Board members as well as members of the public may elect to participate via videoconference.

AUGUST 15, 2024 10:00 a.m.

In-person:

County Administration Center – Room 310 1600 Pacific Highway San Diego, CA 92101

Videoconference:

- 1. Go to www.webex.com
- 2. Select "Join a Meeting"
- 3. Enter the meeting number: 1469 63 6425
- 4. Join the meeting through the WebEx application **OR** web browser
- 5. Videoconference will be opened to the public at 9:50 a.m.

Teleconference:

- 1. Dial (844) 992-4726
- 2. Enter the meeting number **1469 63 6425** and follow the prompts
- Teleconference will be opened to the public at 9:50 a.m.
 Note: Please mute your phone by pressing *6 when not speaking.
 If you are to provide a comment, press *6 to unmute.

Live video stream and audio stream (English and Spanish):

- Go to https://videobookcase.com/california/oshsb/
- 2. Video stream and audio stream will launch as the meeting starts at 10:00 a.m.

August 2024 Agenda Page 2 of 6

Public Comment Queue:

If attending the Occupational Safety and Health Standards Board (Board) meeting in-person, you will be added to the public comment queue upon completing a comment card on the day of the meeting.

If attending the meeting remotely and wish to comment on agenda items, you may submit a request to be added to the public comment queue either in advance of or during the meeting through one of the following methods:

ONLINE: Provide your information through the online comment queue portal at https://videobookcase.org/oshsb/public-comment-queue-form/

PHONE: Call (**510**) **868-2730** to access the automated comment queue voicemail and provide[†]: 1) your name as you would like it listed; 2) your affiliation or organization; and 3) the topic you would like to comment on.

† Information requested is voluntary and not required to address the Board.

I. CALL TO ORDER AND INTRODUCTIONS

A. Spanish translation instructions

II. REMARKS FROM THE CHAIR

III. BUSINESS MEETING

Note: The purpose of the Business Meeting is for the Board to conduct its monthly business. All matters on this agenda are subject to discussion and action as determine to be appropriate by the Board Chair.

For items A through C below, Public comment will be limited to two minutes per speaker or four minutes for speakers requiring concurrent English translation.

Any individual or group wishing to make a presentation during the Public Meeting is requested to contact Sarah Money, Executive Assistant, at (916) 274-5721 at least three weeks prior to the meeting to address any logistical concerns.

A. PROPOSED EMERGENCY SAFETY ORDER FOR READOPTION (GOV. CODE SEC. 11346.1)

1. <u>TITLE 8:</u> <u>GENERAL INDUSTRY SAFETY ORDERS</u> Chapter 4, subchapter 7, revised section 5204 <u>Occupational Exposures to Respirable Crystalline Silica</u>

 Public comment on Occupational Exposures to Respirable Crystalline Silica Emergency Safety Order Readoption August 2024 Agenda Page 3 of 6

Board discussion and vote

B. PROPOSED SAFETY ORDER FOR ADOPTION

1. <u>TITLE 8:</u> <u>CONSTRUCTION SAFETY ORDERS</u> Sections 1671.1, 1716.2, 1730 and 1731

Fall Protection in Residential Construction

- Public comment on Fall Protection in Residential Construction
- Board discussion and vote

C. PROPOSED PETITION DECISION FOR ADOPTION

 Ricardo Beas Safety Professional Petition File No. 603

Petitioner requests to rescind the COVID-19 Prevention Non-Emergency Regulations (Title 8 sections 3205 through 3205.3), based on new information provided by confirmed scientific studies and federal health authorities. The Petitioner contends that recent findings by the federal Center for Disease Control and other scientific authorities have reduced the recommendations for Covid-19 protection. Therefore, the current Title 8 standards for Covid-19 are no longer needed.

The Petitioner contends that the COVID-19 non-emergency regulations pose an inconvenient, time consuming, costly, and unnecessary burden on employers in the state of California and are no longer necessary. One concern is that the regulations refer to the recommendations of the California Department of Public Health which have continued to vary since the inception of this recent version of the regulations and have required employers to be aware of and take action on. The Petitioner further contends that all other states that have rescinded similar regulations pertaining to COVID-19 and requests that the Board do the same.

- Public comment on Petition 603
- Board discussion and vote

D. PROPOSED VARIANCE DECISIONS FOR ADOPTION

- Consent Calendar
- Vote on consent calendar

August 2024 Agenda Page 4 of 6

E. REPORTS

- Acting Executive Officer's Report
- Legislative Report
- Cal/OSHA Report

F. PUBLIC COMMENT ON NON-AGENDA ITEMS OR TO PROPOSE NEW OR REVISED STANDARDS

This portion of the meeting is open to any interested person proposing new or revised standards to the Board or commenting on occupational safety and health issues (Labor Code section 142.2). The Board is prohibited to act on items that are not on the noticed agenda but may refer items to staff for future consideration.

Public comment will be limited to two minutes per speaker or four minutes for speakers requiring concurrent English translation.

Any individual or group wishing to make a presentation during the Public Meeting is requested to contact Sarah Money, Executive Assistant, at (916) 274-5721 at least three weeks prior to the meeting to address any logistical concerns.

G. COMMENTS BY BOARD MEMBERS

Although any Board Member may identify a topic of interest, the Board may not substantially discuss or act on any matter raised during the meeting that is not included on this agenda, except to decide to place the matter on the agenda of a future meeting. (GC sections 11125 & 11125.7(a).).

H. CLOSED SESSION

Public Comment on Closed Session Agenda Items

Pending Decisions

Permanent Variance No. 20-V-096 (Tutor Perini/O&G JV)

Matters Pending Litigation

- Western States Petroleum Association (WSPA) v. California Occupational Safety and Health Standards Board (OSHSB), et al. United States District Court (Eastern District of California) Case No. 2:19-CV-01270
- WSPA v. OSHSB, et al., County of Sacramento, CA Superior Court Case No. 34-2019-00260210

Personnel

I. RETURN TO OPEN SESSION

Report from closed session

August 2024 Agenda Page 5 of 6

J. ADJOURNMENT OF THE MEETING

Next Meeting: September 19, 2024

Rancho Cordova City Hall American River Room 2729 Prospect Park Drive Rancho Cordova, CA 95670

10:00 a.m.

CLOSED SESSION

- If necessary, consideration of personnel matters. (GC section 11126(a)(1)).
- If necessary, consideration of pending litigation pursuant to GC section 11126(e)(1).
- If necessary, to deliberate on a pending decision. (GC section 11126(c)(3)).

PUBLIC COMMENT

Public Hearing

During public hearings, members of the public may provide comments regarding standards that have been noticed to the public for a 45-day comment period. An individual wishing to comment must complete a speaker comment card. Efforts will be made to accommodate everyone who signs up to speak. However, given time constraints, there is no guarantee that all who have signed up will be able to address the Board.

Each individual who submits a comment card will get up to two minutes to speak. The Board Chair may extend the speaking time allotted when practical. The total time for public comment is 120 minutes unless extended by the Board Chair.

Business Meeting Non-Agendized

During the Public Meeting, members of the public can address the Board on items of interest that are either on the Business Meeting agenda or within the Board's jurisdiction but are not on the noticed agenda. The Board is not permitted to take action on items that are not on the noticed agenda but may refer items to staff for future consideration. The Board reserves the right to limit the time for speakers.

DISABILITY ACCOMMODATION NOTICE

Disability accommodation is available upon request. Any person with a disability requiring an accommodation, auxiliary aid or service, or a modification of policies or procedures to ensure effective communication and access to the public hearings/meetings of the Board should contact the Disability Accommodation Coordinator at (916) 274-5721 or the state-wide Disability Accommodation Coordinator at 1-866-326-1616 (toll free). The state-wide Coordinator can also be reached through the California Relay Service, by dialing 711 or 1 (800) 735-2929 (TTY) or 1 (800) 855-3000 (TTY-Spanish).

Accommodations can include modifications of policies or procedures or provision of auxiliary aids or services. Accommodations include, but are not limited to, an Assistive Listening System (ALS), a Computer-Aided Transcription System or Communication

August 2024 Agenda Page 6 of 6

Access Realtime Translation (CART), a sign-language interpreter, documents in Braille, large print or on computer disk, and audio cassette recording. Accommodation requests should be made as soon as possible. Requests for an ALS or CART should be made no later than five (5) days before the meeting.

TRANSLATION

Requests for translation services should be made no later than five (5) days before the meeting. Request may be made to by email to oshsb@dir.ca.gov.

Occupational Safety and Health Standards Board

Meeting Notice

STATE OF CALIFORNIA GAVIN NEWSOM, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS
Occupational Safety and Health Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833

Tel: (916) 274-5721 www.dir.ca.gov/oshsb



NOTICE OF PUBLIC MEETING AND BUSINESS MEETING OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Pursuant to Government Code section 11346.4 and the provisions of Labor Code Sections 142.1, 142.2, 142.3, 142.4, and 144.6, the Occupational Safety and Health Standards Board ("Board") of the State of California has set the time and place for a Public Meeting and Business Meeting:

PUBLIC MEETING: On August 15, 2024, at 10:00 a.m.

in Room 310 of the County Administration Center 1600 Pacific Highway, San Diego, California

as well as via the following:

- Videoconference at www.webex.com (meeting ID 1469 63 6425)
- Teleconference at (844) 992-4726 (Access code 1469 63 6425)
- Live video stream and audio stream (English and Spanish) at https://videobookcase.com/california/oshsb/

At the Public Meeting, the Board will make time available to receive comments or proposals from interested persons on any item concerning occupational safety and health.

BUSINESS MEETING:

On **August 15, 2024,** at 10:00 a.m. in Room 310 of the County Administration Center 1600 Pacific Highway, San Diego, California

as well as via the following:

- Videoconference at www.webex.com (meeting ID 1469 63 6425)
- Teleconference at (844) 992-4726 (Access code 1469 63 6425)
- Live video stream and audio stream (English and Spanish) at https://videobookcase.com/california/oshsb/

At the Business Meeting, the Board will conduct its monthly business.

DISABILITY ACCOMMODATION NOTICE: Disability accommodation is available upon request. Any person with a disability requiring an accommodation, auxiliary aid or service, or a modification of policies or procedures to ensure effective communication and access to the public hearings/meetings of the Board should contact the Disability Accommodation Coordinator at (916) 274-5721 or the state-wide Disability Accommodation Coordinator at 1 (866) 326-1616 (toll free). The state-wide Coordinator can also be reached through the California Relay Service, by dialing 711 or 1 (800) 735-2929 (TTY) or 1 (800) 855-3000 (TTY-Spanish).

Accommodations can include modifications of policies or procedures or provision of auxiliary aids or services. Accommodations include, but are not limited to, an Assistive Listening System (ALS), a Computer-Aided Transcription System or Communication Access Realtime Translation (CART), a

sign-language interpreter, documents in Braille, large print or on computer disk, and audio cassette recording. Accommodation requests should be made as soon as possible. Requests for an ALS or CART should be made no later than five (5) days before the hearing.

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

IOSERH M ALIOTO R Chairma

Occupational Safety and Health Standards Board

Business Meeting

Occupational Safety and Health Standards Board

Business Meeting Standards for Adoption

Ocupational Exposures to Respirable
Crystalline Silica

MOVED, That the following resolution be adopted:

WHEREAS, The Occupational Safety and Health Standards Board (Board) finds that California workers in the artificial stone fabrication industry are currently being exposed to hazardous levels of respirable crystalline silica, and that exposure will kill or permanently disable a substantial number of workers through silicosis and other illnesses, unless immediate action to stop these exposures is taken. The Board further adopts and makes findings set forth in the Finding of Emergency that is part of the Notice of Proposed Emergency Action prepared in this matter. Therefore, be it

RESOLVED, that based on the finding stated above, the Board finds that amendments to title 8, California Code of Regulations, chapter 4, subchapter 7, revised section 5204 of the General Industry Safety Orders, Occupational Exposures to Respirable Crystalline Silica, must be adopted on an emergency basis for the immediate and continued preservation of the public health and safety in the workplace, and general welfare in the workplace; and be it further

RESOLVED by the Board, in regular meeting held in San Diego, California and via teleconference and videoconference, on August 15, 2024, that the proposed amendments of title 8, California Code of Regulations, chapter 4, subchapter 7, revised section 5204 of the General Industry Safety Orders, Occupational Exposures to Respirable Crystalline Silica, appended hereto, be adopted as an emergency regulation; and be it further

RESOLVED that the Board shall file with the Office of Administrative Law a sufficient number of copies of said filing documents and a copy of the rulemaking file for use by the Office of Administrative Law.

	STANDARDS BOARD
	JOSEPH M. ALIOTO JR., CHAIRMAN
Certified As A Regulation	
Of the Occupational Safety	
And Health Standards Board	
BY:	
Autumn Gonzalez, Chief Counsel	

DATED: August 15, 2024

TITLE 8

CHAPTER 4, SUBCHAPTER 7, REVISED SECTION 5204

OCCUPATIONAL EXPOSURES TO RESPIRABLE CRYSTALLINE SILICA

HYPERLINKS TO RULEMAKING DOCUMENTS:

NOTICE/INFORMATIVE DIGEST

FINDING OF EMERGENCY

PROPOSED TEXT FOR BOARD CONSIDERATION

Occupational Safety and Health Standards Board

Business Meeting Standards for Adoption

Fall Protection in Residential Construction

MOVED, That the following resolution be adopted:

WHEREAS, On December 1, 2023, the Occupational Safety and Health Standards Board, pursuant to Government Code Section 11346.4, fixed the time and place for a Public Hearing to consider the revisions to Title 8, Construction Safety Orders, sections 1671.1, 1716.2, 1730 and 1731, Fall Protection in Residential Construction.

WHEREAS, Such Public Hearing was held in person in Sacramento, California and via teleconference and videoconference, on January 18, 2024, and there are now before the Occupational Safety and Health Standards Board the proposed revisions to Title 8, Construction Safety Orders, sections 1671.1, 1716.2, 1730 and 1731, Fall Protection in Residential Construction; therefore, be it

RESOLVED By the Occupational Safety and Health Standards Board in regular meeting held in person in San Diego, California and via teleconference and videoconference, on August 15, 2024, that the proposed revisions to Title 8, Construction Safety Orders, sections 1671.1, 1716.2, 1730 and 1731, Fall Protection in Residential Construction, be adopted.

RESOLVED That the Occupational Safety and Health Standards Board shall file with the Office of Administrative Law a sufficient number of copies of said filing documents and a copy of the rulemaking file for use by the Office of Administrative Law.

OCCUPATIONAL SAFETY AND HEALTH

5	TANDARDS BOARD
	IOSEPH M. ALIOTO JR., CHAIRMAN
Certified As A Regulation	
Of the Occupational Safety	
And Health Standards Board	
DV.	
BY: Autumn Gonzalez, Chief Counsel	_
Addition Gonzalez, Chief Courise	

DATED: August 15, 2024

TITLE 8

CONSTRUCTION SAFETY ORDERS SECTIONS 1671.1, 1716.2, 1730 AND 1731

FALL PROTECTION IN RESIDENTIAL CONSTRUCTION

HYPERLINKS TO RULEMAKING DOCUMENTS:

TEXT FOR BOARD CONSIDERATION

FINAL STATEMENT OF REASONS

INITIAL STATEMENT OF REASONS

FIRST 15-DAY NOTICE (APRIL 5, 2024) FALL PROTECTION IN RESIDENTIAL CONSTRUCTION

From: Halprin, Lawrence P.
To: DIR OSHSB

Subject: RE: 15-DAY NOTICE: Fall Protection in Residential Construction

Date: Sunday, April 7, 2024 1:44:42 PM

Attachments: NCSG-OSHA Settlement Agreement Final Executed 12-01-23.pdf

CAUTION: [External Email]

This email originated from outside of our DIR organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe. If in doubt reach out and check with the sender by phone.

Dear Autumn,

I am submitting this short comment as a public service and not on behalf of any client.

As you probably know, the line between general industry maintenance activities and construction activities is not finely drawn and is often in the eye of the beholder.

I acknowledge that I have not researched the issue to determine whether a distinction is made between reroofing a roof versus replacing broken or missing shingles on a roof and when the number of shingles being replaced might cross over the line between a general industry maintenance/repair activity and a construction activity.

Just in case you were not aware of it, I represented the National Chimney Sweep Guild in a challenge to the November 18, 2016 Final Rule amending OSHA's walking surfaces and fall protection standards. A copy of the settlement agreement between NCSG and OSHA Is attached. There is a clear recognition by OSHA that traditional fall protection is frequently not feasible for activities such as shingle replacement (see Appendix C of the attached Settlement Agreement), and that there will often be a need to rely on travel restraint systems or fall arrest systems that are reliable and effective but do not comply with the design, installation and use requirements in the current standards.

Thank you for your consideration.

Sincerely,



khlaw.com PackagingLaw.com

Serving Business through Law and Science®

Lawrence P. Halprin

Partner

direct 202.434.4177 Halprin@khlaw.com

Keller and Heckman LLP | 1001 G Street NW, Suite 500 West | Washington, DC 20001

Washington, DC Brussels San Francisco Shanghai Boulder

From: Autumn Gonzalez <oshsb-dir.ca.gov@shared1.ccsend.com>

Sent: Friday, April 5, 2024 7:46 PM

To: Halprin, Lawrence P. <Halprin@khlaw.com>

Subject: 15-DAY NOTICE: Fall Protection in Residential Construction

** EXTERNAL EMAIL **

15-DAY NOTICE

COMMENTS DUE 4/22/2024

Aviso de 15-días Comentarios Deben Recibirse 4/22/2024



Occupational Safety and Health Standards Board

NOTICE OF PROPOSED MODIFICATIONS TO CALIFORNIA CODE OF REGULATIONS

TITLE 8: Sections 1671.1, 1716.2, 1730 and 1731 of the Construction Safety Orders

Fall Protection in Residential Construction

Written comments on these modifications or documents relied upon must be received by **5:00 p.m. on April 22, 2024** by mail or email:

MAIL

Occupational Safety and Health Standards Board 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833

EMAIL

oshsb@dir.ca.gov

Comments received after 5:00 p.m. on April 22, 2024 will not be included in the record and will not be considered by the Board.

Please confine your comments to the modification of the text and the additional documents.

This proposal will be scheduled for adoption at a future Standards Board Business Meeting.

Access the 15-Day Notice for

Fall Protection in Residential Construction.

For additional information on Board activities, please visit the OSHSB website.

Join Our Mailing List

Junta de Normas de Seguridad y Salud Ocupacional

AVISO DE MODIFICACIÓN DE LA PROPUESTA DEL CÓDIGO DE REGULACIONES DE CALIFORNIA

TÌTULO 8: Secciones 1671.1, 1716.2, 1730 and 1731 de las Órdenes de Seguridad en la Construcción

Protección contra caídas en la construcción residencial

Comentarios escritos sobre estas modificaciones o de los documentos de respaldo deben recibirse antes de las 5:00 p.m. del 22 de abril de 2024 por correo o correo electrónico.

CORREO

Occupational Safety and Health Standards Board 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833

CORREO ELECTRÓNICO

oshsb@dir.ca.gov

Los comentarios recibidos después de las 5:00 p.m. del 22 de abril 2024 no se incluirán en el registro y no serán considerados por la Junta.

Por favor, limite sus comentarios al texto modificado con respecto a su versión original y los documentos añadidos.

Esta propuesta se programará para su adopción en una futura Reunión de Negocios de la Junta de Normas.

Acceda al Aviso de 15 días para

Protección contra caídas en la construcción residencial.

Para obtener información adicional sobre las actividades de la Junta, visite el sitio web de

OSHSB.

Únase a nuestra lista de correo

Occupational Safety and Health Standards Board | (916) 274-5721 2520 Venture Oaks Way, Suite #350, Sacramento, CA 95833 | www.dir.ca.gov/oshsb

OSHSB | 2520 Venture Oaks Way, Suite 350, Sacramento, CA 95833

<u>Unsubscribe halprin@khlaw.com</u>

<u>Update Profile</u> | <u>Our Privacy Policy</u> | <u>Constant Contact Data Notice</u>

Sent by <u>oshsb@dir.ca.gov</u> powered by



Try email marketing for free today!

This message and any attachments may be confidential and/or subject to the attorney/client privilege, IRS Circular 230 Disclosure or otherwise protected from disclosure. If you are not a designated addressee (or an authorized agent), you have received this e-mail in error, and any further use by you, including review, dissemination, distribution, copying, or disclosure, is strictly prohibited. If you are not a designated addressee (or an authorized agent), we request that you immediately notify us by reply e-mail and delete it from your system.

IN THE UNITED STATES COURT OF APPEALS FOR THE SEVENTH CIRCUIT

NATIONAL CHIMNEY SWEEP GUILD, et al.,

Docket No. 17-1087

Petitioner,

v.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, UNITED STATES DEPARTMENT OF LABOR,

Respondent.

STIPULATION AND SETTLEMENT AGREEMENT Between the National Chimney Sweep Guild and the U.S. Department of Labor

Following extensive negotiations, the Secretary of Labor ("Secretary") and the National Chimney Sweep Guild ("NCSG") have reached a full and binding settlement of the Petition for Review filed in this Court. This matter involves a challenge to a final rule promulgated on November 18, 2016, by the Occupational Safety and Health Administration ("OSHA"), entitled Walking-Working Surfaces and Personal Protective Equipment (Fall Protection Systems) ("Walking-Working Surfaces Rule"). *See* 81 Fed. Reg. 82494.

The Secretary and NCSG stipulate and agree as follows:

1. This Stipulation and Settlement Agreement, incorporating by this reference the

attached Settlement Agreement, shall be effective upon execution by both parties, which occurred on December 1, 2023.

- Within fifteen days of execution of this Stipulation and Settlement Agreement,
 NCSG shall file a motion with the United States Court of Appeals for the Seventh
 Circuit for voluntary dismissal, with prejudice, of its petition for review in this matter.
- 3. Within fifteen days of execution of this Stipulation and Settlement Agreement, NCSG shall also withdraw from the Secretary's consideration the Petition for a Partial Administrative Stay or Variance, Re-Opening of the Rulemaking Record and Reconsideration, which NCSG and the Ned Stevens Petitioners filed with the Secretary on June 8, 2017. This withdrawal shall be accomplished by letter to the Secretary of Labor.
- 4. Within fifteen days of execution of this Stipulation and Settlement Agreement,
 NCSG shall inform its members of the settlement and post a copy of the Stipulation
 and the Settlement Agreement on its website.
- OSHA shall distribute this Stipulation and Settlement Agreement to all OSHA Regional and Area Offices, including its compliance safety and health officers ("CSHOs"). OSHA shall also instruct its Regional Offices, Area Offices, and CSHOs to implement this Stipulation and Settlement Agreement during any inspection of a Chimney Service Industry employer (as defined in the attached Settlement Agreement) worksite that involves potential non-compliance with 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), or 1910.140¹. Such inspections must be performed pursuant to this Stipulation and Settlement Agreement if they occur after

2

¹ The reference to 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140 includes the current versions and any future renumbered versions of 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140. However, this stipulation and Settlement Agreement will cease to be effective to the extent it is superseded by any substantive changes to any of these standards.

the effective date of this Stipulation and Settlement Agreement and the employer, when asked, informs OSHA that the employer's fall protection practices include the options outlined in the attached Settlement Agreement at the worksite that is the subject of the inspection.

- 6. NCSG will conduct outreach to the Chimney Service Industry and encourage them to adopt the fall protection practices described in this Settlement Agreement, document those practices, and communicate these practices to all of their employees who perform Covered Tasks. The objective of having and communicating the documented fall protection practices is to enable the employee(s) at the site being inspected, even if not owners or supervisors, to advise CSHOs of their fall protection practices so the appropriate inspection can be conducted without delay.
- 7. OSHA shall provide Chimney Service Industry employers until December 1, 2024 (twelve months from the date of execution) to implement this Settlement Agreement. Employers who are in the process of implementing this Settlement Agreement must comply with the requirements of 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140 to the extent such compliance is feasible, and does not pose a greater hazard, pursuant to Occupational Safety and Health Review Commission precedent.
- 8. OSHA shall distribute this Stipulation and Settlement Agreement to all the responsible agencies operating state plans pursuant to Section 18 of the OSH Act, and encourage those agencies to adhere to the terms of this Stipulation and Settlement Agreement as if it referenced the relevant provisions of any applicable standards, whether or not identical to 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140.
- 9. Each party agrees to bear its own attorney fees, costs, and expenses which arise or

have arisen out of and are incidental to the instant matter before this Court.

FOR THE SECRETARY OF LABOR:

FOR NATIONAL CHIMNEY SWEEP GUILD:

Kristen Lindberg, Esq.

U.S. Department of Labor

Office of the Solicitor

200 Constitution Ave., NW

Room S-4004

Washington, D.C. 20210

Executed on November ____, 2023

December 1,2023

Matt Mair, President

National Chimney Sweep Guild

1255 SW Prairie Trail Parkway

Ankeny, Iowa 50023

Lawrence P. Halprin, Esq.

Keller & Heckman LLP

1001 G Street, NW

Suite 500W

Washington, D.C. 20001

Attorney for NCSG

Executed on November 21, 2023

SETTLEMENT AGREEMENT

TABLE OF CONTENTS

I.	GEN	NERAL	3		
II.	DEF	TINITIONS	5		
III.	EMPLOYERS QUALIFYING TO OPERATE UNDER THIS				
	SET	TLEMENT AGREEMENT	7		
IV.	SAF	SAFETY PROGRAM REQUIREMENTS APPLICABLE TO ALL			
	FALL PROTECTION OPTIONS UNDER THIS AGREEMENT				
	A.	Safety Program for Rooftop Work	8		
	B.	Comprehensive Training Program	8		
	C.	Requirements With Respect to the Covered Tasks	11		
V.	SECTION 1910.28(a)(2)(ii) ASSESSMENT		14		
	A.	General	14		
	В.	Scope	14		
VI.	FAL	FALL PROTECTION OPTIONS FOR COVERED TASKS15			
	A.	Preference for Ground Level Work	15		
	B.	Installed Fall Protection	15		
	C.	Fall Protection Options	15		
	D.	Exception to Fall Protection Requirement	17		
APP	ENDIC	CES	18		
APP	ENDIX	X A - TRAVEL RESTRAINT SYSTEMS	A-1		
I.	Use	of Travel Restraint Systems	A-1		
	A.	Purpose	A-1		
	B.	Equipment	A-1		

STIPULATION AND SETTLEMENT AGREEMENT Between the National Chimney Sweep Guild

and the U.S. Department of Labor

	C.	General Conditions for Use	A-1
II.	Chimney-Based Travel Restraint Systems		
	A.	Description	A-2
	В.	Conditions for Use	A-2
III.	Ground-Based Anchorage Travel Restraint Systems		
	A.	Approved Ground-Based Anchorages	A-2
	1.	Mature Tree	A-2
	2.	Structural Member	A-3
	3.	Vehicle	A-4
IV.	ROC	OF TOP TRAVEL RESTRAINT SYSTEMS USING A NON-	
	PEN	ETRATING ROOF ANCHORAGE	A-5
	A.	Description	A-5
	В.	Conditions of Use	A-5
APP	ENDIX	X B - PERSONAL FALL ARREST SYSTEMS	B-1
I.	Use	Use of Personal Fall Arrest Systems	
	A.	Description	B-1
	B.	General Conditions for Use	B-1
II.	ROOF TOP PERSONAL FALL ARREST SYSTEMS USING A NON-		
	PEN	ETRATING ROOF ANCHORAGE	B-1
	A.	Description	B-1
	В.	Conditions of Use	B-1
APP	ENDIX	C - NON-EXCLUSIVE LIST OF COVERED TASKS	C-1
ΔPD	ENDIY	X D - MODEL TEMPLATE	D_1

SETTLEMENT AGREEMENT

I. GENERAL

- A. This Settlement Agreement, executed December 1, 2023, between the U.S. Department of Labor, Occupational Safety and Health Administration ("DOL/OSHA"), and the National Chimney Sweep Guild ("NCSG"), which includes Appendices A, B, C, and D, will be referred to herein as the "Agreement." It contains procedures and requirements ("Fall Protection Options") agreed to by DOL/OSHA and NCSG under which employers in the Chimney Service Industry may satisfy the fall protection requirements of 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140, whenever applicable, which were promulgated as part of OSHA's Walking-Working Surfaces Rule for General Industry, 81 Fed. Reg. 82494 (November 18, 2016). This agreement does not address compliance with any other OSHA requirements. The Fall Protection Options provided for under this Agreement apply only to "Covered Tasks," as defined in Section II.C below, when performed by employers in the Chimney Service Industry. They do not apply to, and may not be used for, any work performed by an employer outside the Chimney Service Industry. They do not apply to, and may not be used for, construction activities, except as specifically permitted herein.
- **B.** This Agreement identifies Fall Protection Options that will be deemed compliant with 29 CFR §§ 1910.28(b)(1), 1910.29(j), and 1910.140 when used pursuant to the conditions specified in this Agreement. Where the Fall Protection Options under this Agreement do not apply or are not being utilized, the employers in the Chimney Service Industry shall be subject to the fall protection requirements of 29 C.F.R. § 1910.28, § 1910.29(j) and 1910.140, as written.
 - 1. The anchorages identified in Appendices A and B, selected and used by or under the supervision of a Competent Person per the specific criteria set

out in the relevant Appendix, will be deemed to satisfy 1910.140(c)(13)(ii).¹

- 2. The anchorages identified in Appendices A and B, selected by or under the supervision of a Qualified Person in accordance with the relevant Appendix, and used by or under the supervision of a Qualified Person or Competent Person in accordance with the relevant Appendix, which, as part of a complete fall protection system, maintain a safety factor of at least two, will be deemed to satisfy 1910.140(c)(13)(ii).²
- C. OSHA shall ensure that no citation for failure to comply with the fall protection requirements of 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), or 1910.140 shall be issued if and when a Chimney Service Industry employer is in compliance with the terms of this Agreement applicable to the activity at a worksite inspected by OSHA.

¹ For example, a worker is using a travel restraint system consisting of a harness attached by a carabiner to a rope grab with a vertical lifeline that is threaded through the rope grab, run over the peak of the roof and down the other side of the roof to a tree, and attached to the tree with an appropriate knot. Except for the tree and the knot, all individual components selected by the sweep to assemble the travel restraint system meet the technical specifications in 29 CFR § 1910.140 and are being used in accordance with any instructions and specifications provided by the manufacturer. The tree that is serving as an anchor meets all criteria in Appendix A, Section III.A.1. In that situation, a Competent Person is authorized to select the individual components, assemble, and install this travel restraint system, and to use or supervise its use to perform the Covered Task. Rope grab means a deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.

² For example, a worker is using a travel restraint system consisting of a harness attached by a carabiner to a rope grab with a vertical lifeline that is threaded through the rope grab, run over the peak of the roof and down the other side of the roof to a tree, and attached to the tree with an appropriate knot. Except for the tree and the knot, all individual components selected by the sweep to assemble the travel restraint system meet the technical specifications in 29 CFR § 1910.140 and are being used in accordance with any instructions and specifications provided by the manufacturer. The tree that is serving as an anchor meets all criteria in Appendix A, Section III.A.1 subject to modification as provided by Appendix A, Section I.C, General Conditions of Use. In that situation, a Qualified Person is authorized to specify or select the anchor; and either a Qualified Person or a Competent Person is authorized to select the other individual components, assemble, and install this travel restraint system, and to use or supervise its use to perform the Covered Task.

II. DEFINITIONS

- **A.** "Chimney Service Industry" means businesses engaged in the maintenance, repair, and installation of chimney and venting systems serving fireplaces and heating appliances.
- **B.** "Competent Person" means a person who is capable of identifying existing and predictable hazards in any personal fall protection system or any component of it used under this Agreement, as well as in their application and uses with related equipment, and who has authorization to take prompt, corrective action to eliminate the identified hazards;
- C. "Covered Tasks" refers to the group of tasks covered by this agreement. Covered tasks are limited to tasks performed by Chimney Service Industry employers on residential roofs or roofs on residential-type structures that have been converted to commercial use (e.g., a dentist's office). Covered Tasks are limited to general industry tasks, and do not extend to construction tasks. They include but are not limited to the Covered Tasks listed in Appendix C.
- **D.** "Qualified Person" means a person who, by possession of a recognized degree, certificate, or professional standing, <u>OR</u> who by extensive knowledge, training, and experience has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project within the scope of this Agreement.⁴

³ The initial installation of a chimney cap, which OSHA views as a construction activity, is deemed to fall within the definition of Covered Tasks for purposes of this Agreement only. The removal and replacement of an existing chimney cap may be part of either a Section 1910.28(a)(2)(ii) Assessment or a Covered Task, depending on the circumstances.

The most important aspect of a Qualified Person is that they have the "demonstrated ability" to solve or resolve problems relating to the subject matter, work, and project. When the person the employer designates as

⁴ The following explanatory material is designed to further explain what is meant by a Qualified Person. It consists of direct quotes of materials extracted from the Preamble to the Walking-Working Surfaces Rule (81 Fed. Reg. 52494). The definition of "qualified" in the rule (29 C.F.R. § 1910.21(b)) allows employers to have crew chiefs, supervisors, operations personnel, or other individuals train workers, provided they have the necessary "degree" or "extensive knowledge" outlined in the definition of qualified, and specified in 29 C.F.R. § 1910.30(a). 29 C.F.R. § 1910.30(a)(2) does not require that trainers possess a degree if they have the necessary knowledge, training, and experience. 81 Fed. Reg. 82640, col. 3.

- E. "Fall Protection Aid" means a device designed to be hooked onto (rather than being bolted or nailed to) an appropriate component of the roof, such as the roof ridge or eave, and used by an employee to prevent a fall while traveling to or from a Covered Task, or while setting up and removing the Fall Protection Option that will be used while performing the Covered Task. A Fall Protection Aid may only be used as an anchorage for a personal fall protection system while performing a Covered Task if it is specifically designed for that purpose and installed and used per the manufacturer's instructions and specifications (in which case it also would be a Non-Penetrating Roof Anchorage).
- F. "Non-Penetrating Roof Anchorage" means a multipurpose device that secures to (rather than being bolted or nailed to) an appropriate component of the roof (e.g., the roof ridge, roof eave/soffit) and may serve as an anchorage for a personal fall protection system (either a Travel Restraint System or a Personal Fall Arrest System). A Non-Penetrating Roof Anchorage may only be used as an anchorage for a personal fall protection system *while performing a Covered Task* if it is used in accordance with Section IV.B of Appendix A. A Non-Penetrating Roof Anchorage must be installed and used as part of a complete personal fall protection system that maintains a safety factor of at least two pursuant to 29 C.F.R. § 1910.140(c)(13)(ii).

Qualified Persons must possess the type of qualifications (*i.e.*, recognized degree, certificate, or professional standing or extensive knowledge, training, and experience) that makes them capable of designing anchorages that successfully meet the requirements of the Walking-Working Surfaces Rule. Or, the Qualified Person must have demonstrated ability to solve and resolve the issues relating to the subject matter, work, or work project. 81 Fed. Reg. 82655, col. 3, and 82656, col. 1.

a Qualified Person has demonstrated the ability to solve or resolve problems, which may include performing various complex calculations to ensure systems and components meet required criteria, the qualifications of that person are adequate. In addition, an employer may need to select different Qualified Persons for different projects, subject matter, or work to ensure the person's professional credentials or training, experience, and knowledge are sufficient to solve or resolve the problems associated with the subject matter, work, or project. 81 Fed. Reg. 82650, col. 1.

⁵ Whenever used in this Settlement Agreement, the requirement to use a system or component according to/per/consistent with the manufacturer's instructions and specifications does not include a direction from the manufacturer that the purchaser/user must obtain training from the manufacturer or its representative before using the product.

G. "Roof Hook Ladder" means a straight ladder with attached ridge hooks designed to hook over the roof ridge and hold the ladder in position. Where the location and characteristics of the work, and the manner in which the Roof Hook Ladder is installed, will prevent the Roof Hook Ladder from being dislodged, it can be used:

(1) without fall protection for tasks that are performed when working from the ladder; (2) as a Fall Protection Aid; or (3) as a Non-Penetrating Roof Anchorage, provided the criteria for use as a Fall Protection Aid or Non-Penetrating Roof Anchorage in this Agreement are met.

III. EMPLOYERS QUALIFYING TO OPERATE UNDER THIS SETTLEMENT AGREEMENT

- **A.** Each employer electing to operate under this Settlement Agreement shall, before commencing activities under this Settlement Agreement, ensure it has:
 - Documented its Safety Program for Rooftop Work, as described in Section IV;
 - 2. Identified, in its Safety Program for Rooftop Work, the Covered Tasks that will be performed by its employees and any restrictions on the Covered Tasks that may be performed by a particular employee;
 - 3. Identified, in its Safety Program for Rooftop Work, the Fall Protection Options (described below) that will be installed and utilized by its employees, and any restrictions in the Fall Protection Options that may be installed or utilized by a particular employee;
 - 4. Obtained and provided its employees with the equipment necessary to perform the Covered Tasks and to install and utilize the Fall Protection Options that the employer has chosen to include in its Safety Program for Rooftop Work, consistent with any restrictions placed on the Covered Tasks performed or Fall Protection Options installed or used by a particular employee per Paragraphs III.A.2 and 3, above; and
 - 5. Provided its employees with the training necessary to perform the Covered Tasks and implement the Fall Protection Options that the

employer has chosen to include in its Safety Program for Rooftop Work, consistent with any restrictions placed on the Covered Tasks performed or Fall Protection Options installed or used by a particular employee per Paragraphs III.A.2 and 3, above.

B. Each employer electing to operate under the Settlement Agreement shall ensure their Qualified Persons, Competent Persons, and employees implement the provisions of this agreement as applicable to each.

IV. SAFETY PROGRAM REQUIREMENTS APPLICABLE TO ALL FALL PROTECTION OPTIONS UNDER THIS AGREEMENT

A. Safety Program for Rooftop Work

- 1. The employer must develop and implement a written Safety Program for Rooftop Work addressing the Covered Tasks performed by its employees.
- 2. The Safety Program for Rooftop Work must include a comprehensive training program for training on the use of the Fall Protection Options authorized by this Agreement.

B. Comprehensive Training Program

1. General

- a. The Comprehensive Training Program must include the training requirements listed in Paragraph IV.B.2, below, for all personnel performing or supervising work using any Fall Protection Option identified in Appendix A or Appendix B of this Agreement as well as the training requirements listed in Paragraph IV.B.2, below, for all personnel who will be a Competent Person under this Agreement (Note: Redundant training is not required to the extent the employer verifies the employee already has the required knowledge from prior training and/or experience.)
- b. All training must comply with 29 C.F.R. § 1910.30.
- c. All required training must also be provided to an employee before that employee performs or supervises work using any Fall Protection Option identified in Appendix A or Appendix B of this Agreement.

d. The Comprehensive Training Program must be developed and conducted by a Qualified Person and the Program must include a written certification by a Qualified Person that the Program conforms with this Agreement.

2. Fall Hazards and Fall Protection

a. Overview

The training program, per 29 C.F.R. § 1910.30, shall enable each employee to recognize the hazards of falling as well as the fall hazards at the worksite, and shall train each employee in the procedures to be followed to minimize these hazards.

 Minimum Training for all Employees Performing Work Under this Agreement

The employer must ensure that each employee performing work under this Agreement is trained by a Qualified Person in at least the following topics:

- (1) The nature of the fall hazards in the work area and how to recognize them;
- (2) The proper procedures to be followed to minimize those hazards;
- (3) The proper procedures for installing, inspecting, operating, maintaining, and disassembling the personal fall protection systems and other equipment that the employee uses to address fall hazards;
- (4) The proper use of personal fall protection systems and other equipment that the employee uses to address fall hazards, including, but not limited to, identification and evaluation of proper anchor points, proper hook-up, anchoring, and tie-off techniques, and methods of equipment inspection and storage, as specified by the manufacturer;
- (5) The proper care and storage of the personal fall protection systems and other equipment that the employee uses to address fall protection hazards; and
- (6) Fall/slip recovery procedures and techniques.

- c. Additional Training for Competent Persons
 - (1) The employer must ensure that each employee who will be a Competent Person under this Agreement is trained by a Qualified Person to:
 - (i) conduct and document the hazard assessment;
 - (ii) select and use the appropriate Fall Protection Options; and
 - (iii) complete the job-specific Fall Prevention Plan, using Appendix D or equivalent.⁶
 - (2) The employer must ensure that each employee who will be a Competent Person under this Agreement demonstrates the ability to identify existing and predictable hazards in the personal fall protection systems or components used under this Agreement, as well as in the application or uses of related equipment.

d. Training Format

An appropriate portion of the required training in the use of personal fall protection systems must be a hands-on demonstration, which can be in a classroom setting or through properly supervised on-the-job training, to ensure the training is effective and understood. 29 C.F.R. § 1910.30 does not otherwise require or prohibit a specific format for delivering training to workers. Employers may use video-based, web-based or computer-based training, provided that:

- A Qualified Person developed or prepared the training;
- A Qualified Person is available to answer any questions workers may have;
- The training content complies with the requirements in 29 C.F.R. § 1910.30; and
- The employer provides the training in a manner each worker understands (29 C.F.R. § 1910.30(d)).

⁶ The term "Fall Prevention Plan" is used here to distinguish it from the term "Fall Protection Plan" as used in 29 C.F.R. 1910.28(b)(1)(ii) and 1926.502(k).

C. Requirements With Respect to the Covered Tasks

1. Overview

The Safety Program for Rooftop Work must include the following requirements with respect to the Covered Tasks. The employer will conduct a hazard assessment and then develop and implement a written Fall Prevention Plan, based on that hazard assessment, for each job where this Agreement is implemented. The employer will also ensure its employees meet the requirements applicable for their roles as trained employees, Competent Persons, and/or Qualified Persons.

2. Hazard Assessment

A Competent Person will conduct a hazard assessment based on the Covered Task and conditions at each individual worksite, taking into account factors such as weather conditions (e.g., wind, rain, snow, moss, moisture, temperature), condition of the roof, access to the roof and to the location where the Covered Task will be performed, roof pitch, type of surface, nature of Covered Task, presence of skylights or utility lines, required equipment and materials, time to perform the Covered Task, and number of employees assigned to the job and on the roof. The hazard assessment will be documented in the written Fall Prevention Plan created for each job where this Agreement is implemented.

3. Fall Prevention Plan

The Fall Prevention Plan must be completed by a Competent Person or a Qualified Person. The Plan must be specific to the Covered Tasks being performed and the jobsite conditions. A flexible, generic template may be used for this purpose if it adequately addresses the tasks and conditions at the jobsite. The template in Appendix D is an example of an acceptable template for this purpose. The Fall Prevention Plan will establish acceptable roof working conditions, work practices, and fall protection measures to be implemented for particular Covered Tasks under the particular worksite conditions, including:

- a. Selection of the appropriate method and location of access to the roof and work area(s) (e.g., placing the ground ladder at the location that will provide the highest overall level of safety for the Covered Task);
- b. Selection of the appropriate fall protection measures;
- c. Selection of the appropriate PPE (e.g., selecting shoes that achieve adequate traction with the surface of the roof).
- 4. At least one of the workers installing or supervising the installation of the fall protection system must be a Competent Person. At least one of the workers using or supervising the use of the fall protection system must be a Competent Person.
- 5. A Qualified Person must design any fall protection system used under this Agreement that is not: 1) installed and used per the specifications in this Agreement; or 2) installed and used in a manner for which the system was designed, and consistent with the manufacturer's instructions and specifications for the use of the system or its components.⁷
- 6. The same individual may be both a Competent Person and a Qualified Person. Where the circumstances require the participation of both a Competent Person and a Qualified Person, that requirement is satisfied by one individual who meets the requirements of both definitions.
- 7. All workers performing work under this Agreement must have had at least the training required under Section IV.B.2.a-b.
- 8. Work on the Covered Tasks
 - a. Employers will ensure that their employees implement the applicable requirements of the Fall Prevention Plan for the Covered Task, including

⁷ For example, a worker is using a travel restraint system consisting of a harness attached by a carabiner to a rope grab with a vertical lifeline that is threaded through the rope grab, run over the peak of the roof and down the other side of the roof to a tree, and attached to the tree with an appropriate knot. Except for the tree and the knot, all individual components selected by the sweep to assemble the travel restraint system meet the technical specifications in 29 CFR § 1910.140 and are being used in accordance with any instructions and specifications provided by the manufacturer. The tree that is serving as an anchor meets all criteria in Appendix A, Section III.A.1. In that situation, a competent person is authorized to select the individual components, assemble, and install this travel restraint system, and to use or supervise its use to perform the Covered Task.

location and method of roof access, proper use of appropriate fall protection measures, and proper use of appropriate PPE.

- b. Employers will ensure their employees use caution while walking on a roof and maintain a low center of gravity.
- c. Unless it is infeasible or poses a greater hazard pursuant to Occupational Safety and Health Review Commission precedent, employers will ensure employees use a Fall Protection Aid, a Roof Hook Ladder, a Non-Penetrating Roof Anchorage, or a Travel Restraint System described in Appendices A and B to access (travel to or from) the Covered Tasks, or while setting up and removing the Fall Protection Option that will be used while performing the Covered Tasks.
- 9. Weather Hazards: When adverse weather (such as high winds, rain, snow, or sleet) creates a hazardous condition (such as a slippery roof) that is not eliminated or adequately controlled, Covered Tasks will be suspended until the hazardous condition no longer exists or is adequately controlled.
- 10. Prompt Rescue: When using fall arrest systems to perform Covered Tasks under this Agreement, the equipment set-up will include self-rescue devices and employers will require employees performing Covered Tasks to carry mobile telephones to summon help. For Covered Tasks not requiring fall arrest systems, employers will encourage employees to carry mobile telephones to summon help.
- 11. Employer Enforcement, Investigations, and Retraining
 - a. Employers shall ensure unannounced safety spot checks are performed and documented. Each worker engaged in Covered Tasks under this Agreement shall be spot checked for compliance with this Agreement a minimum of once per year.
 - Employers shall take immediate action to correct any observed or reported violations of this Agreement and retrain employees as required.
 All retraining shall be documented.

c. Employers shall conduct investigations into any observed or reported incidents or near misses that involve falls from height. This investigation and analysis of causal factors shall be completed within two weeks of the incident. Employers must implement appropriate changes, if necessary, to prevent similar incidents in the future, and must document such changes.

V. ASSESSMENTS UNDER 29 C.F.R. § 1910.28(a)(2)(ii) ("SECTION 1910.28(a)(2)(ii) ASSESSMENTS")

A. General

Pursuant to 29 C.F.R. § 1910.28(a)(2)(ii), with one exception, fall protection is not required when employees are: (1) inspecting, investigating, or assessing workplace conditions or work to be performed prior to the start of rooftop work⁸ or (2) conducting a good faith inspection, investigation, or assessment of workplace conditions and the rooftop work that was performed to confirm all rooftop work has been completed. The exception is that employees must use any fall protection system or equipment meeting the requirements of 29 C.F.R. § 1910.29 that has been installed and that is available and adequate (e.g., in good condition and appropriate location) for workers to use for pre-work and post-work assessments (see 29 C.F.R. § 1910.28(a)(2)(ii)).

B. Scope

The following rooftop activities fall within the scope of a Section 1910.28(a)(2)(ii) Assessment: inspecting flashing, shingles, roof vents, and chimneys (which includes removing the chimney cap with a screwdriver or screw gun to allow inspection of the crown and inside of the chimney cap and flue with the aid of a flashlight and/or camera, and then replacing the chimney cap with a screwdriver or screw gun) while on the roof. Incidental chimney cleaning activities, such as brief removal of creosote,

⁸ This means a Section 1910.28(a)(2)(ii) Assessment may be performed before or after an employer has first performed some non-assessment tasks that do not involve accessing the rooftop.

may also be considered part of the Section 1910.28(a)(2)(ii) Assessment for purposes of this Agreement.

VI. FALL PROTECTION OPTIONS FOR COVERED TASKS

A. Preference for Ground Level Work

To the extent practical – and permitted by the homeowner, any applicable legal requirements (e.g., pandemic restrictions), and the design of the house (e.g., chimney, damper, flue, fireplace) – employers will ensure employees perform chimney inspection and cleaning activities from inside the house.

B. Installed Fall Protection

Employees must use any existing fall protection system or equipment meeting the requirements of 29 C.F.R. § 1910.29 that has been installed and is available and adequate (e.g., in good condition and appropriate location) for workers to use to access the location where the rooftop task will be performed and/or to perform the Covered Task. The requirement to use existing fall protection anchors is contingent on a Competent Person determining, by visual inspection, that the existing roof anchors are firmly installed, in good condition (e.g., free of significant corrosion), and in an appropriate location to provide fall protection while accessing the location where the Covered Task will be performed and/or performing the Covered Task. Where there are no existing fall protection while accessing the location where the Covered Task will be performed and/or performing the Covered Task, employers may utilize one or more of the following Fall Protection Options.

C. Fall Protection Options

When fall protection is required, employees performing Covered Tasks under this Agreement shall be protected from falls by any of the Fall Protection Options described in Paragraphs 1 through 4, below, which is not infeasible and does not

create a greater hazard (pursuant to Occupational Safety and Health Review Commission caselaw), and may use a combination of these options. A Fall Protection Aid may be used by an employee to prevent a fall while traveling to or from a Covered Task, or while setting up and removing the Fall Protection Option that will be used while performing the Covered Task.

- 1. A Travel Restraint System that complies with the requirements in Appendix A of this Agreement and is otherwise subject to 29 C.F.R. § 1910.140.
- 2. A Personal Fall Arrest System that meets the requirements in Appendix B of this Agreement and is otherwise subject to 29 C.F.R. § 1910.140.
- 3. Working from an aerial work platform that complies with 29 C.F.R. § 1910.67.
- 4. Working from portable ladders where the physical conditions at the worksite permit. The use of ladders shall be in compliance with 29 C.F.R. § 1910.23. Note: Employers shall ensure that employees move ladders from location to location around the worksite as often as necessary to safely access the areas where work is to be performed.

Additions, modifications, and updates to the Fall Protection Options described in Paragraphs 1 through 4, above, that are designed to make them safer or more efficient while providing substantially equivalent protection may be requested by NCSG, but are permitted only after consultation with the OSHA National Office, Directorate of Enforcement Programs, and receipt of written approval from OSHA. Consent to modifications or updates may not be unreasonably withheld and all parties must negotiate any changes in good faith.

D. Exception to Fall Protection Requirement

For chimney sweeping and chimney cap installation only: If all means of performing chimney sweeping or installing chimney caps under Sections VI.A, B, and C, above, are infeasible and/or create a greater hazard (pursuant to Occupational Safety and Health Review Commission caselaw), the employer may allow employees to enter onto a roof to perform those tasks without fall protection when the following conditions are met:

- 1. A Competent Person has determined, by visual inspection, that the work surface is in good condition and capable of supporting the employee;
- 2. Employees shall not enter onto any portion of a roof where the roof pitch is greater than 4 in 12;
- 3. Employees shall keep their centers of gravity low whenever walking on or working from the roof; and
- 4. Employees shall take an access path that minimizes the time spent within 6 feet of the edge of the roof.

APPENDICES

APPENDIX A

TRAVEL RESTRAINT SYSTEMS

I. Use of Travel Restraint Systems

A. Purpose

A Travel Restraint System is designed and used to prevent an employee from going over the edge of a walking-working surface rather than arresting a fall after going over the edge. A Travel Restraint System shall not be relied upon to arrest a fall because it is not designed to handle the potential forces generated in free fall.

B. Equipment

A Travel Restraint System generally consists of an assembly of components – anchorage, anchorage connector, lanyard (or other means of connection), ascent/descent device, lifeline, and body support (harness or belt) – that an employer uses to eliminate the possibility of an employee going over the edge of a walking-working surface.

C. General Conditions for Use

Except as provided in this Agreement, use of a Travel Restraint System shall be subject to all applicable provisions in 29 C.F.R. § 1910.140. The Travel Restraint Systems described in this Appendix A may be used for Covered Tasks. These descriptions are requirements when the systems are being installed by a Competent Person, and safe harbor guidance if the person designing the Travel Restraint System is a Qualified Person. A Qualified Person may, in the exercise of his/her knowledge, training and/or experience, determine that some of the criteria listed below may be modified.

II. Chimney-Based Travel Restraint Systems

A. Description

While it may be set up in a variety of ways, a Chimney-Based Travel Restraint System generally means a combination of a line tightly wrapped around a chimney to which a lanyard and body support (belt or harness) are attached.

B. Conditions for Use

- 1. A Competent Person must determine that the chimney is suitable for this purpose and that the Travel Restraint System can be safely attached to the chimney. A non-enclosed chimney or vent (a/k/a a manufactured chimney or vent with no chase) is not suitable for this purpose.
- 2. A brick or stone chimney shall be in good condition and solid, with no loose, missing, or damaged grout or cement mortar and no loose brickwork.
- 3. The chimney may not be within six feet of the gable edge of the roof.
- 4. The restraint lines shall be padded where they touch angled, sharp, or rough surfaces.

III. Ground-Based Anchorage Travel Restraint Systems

A. Approved Ground-Based Anchorages

The following objects may be used as a single anchorage for a Travel Restraint System when the listed requirements are met.

- 1. **A mature tree** that, based upon visual inspection prior to use, meets the following requirements:
 - a. The tree has a trunk that appears to be at least 6.5 inches in diameter.
 - b. The tree shall be inspected prior to use by striking the trunk with a rubber mallet in at least three locations to determine if the inside of the tree is solid.

- c. The tree is substantially in line with and on the opposite side of the roof from the work being performed.
- d. The rope and/or webbing between the tree and the eaves is at as shallow an angle as possible to minimize the risk of anchor sling slippage and to maintain lateral load on the trunk.
- e. The anchor sling is installed as low to the ground as possible, is secure and remains in place (does not slide up the trunk). If nails or screws are used to secure the slings, they shall be placed above the sling (not through) and a minimum of three shall be used, spaced around the area where the sling contacts the trunk.
- f. If necessary, the rope/webbing shall be protected from any visible contact with tree sap.
- g. The tree trunk shall be substantially free of visible fungus, rot, cracks, splits, or decay.
- h. The tree trunk shall be close to vertical (i.e., not leaning significantly).
- i. The bark of the tree shall be healthy, primarily intact, and not loose.
- i. The tree shall not lean or give when pushed or pulled.
- k. The tree roots shall be substantially free of visible fungus or rot.
- 1. The tree roots shall not be bound between structures.
- m. The tree roots shall not be shallow.
- n. The tree crown shall have no or very few dead branches.
- o. The ground around the tree shall be free of large cracks or fissures.
- p. The ground around the tree shall show no evidence of upheaval.
 Note: Workers shall tie off to the largest-diameter tree available that meets the above requirements.
- 2. **A structural member** (such as a wooden structure or a metal structure) that, based upon visual inspection prior to use, meets the following requirements:
 - a. A wooden structure that is:
 - (1) Made from 4x4 lumber (which is actually $3\frac{1}{2}$ inches by $3\frac{1}{2}$ inches) or

equivalent (e.g., two 2"x4" lumber joined to form 4 x 4 lumber), or larger lumber.

- (2) Free of rot, cracks, and decay.
- (3) Substantially in line with and on the opposite side of the roof from the work being performed.
- b. A metal structure that is:
 - (1) Solidly connected to the building structure.
 - (2) Free of rust and corrosion.
 - (3) Substantially in line with and on the opposite side of the roof from the work being performed.
- c. The following shall not be used as anchorage points:
 - (1) Handrails;
 - (2) Pipes;
 - (3) Utility conduits;
 - (4) Vents; and
 - (5) Any other structure not intended or designed to be load bearing.
- 3. **A vehicle** that, based upon visual inspection prior to use, meets the following requirements:
 - a. Has a gross vehicle weight of at least 4,000 pounds.
 - b. The vehicle shall be parked on a clean, dry, stable surface.
 - c. The vehicle shall be in line with and on the opposite side of the roof from the work being performed, with the restraint line in line with the length of the vehicle.
 - d. The restraint line shall not cross the vehicle travel ways.
 - e. The vehicle shall be parked with the ignition off.
 - f. A vehicle with an automatic transmission shall be in "park." A vehicle with a manual transmission shall be in gear.
 - g. The vehicle shall have the parking brake set, wheels chocked to restrain movement of the vehicle in both directions, and doors locked.

- h. The keys to the vehicle shall remain with the worker performing the roof work.
- i. A tag shall be placed near the ignition warning that the vehicle is not to be moved.
- j. The restraint lines shall be connected to approved connection points on the vehicle, and shall be padded where they touch angled, sharp, or rough surfaces. The only approved connection points are the following:
 - (1) Around wheels;
 - (2) Through openings in rims;
 - (3) B pillar;
 - (4) Frame; and
 - (5) Axles.

IV. Roof Top Travel Restraint Systems Using Non-Penetrating Roof Anchorages

A. Description

A Non-Penetrating Roof Anchorage is one that secures onto a suitable component of the roof but is not nailed, screwed, or bolted to the roof component.

B. Conditions of Use

- 1. In cases where a system or its components are assembled, installed, and used in a manner consistent with the manufacturer's instructions and specifications for their use, and in accordance with their intended use, a Competent Person may assemble, install, or use it, or supervise the system's assembly, installation, or use. Otherwise, the determination that this system is safe and appropriate to use for fall protection under the circumstances at the site must be made by a Qualified Person.
- 2. This system may only be relied upon to provide fall protection while performing the work where the location and characteristics of the work, and the way the

Non-Penetrating Roof Anchorage is installed, will not dislodge the Non-Penetrating Roof Anchorage.

3. The roof slope is not more than the slope for which the system or its components are rated by the manufacturer.

APPENDIX B

PERSONAL FALL ARREST SYSTEMS

I. Use of Personal Fall Arrest Systems

A. Description

A personal fall arrest system means a system used to arrest an employee in a fall from a walking-working surface. A personal fall arrest system consists of a body harness, anchorage, and connector. The means of connection may include a lanyard, deceleration device, lifeline, or a suitable combination of these.

B. General Conditions for Use

Except as provided in this Agreement, use of a Personal Fall Arrest System shall be subject to all applicable provisions in 29 C.F.R. § 1910.140. The Personal Fall Arrest Systems described in this Appendix B may be used for Covered Tasks. These descriptions are requirements when the systems are being installed by a Competent Person, and safe harbor guidance if the person designing the Personal Fall Arrest System is a Qualified Person. A Qualified Person may, in the exercise of his/her knowledge, training and/or experience, determine that some of the criteria listed below may be modified.

II. Roof Top Personal Fall Arrest Systems Using Non-Penetrating Roof Anchorages

A. Description

A Non-Penetrating Roof Anchorage is one that secures onto a suitable component of the roof but is not nailed, screwed, or bolted to the component.

B. Conditions of Use

1. In cases where a system or its components are assembled, installed, and used in accordance with the manufacturer's instructions and specifications for their use,

and in accordance with their intended use, a Competent Person may assemble, install, or use the system, or supervise the system's installation or use.

Otherwise, the determination that this system is safe and appropriate to use as a personal fall arrest system under the circumstances at the site must be made by a Qualified Person.

- 2. This system may only be relied upon to provide fall protection while performing the work where the location and characteristics of the work, and the way the Non-Penetrating Roof Anchorage is installed, will not dislodge the Non-Penetrating Roof Anchorage.
- **3.** The roof slope is not more than the slope for which the system or its components are rated by the manufacturer.

APPENDIX C

NON-EXCLUSIVE LIST OF COVERED TASKS

The following is a non-exclusive list of Covered Tasks. These tasks are only covered by this Agreement to the extent they fall within the scope of General Industry activities rather than Construction activities.

- 1. Chimney sweeping
- 2. Install, remove and replace chimney covers or caps
- 3. Waterproof or paint chimney
- 4. Repair chimney crowns or chase covers
- 5. Repair chimney chase
- 6. Repair grouted/mortared joints
- 7. Replace metal chimney liners.
- 8. Replace broken/missing clay chimney liner tiles.
- 9. Replace broken/missing masonry units.
- 10. Repair flashing
- 11. Repair roof flue or mechanical exhaust vents
- 12. Replace shingles

The term "Covered Tasks" includes any other similar chimney maintenance or repair tasks that do not constitute construction.

SPECIAL ACCESS TASKS

In some situations, the only practical means of accessing the top of the chimney to perform a Covered Task is by placing the feet of a portable ladder on the surface of the roof and leaning it against the chimney. In those situations, two types of ladders may be used and fall protection must be carefully planned. Use of a portable ladder for this purpose must comply with 29 C.F.R. 1910.23(c)(4).

Ladder Options:

- 1. Use a straight portable ladder lashed tightly against the chimney at two different heights with both legs sitting firmly on the surface of the roof to provide firm support and prevent movement of the ladder. An appropriate rigid spacer may be used at the bottom between the ladder and the chimney to provide a slight incline that makes it easier to climb and descend the ladder.
- 2. Use a folding portable ladder with the back legs lashed tightly against the chimney at two different heights and both front legs sitting firmly on the surface of the roof, or a level platform designed for this purpose, in order to provide firm support and prevent movement of the ladder.

Fall Protection:

A Competent Person must determine whether a Chimney-Based Travel Restraint System is required in addition to any other fall protection systems that have been set up to perform the Covered Tasks.

APPENDIX D

MODEL TEMPLATE FOR

FALL PREVENTION PLAN FOR COVERED TASKS

(for purposes of illustration)

This written plan must be completed, and the fall protection measures required under the December 1, 2023, NCSG-OSHA Settlement Agreement must be in place before performing Covered Tasks under the Settlement Agreement. If, after the rooftop work begins, the nature or scope of the tasks to be performed is modified or there is a change in conditions, the Competent Person must review this plan and either determine that it continues to be effective or make any necessary changes before continuing work. This plan must be provided to OSHA upon request.

Customer:	Date:	Time:
Address:		
Names of employees assigned to job:		
Task(s) to be performed:		

		DIRECTIONS FOR USE OF THIS FORM		
		 For each Covered Task to be performed, identify: (1) the Covered Task; (2) the location on the roof where it will be performed; (3) the method and location of roof access; (4) whether the Covered Task requires a portable ladd on the roof to reach the top of a chimney; and (5) the fall protection option(s that will be employed. Multiple tasks should be grouped and covered by one set of entries if the Hazard Assessment and Implementation Plan (e.g., same fall protection plan for the grouped tasks is the same. Tasks performed with different fall protection set-ups must not be grouped. 		
		HAZARD ASSESSMENT & IMPLEMENTATION PLAN		
		Covered Task (or Grouped Tasks) 1		
Item	Yes	Item		
#	/No			
1		Location of Covered Task (or grouped Covered Tasks) on roof, including estimated distance to edge of roof:		

STIPULATION AND SETTLEMENT AGREEMENT

Between the National Chimney Sweep Guild and the U.S. Department of Labor

2	Location of Roof Access, including estimated distance from access to Covered Task: Method of Roof Access:	
3	Slope(s) of Roof: Composition of Roof Surface(s):	
4	Does the roof have the structural integrity to support the workers and work to be performed without supplemental equipment? If "no," specify the Special Measures that will be required in Item 14.	
5	Does the roof provide an adequate walking/working surface for the job (e.g., good traction, even surface)? If "no," specify the Special Measures that will be required in Item 14.	
6	Are there any obstacles to accessing the roof or performing the Covered Tasks that need to be addressed? If "yes," identify the obstacles and specify the Special Measures that will be required in Item 14.	
7	Does the Task Require a Portable Ladder on the Roof to Reach the Top of a Chimney? If "yes," enter "X" in applicable blank to identify ladder.) Use a straight portable ladder lashed tightly against the chimney at two different heights with both legs sitting firmly on the surface of the roof to provide firm support and prevent movement of the ladder. Use a folding portable ladder with the back legs lashed tightly against the chimney at two different heights and both front legs sitting firmly on the surface of the roof to provide firm support and prevent movement of the ladder.	
8	Was a fall hazard assessment performed and was it based on the Covered Task(s) to be performed and conditions at the worksite, taking into account factors such as weather conditions (e.g., wind, rain, snow, moss, moisture, temperature), condition of the roof, access to the roof and to the location where the Covered Task will be performed, roof pitch, type of surface, presence of skylights or utility lines, required equipment and materials, time to perform the Covered Task, and number of employees assigned to the job and on the roof?	
9	Does the roof have guardrails or anchors for a personal fall protection system that would provide complete fall protection when accessing and performing the Covered Task? If "yes": use them and skip to Item 11. If "no": proceed to Item 10 to develop and implement a Fall Prevention Plan before work is allowed to proceed.	

	Fall Protection Options			
10.A	Is fall protection required during access to and from the Covered Task(s)? Y or N			
	If "No," explain why by checking applicable box below and skip to Question 10.B. Fall			
	protection is Not required because task will be:			
	Performed from Roof Hook Ladder that can be set up without using fall protection.			
	Performed from portable ground ladder.			
	Performed from Aerial Work Platform.			
	Other. Explain:			
	If "Yes," place an "X" in the box next to each measure that will be used.			
	Use Existing Fall Protection Anchorages located at:			
	Use a Fall Protection Aid. Specify aid:			
	Use a Travel Restraint System with a Ground-Based Anchorage			
	Specify Anchorage:			
	Use a Roof Top Travel Restraint System with a Non-Penetrating Roof			
	Anchorage			
	Specify Anchorage:			
	Use a Roof Top Personal Fall Arrest System with a Non-Penetrating Roof			
	Anchorage			
	Specify Anchorage:			
	Use a Personal Fall Arrest System with a Ground-Based Anchorage*			
	Specify Anchorage:			
	*This approach is not authorized by the Settlement Agreement with OSHA. It may be used, in compliance with relevant OSHA standards, if fall protection is required and			
	the fall protection options in the Agreement are infeasible or pose a greater hazard,			
	pursuant to Occupational Safety and Health Review Commission precedent. Such use must be documented.			

STIPULATION AND SETTLEMENT AGREEMENT

Between the National Chimney Sweep Guild and the U.S. Department of Labor

	Is interim fall protection required while setting up or removing the fall
10.B	protection that will be used while performing the Covered Task(s)? Y or N.
	If "No," explain why by checking applicable box below and skip to Question 10.C. Fall
	protection is Not required because task will be:
	Performed from Roof Hook Ladder that can be set up without using fall protection.
	Performed from portable ground ladder.
	Performed from Aerial Work Platform.
	Other. Explain:
	If "Yes," place an "X" in the box next to each measure that will be used.
	Use Existing Fall Protection Anchorages located at:
	Use a Fall Protection Aid. Specify aid:
	Use a Travel Restraint System with a Ground-Based Anchorage
	Specify Anchorage:
	Use a Roof Top Travel Restraint System with a Non-Penetrating Roof
	Anchorage
	Specify Anchorage:
	Use a Chimney-Based Travel Restraint System
	Ose a Chimney Dasca Travel Restraint System
	Use a Roof Top Personal Fall Arrest System with a Non-Penetrating Roof
	Anchorage
	Specify Anchorage: Use a Personal Fall Arrest System with a Ground-Based Anchorage*
	Use a Personal Fall Arrest System with a Ground-Based Anchorage*
	Specify Anchorage:
	*This approach is not authorized by the Settlement Agreement with OSHA. It may be
	used, in compliance with relevant OSHA standards, if fall protection is required and
	the fall protection options in the Agreement are infeasible or pose a greater hazard
	pursuant to Occupational Safety and Health Review Commission precedent. Such use
	must be documented.
10.0	Is fall protection is required while performing the Covered Task(s)? Y or N
10.C	If "No," explain why by checking applicable box below and skip to Question 11. Fall
	protection is Not required because task will be:
	Performed from Roof Hook Ladder that can be set up without using fall protection.
	Performed from portable ground ladder.
	Performed from Aerial Work Platform.
	Other. Explain:
	If "Yes," place an "X" in the box next to each measure that will be used.
	Use Existing Fall Protection Anchorages located at:
	OSC Existing Fan I Totection Amenorages located at.
	Use a Fall Protection Aid. Specify aid:
	Use a Travel Restraint System with a Ground-Based Anchorage
	Specify Anchorage:
	Use a Roof Top Travel Restraint System with a Non-Penetrating Roof
	Anchorage
	Specify Anchorage:

Anchora Spe Use a Pe Spe * This approach is used, in compliance the fall protection of pursuant to Occup	age ecify Anchorage: ersonal Fall Arrest System cify Anchorage: not authorized by the Se e with relevant OSHA sta options in the Agreement ational Safety and Healtl	t are infeasible or pose a greater hazard,
	• • •	
Identify any PPE req	uired to perform the planned	ed tasks.
Identify any measure	s needed to protect individu	uals from falling objects.
Identify any Special Measures required for the job.		
X	. 14 0	B (1 B) (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
I certify that I have reviewed the foregoing Fall Prevention Plan and determined that it provides an effective level of protection from fall hazards for the work to be performed.		
Name	 Date	Signature
	Anchora Spe Use a Per Spe * This approach is used, in compliance the fall protection opersuant to Occup must be documented. Identify tools and equal special in the specific	Anchorage Specify Anchorage: Use a Personal Fall Arrest Syste Specify Anchorage: * This approach is not authorized by the Se used, in compliance with relevant OSHA st the fall protection options in the Agreemen pursuant to Occupational Safety and Healt must be documented. Identify tools and equipment (other than PPE) re Specify any Special Measures required to transp Identify any PPE required to perform the planner Identify any measures needed to protect individual Identify any Special Measures required for the jumple of the planner Identify any Special Measures required for the jumple of the planner I certify that I have reviewed the foregoing Fall an effective level of protection from fall hazards

Bland, Kevin D. From: DIR OSHSB To:

Cc:

Bruce Wick; jodi@hutechgroup.com; DonJuan, Alba
Response to 15-day notice re CSO, Sections 1671.1, 1716.2, 1730, and 1731 Subject:

Date: Wednesday, April 17, 2024 3:40:33 PM

Attachments: Coalition comments Residential Framing Fall Protection Letter April 17 2024 (4).pdf

CAUTION: [External Email]

This email originated from outside of our DIR organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe. If in doubt reach out and check with the sender by phone.

Dear Standards Board,

Please see the attached response to the 15-day notice in the above captioned rule making. Please distribute to the Board and EO in advance of April's Board meeting in Gilroy.

Kevin

Kevin D. Bland | Ogletree Deakins

Park Tower, 695 Town Center Drive, Fifteenth Floor | Costa Mesa, CA 92626 | Telephone: 714-800-7935 | Mobile: 949-813-1120 kevin.bland@ogletree.com | www.ogletree.com | Bio

This transmission is intended only for the proper recipient(s). It is confidential and may contain attorney-client privileged information. If you are not the proper recipient, please notify the sender immediately and delete this message. Any unauthorized review, copying, or use of this message is prohibited.







April 17, 2024

Chair David Thomas and Board Members Occupational Safety & Health Standards Board Department of Industrial Relations, State of California 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833

Submitted electronically: oshsb@dir.ca.gov

SUBJECT: FALL PROTECTION IN RESIDENTIAL CONSTRUCTION, CSO SECTIONS 1671.1, 1716.2, 1730 AND 1731 COMMENTS

ON 15-DAY NOTICE.

Dear Chair Thomas and Members of the Board:

The California Framing Contractors Association along with the Residential Contractors Association and the Housing Contractors of California submit this letter to provide comment on the Fall Protection in Residential Construction 15-day notice (the "Draft Regulation"). The Coalition represents employers both Union and Non-Union, large and small who engage in residential framing. Our recommended revisions are essential to employee safety in residential framing construction.

Many members of the Coalition were involved with the development and implementation of the original regulation for residential construction (Section 1716.2) and have significant experience with how to effectively and safely prevent injuries and falls during the framing activities. California workers engaged in residential framing have significantly benefitted from the current standard that has been in place and effective in California for over 20 years. California has lead the way in reducing falls in residential construction with the development of the current regulation. Hundreds of thousands of both union and non-union carpenters have been trained on each task and process under 1716.2 over the past 20 years. It is vital that California puts safety of its residential framing workers above the political pressures of the Federal attempt to undermine the safe and effective processes outlined in the current 1716.2 regulation.

We take the safety and health of our employees very seriously – and though we oppose the Draft Regulation, we hope the below comments provide helpful input regarding improving the final text, should it be passed by the Standards Board.

Original Comments to 45-day notice and requested revisions to the text of the 15-day notice:

Rule Making Notice Defect:

This rulemaking proposal has been noticed as a "Residential Fall Protection" proposal. However, the draft regulation contains a substantial change to Title 8 section 1671.1. This section applies to ALL construction. There has been no effort to include any other trades or contractors effected by the proposed change. The proposed change is substantial as is shown below:







§1671.1. Fall Protection Plan.

(a) This section applies to all construction operations when it can be shown by the <u>employer</u> that the use of conventional fall protection is <u>impractical</u> infeasible or creates a greater hazard.

NOTE: There is a presumption that conventional fall protection is feasible and will not create a greater hazard. Accordingly, the employer has the burden of establishing that conventional fall protection is infeasible or creates a greater hazard.

First, the plain language indicates that this applies to "all construction" therefore, this section should be stricken from this proposal based on the lack of notice to all construction stakeholders. Further, Appendix E to Subpart M of Part 1926 of the Federal regulation provides a sample plan for use in residential construction that recognizes the hazards and infeasibility associated with residential framing activities (more on this late in this letter). OSHA and Cal-OSHA seems to ignore all the evidence that has been presented that conventional fall protection is infeasible, not practical and that it will create a greater hazard. Finally, for reference, see the CFR Section 1926.502(k) (fall protection plans) which does not incorporate any reference to the note or the presumption. To this end, the proposed changes to Section 1671.1 should be stricken from the proposed draft along with the note.

Changes to Proposed 1716.2:

The proposal contains essentially the same proposed changes to sections (e), (f), and (g) related to use of fall protection plans and a revised trigger height. The Draft Regulation reduces the trigger height from 15 foot to 6 foot with further added language for the use of a fall protection plan. Here, we feel it is important to provide a bit of historical information. The main and overriding purpose of the original 1716.2 regulation was to all but eliminate the use of fall protection plans in residential framing by detailing each task in the process of framing utilizing the safest methods and procedures. Carpenters have been effectively trained on these methods for the last 20 years effectively. Our members have experienced almost zero falls using the 1716.2 methods over the last 20 years. Therefore, it is vital to the safety of our workers engaged in residential framing to continue to frame with safe processes. It has been demonstrated time, and time again that on the first floor framing conventional fall protection does not work, and in fact, creates a greater hazard in most, if not all of the framing processes at that level. This is evidenced by the video provided to and shown to the Board during the public comment section of the Board meeting on December 14, 2023 in Folsom, CA. We request that video be incorporated herein by reference. Therefore, the video, in its entirety, shall be made part of the official rulemaking record for this proposal.

Since there is substantial evidence that the hazards involved in installing scaffolds, guardrails, and "tie-off" systems for the first floor framing processes are greater than the actual framing activities involved, it is our request that the proposed Draft include a definitive option to utilize Appendix E to Subpart M of Part 1926 of the Federal regulation for all first floor framing







activities and be adopted into the Draft Regulation as Appendix A. Attached is the proposed Appendix A language which is a verbatim copy of the applicable parts of Appendix E which applies specifically to residential framing construction.

If the Board decides that regardless of the hazards involved in perimeter fall protection installation, that perimeter fall protections must still be installed, then, proposed changes must be made to ensure a feasible means of worker safety is provided as follows:

- (e) Work on Top Plate, Joists and Roof Structure Framing.
- (1) When employees are walking/working on top plates, joists, rafters, trusses, beams or other similar structural members over <u>6</u> <u>15</u> feet <u>or more</u> above the surrounding grade or floor level below, fall protection shall be provided by <u>one or more of the following methods around the perimeter of the structure: scaffolding, guardrails, <u>safety nets</u>, personal fall protection systems. <u>For work on the interior of the structure</u>, a fall protection plan consistent with Appendix A shall be used.</u>
- (f)Work on Floors and Other Walking/Working Surfaces. When working on floors and other walking/working surfaces that <u>are 6 15</u> feet or more above the surrounding grade or floor level below and will later be enclosed by framed exterior walls, employees directly involved with the layout and construction of framed stud walls shall be protected from falling by <u>one or more of the following methods around the perimeter of the structure: personal fall protection systems, scaffolding, safety nets, standard guardrails as specified in Section 1620 around all unprotected sides or edges. For work on the interior of the structure, a fall protection plan consistent with Appendix A shall be used.</u>
- (1) Floor, roof, and wall opening shall be guarded as required by Section 1632.
- (g) Work on Starter Board, Roof Sheathing and Fascia Board.
- (1) When installing starter board, roof sheathing, and fascia board, employees shall be protected from <u>falls when 6 15-feet or more above the structure's exterior surrounding grade or floor level below</u> by <u>one or more of the following methods:</u> scaffolding, <u>safety nets</u>, guardrails, personal fall protection systems. <u>For work on the interior of the structure</u>, a fall protection plan consistent with Appendix A shall be used.





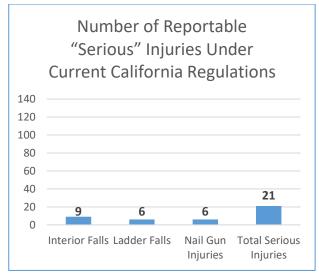


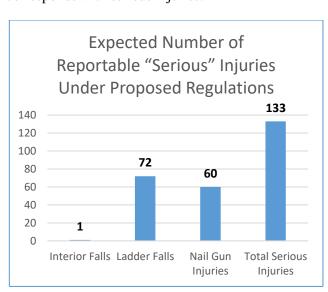
Effective Date of Proposed Regulation if Adopted

The cost of housing in California is skyrocketing. The bids and contracts for construction are very competitive. As you may know, if fall conventional fall protection is required on all first floors of residential structures, additional equipment must be purchased and the labor costs must be accounted for in bidding and contracts. Most bidding and contracts are done at least a year ahead of the actual work beginning. Also, the equipment suppliers will have a hard time ramping up availability for fall protection equipment needs of both the framing and roofing industry. The reroofing industry has not had to provide fall protection before, as they are being moved from a 20 foot trigger height. They will need time to develop fall protection programs, as well as purchase supplies. Therefore, should the Board adopt a new regulation, we request that the effective enforcement date of a proposed regulation be delayed for 12 months past the adoption date.

Results of Serious Injury Survey on Residential Fall Protection

The California Framing Contractors Association conducted a survey of 5 years of OSHA 300 logs from 11 of its members. OSHA 300 logs are a very credible source of data due to the yearly log being signed off by a corporate officer under penalty of perjury. The survey covered 26 million worker hours of residential framing work. **There were no fatal injuries during those 26 million worker hours.** The 11 member companies report no fatal injuries from residential framing work since the implementation of California's Title 8 Section 1716.2, 20 years ago. That time frame would cover approximately 104 million worker hours. Important information from that survey is presented in chart form below. The information focuses on injuries that are reportable to Cal/OSHA, which closely corresponds with serious injuries.











Information to interpret the charts above:

- 1. Interior falls under the current regulation occur when a worker falls from a surface such as a secured joist or truss. These falls would likely reduce 90% if the proposed regulation is implemented. The number of falls would likely go from 9 to 1.
- 2. Ladder falls are rare under the current regulation, since work off ladders has been intentionally reduced to 5% or less of the work time exposure. It is conservatively expected that the exposure time working on ladders would increase to 65% of the work exposure under the proposed regulation, therefore increasing the number of ladder falls by 12 times. The ladder falls would likely go from 6 to 72.
- 3. Nail gun injuries under the current regulation are rarely serious, due to the workers using the nail guns around their feet and are primarily puncture wounds. Serious injuries occur 2.5% of the time a nail gun misfires under the current regulation. Under the proposed regulation, nail guns would be used around the head, neck, and chest area, greatly increasing the percentage of serious injuries. It is expected that serious injuries would occur 25% of the time under the proposed regulation. The injuries would go from 6 to 60.

Therefore, the total serious injuries would increase from 21 to 133 if the new regulation is implemented.

Rebuttal to Federal OSHA Photo Examples Provided During Standards Board Meeting on March 21, 2024

The stakeholder community was not given the opportunity to address the Fall Protection options that Federal OHSA claimed were feasible in residential framing construction identified in their PowerPoint. Therefore, we have set forth an explanation of why each example given by Federal OSHA is infeasible, legally impossible, and highly dangerous. We request that the Board carefully review the photos and our comments related to each photo provided by Federal OSHA.







Conventional Fall Protection - Guardrails





These are infeasible for framing because the guardrail is attached to the fascia and trusses which the framer installs.

Conventional Fall Protection - Guardrails





These methods are currently used under 1716.2 for all floor openings once sheathed. Notice that these are all installed on fully sheeted floors AFTER the joisting and sheathing is completed.







Conventional Fall Protection - Guardrails





These methods are currently used under 1716.2 for all floor openings once sheathed. Notice that these are all installed on fully sheeted floors AFTER the joisting and sheathing is completed.

Conventional Fall Protection - Guardrails



These methods are currently required under 1716.2 for all window and door openings once framed. Notice that this is installed when framing of the wall is completed.







Conventional Fall Protection Systems -









Five points of safety issues with these nets:

1. The fall exposure for ladder use is increased exponentially.2. The bracing makes the net installation not in compliance with the net regulation under Title 8.3. The nets are installed after framed walls are tied in by trusses providing lateral force strength A. Ladder fall exposure in bringing down the nets 5. Getting the nets up and down the ladder while maintaining 3 points of contact is virtually impossible.

Conventional Fall Protection – PFAS **Anchors**



Note that all of these fail to consider the application of use at your feet during framing activities and the limitations of truss engineering prior to diaphragm installed for stability. Also note that the examples show finished framed installation such as with shingles and a fulling installed roof structure. None of these are feasible options for framing installation of trusses or joists.







Conventional Fall Protection – PFAS Anchors





Notice that these are all installed oncompleted roofs AFTER the framing is completed. These examples are infeasible for framing activities.

Conventional Fall Protection - PFAS





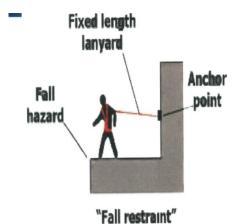
Notice that these are all installed oncompleted roofs AFTER the framing is completed. These examples are infeasible for framing activities.







Alternative Methods – Fall Restraint Systems



This does not in any way depict framing activity. In fact, it proves the point that lanyard placement at the feet as shown in the previous photos does not work

Alternative Methods - Ladders







These examples fail to recognize the pneumaticnailer's placement hazard at the face and chest as well at the fall exposure from the ladders.







Alternative Methods – Mobile Work Platforms







None of these examples show a feasible application for framing activities. In fact, none show any working using these lifts in a framing activity.

Alternative Work Methods - Scaffolds

Note this is in a basement with no bracing which does not occur in California production framing. Further, note that the scaffolds have the guard rail removed which does not comply with Title 8 scaffold regulations.









Alternative Work Methods - Scaffolds

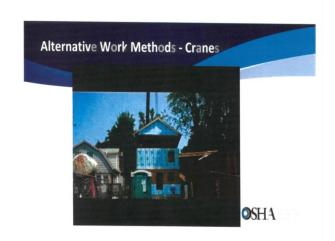




Photos left to right. The first photo shows a form of bracket scaffold that is on the interior of an exterior wall and does not meet Title 8 scaffold requirements. The next photo shows the current method under 1716.2 at the second story exterior. This is currently required in California. The last photo, once again shows a fully framed home.

Then there's this

This photo is one of the scariest photos of them all in that is shows workers directly under a suspended load. This is infeasible and extremely dangerous.









Response to Statement of Reasons provided with 15-day Notice:

We have carefully considered the Statement of Reason provided by the Board. We have provided comments in "bold" below. It is clear by the statements by the Board that there is a fundamental lack of understanding of residential framing and fall protection systems that Federal OSHA alleges will work. Therefore, we have addressed the incorrect, misunderstood, and uninformed reasoning provided in the 15-Day Notice. We are requesting that the Board reviews and takes action to issue another 15-Day Notice that incorporates the revisions to the regulation that we have requested to insure that our working men and women are truly provided a safe working environment. To that end, we request that the Board Staff and the affected framing community is provided an opportunity to meet in-person to address these critical safety issues. Our number one goal is to provide the safest possible means for our working men and women during framing activities. The proposal for this Board today does not come close to meeting that goal.

Commenter 1-Bruce Wick.

Comment 1.1: The commentors stated they are disappointed in the significant errors in the Standardized Regulatory Impact Assessment (SRIA) in that the costs presented are substantially understated or miscalculated. Commenters stated that benefits and expected savings should be reduced, the framing and roofing costs (reflected in the original 2019 SRIA) make significant incorrect assumptions, and request that a revised SRIA/assessment be produced.

Response to Comment 1.1: The Board is not persuaded by the commenters' arguments and respectfully disagrees with these statements. The Board hired David Roland-Holst, Samuel Evans, and Sam Heft-Neal from Berkeley Economic Advising and Research (BEAR), a reputable consulting company, to prepare the Standardized Regulatory Impact Assessment (SRIA). Furthermore, the SRIA was based on consultation with regulatory and industry experts, including the commenters.

Fact: The commenters as well as other experts did give information to the SRIA researchers. The researchers gained some understanding of the specific issues, but not enough. They still clearly misunderstood some very important parts of this regulatory proposal.

As is standard for an impact assessment, cost estimates reflect only the proposed changes to the existing standard and do not represent the full cost of complying with existing requirements. Additionally, this analysis was prepared with guidance from the Department of Finance (DOF) and utilized DOF residential projected construction growth rates. Moreover, the SRIA underwent extensive and multiple internal levels of review, including reviews from the DOF, and none of these reviewers identified the errors or flaws listed by the commenters.

Fact: The commenters have the most expertise regarding this regulatory proposal. Multiple people did look at the SRIA, but none had enough expertise to raise the issues and concerns that needed to be raised.

Nonetheless, as indicated in the Notice, the Board updated the benefits and compliance costs to account for inflation utilizing DOF's recent projections. Therefore, the Board declines the commenters' recommendation to make additional revisions to the SRIA.







Comment 1.2: The commenters believe that the expected saving of 2.8 lives (rate of fatalities) in the SRIA should be reduced from 2.8 down to 1.8. Likewise, commenters believe that there will be many more injuries involving those who install and disassemble the fall protection and recommend that the benefits/avoided injuries estimated in the 2019 SRIA be reduced to 40% of the calculated cost.

Response to Comment 1.2: The Board is not persuaded by the commenters' arguments and notes the consulting company that performed the 2019 SRIA based their assumptions and calculations on information originally obtained by reaching out to stakeholders, including the commenters. Commenters provide no statistical or workers' compensation data to support their recommended revisions; therefore, the Board declines to make further revisions to the SRIA. See also response to comment 1.1.

Fact: We have stated repeatedly that neither the workers' compensation industry nor California or Federal OSHA records information that relate to the specificity of the regulatory proposal. We did not have time when commenting on the original SRIA to conduct any surveys, as we needed to get our objections over to the California Department of Finance right away. We have now conducted a thorough survey of California residential framing contractors, utilizing five years of their OSHA 300 logs. These logs are signed annually by a corporate officer, under the penalty of perjury. A copy is included with this response. The data clearly show the SRIA dramatically understated the increased injuries that will result from the use of ladders. This is proof that the numbers in the SRIA must be changed before this regulatory proposal is finalized.

<u>Comment 1.3:</u> The commenters state they disagree with the assessment that framing employees will be protected by tie-off fall protection systems and add that framing employees have nothing to tie off to, a tie-off system does not provide effective fall protection for framing employees under 15 feet, and all framing operations would be covered by 100% scaffolding (the stricter alternative).

Response to Comment 1.3: The Board is not persuaded by the commenters' arguments. The Board relied on Fed-OSHA's February 2015 letter where OSHA notes that since the Cal/ OSHA standard (section 1716.2) was promulgated, there have been additional technological advances in the types and capability of commercially available fall protection equipment, and OSHA rarely encounters real-world situations in which conventional fall protection is truly.

Fact: A major issue is that technology has not replaced the fact that the first story of a residential housing unit needs to be braced during construction, and does not have the required anchorage necessary for a Personal Fall Arrest System until the framing work is completed. Therefore, the use of nets, PFAS, and rolling scaffold do not work. The only solution for the interior work is the use of ladders. Federal OSHA has said they have no prohibition on the use of ladders, and that is the method used for compliance in Federal OSHA states, if any compliance is being done.

Likewise, the 2020 OSHA Guidance Document titled "Fall Protection in Residential Construction," the 2011 OSHA Fact Sheet titled "Reducing Falls During Residential Construction: Installing Roof Trusses," and the March 21, 2024, OSHA Directorate of Construction presentation (included as documents relied upon) list various methods that can provide suitable protection to framing employees, including but not limited to, the use of scaffolds. See also response to comment 1.2

Fact: Many of the examples listed show roofing work. Roofing work commences after the framing work is done, and the housing unit does have the anchor strength to utilize a PFAS. The other







examples do not cover the issues for framing in California. Wooden structures with bracing, limited lot lines for use of mobile equipment, to name a few, are not addressed by Federal OSHA.

Comment 1.5: The commenters state that the roofing costs assessment makes significant incorrect assumptions, reroofing operations would involve one- and two-story housing and would be 50% of the total housing stock per year. The commentors also reiterate their belief that: the SRIA includes errors previously discussed; the SRIA does not address the housing crisis; it does not reflect the re-roofing operations trigger height being lowered from 20 feet to 6 feet; fall protection plans be removed from the SRIA in their entirety; and CALPASC be removed as a source of information for Table 3 on page 9 of the SRIA.

Response to Comment 1.5: The Board is not persuaded by the commenters' statements that the roofing costs assessment prepared by reputable economists makes significant incorrect assumptions because the commenters have provided no support for such statements. Further, the Board notes that the 20 feet trigger height contained in section 1730 (Roof Hazards) was not touched; rather as stated in the ISOR, the amendments proposed for this section are clarifications to inform the employer that section 1730 does not apply to residential-type roofing activities nor to how the employee's height working measurement is to be taken.

Fact: It is quite surprising that the Board does not understand its own regulatory proposal. Obviously the trigger height in 1730 is not changed. But custom home roofing work, and residential re-roofing operations are being moved from 1730 to 1731; which is being reduced from 15 to 6 feet. Therefore, custom home and residential re-roofing work would now require fall protection for both first and second story.

In addition, the average useful life of a residential roof can last beyond the conservative assumption of 25 years used in the SRIA. Therefore, the Board disagrees with the commenters' assertions that reroofing operations costs would involve two story housing, would involve 50% of the total housing stock per year, or that the trigger height for re-roofing operations would be lowered from 20 feet to 6 feet under the proposed amendments. Regarding the housing crisis comment, as stated in the SRIA, no significant impact on housing costs was identified and costs are expected to be passed on to consumers of residential framing and roofing services.

Fact: Clearly the Board and the SRIA have misunderstood the proposed regulation. And the SRIA commenters severely misunderstood the reality that historical housing stock in California was primarily single story for many decades. The California legislature continually states that we are in a housing crisis. The included corrected SRIA costs show that there will be an annual impact of \$197.75 Million to California homeowners and rentals. These are significant impacts.

The Board disagrees with the request to remove fall protection plans from the SRIA in their entirety, since employers who demonstrate that the use of conventional fall protection systems are not feasible or create a greater hazard can use fall protection plans in accordance with section 1671.1. As for the request to remove CALPASC as an information source or consultant utilized for the SRIA, the commenters were verbally interviewed by the economists who prepared the SRIA and the Board acknowledges that the commenters now disagree with the information reflected therein. The Board declines to grant this request as it goes beyond the formal rulemaking process. See also responses to comments 1.1, 1.2 and 3.1.







Commenters 4-Eric Berg and Jason Denning.

Comment 4.3: The proposed regulation will require the use of guardrails, personal fall protection, scaffolds, or safety nets to protect workers from falls from walking/working surfaces six feet or greater in height above the ground or a lower level. Additionally, the proposed regulatory change will limit the use of fall protection plans in accordance with title 8 sections 1671.1 and 1671.2 to only when an employer can demonstrate other prescribed fall protection methods are infeasible or create a greater hazard. Concerns that the proposed regulation will force the construction industry to utilize equipment and methods that are infeasible or create a greater hazard to workers are unfounded. For example, it was argued that the proposal would create a greater hazard for employees because ladders are not stable working platforms and create ergonomic issues for workers when lifting joists and trusses to an upper level. However, the accident data included in the commenters' letter illustrates that fatal incidents related to the use of ladders were less than one-third of that from falls. Secondly, other mechanical means of placing joists and trusses, such as cranes or other hoisting devices, should be used instead of employees lifting structural members on ladders.

Fact: Construction across the country has worked hard to minimize ladder use. We now limit exposure to 5% of carpenters' time. This proposal would increase that exposure 10 times, costing an exponential increase in ladder falls, ergonomic injuries, and serious pneumatic nail gun injuries.

Lastly, the proposal does not mandate the use of ladders. Concerns regarding the use of scaffolding as fall protection would create a greater hazard to employees than working from heights without fall protection is also unfounded. This concern is based on the purported time needed to install scaffolding, which allegedly could expose workers to a greater duration of unprotected fall hazards. Accident data included in the commenters' letter illustrates the number and rate of fatalities for the use of scaffolding and staging for 2011-2018 were even less than the use of ladders and much lower than the number of fatalities from falls. Fact: See above comment, if some falls injuries are reduced, those injuries will be greatly overtaken by the increase in ladder falls, ergonomic injuries, and serious pneumatic nail gun injuries.

<u>Response to Comment 4.3</u>: The Board acknowledges and appreciates the commenters' statements and submission of fatality data caused by the use of ladders and of scaffolding in construction.

Comment 4.4: Concerns that this proposal would lead to the increased use of fall protection plans in the construction industry since personal fall protection is ineffective or difficult to implement at six-foot working levels are unfounded. The proposed rulemaking, in reality, will reduce the ability to use fall protection plans, which are currently permitted by title 8 regulations. The proposed changes limit the use of fall protection plans in compliance with existing title 8 sections 1671.1 and 1671.2 to when the employer demonstrates that other fall protection measures are infeasible or create a greater hazard. The current regulation is much less protective and allows fall protection plans when other fall protection methods are impractical or create a greater hazard. Commenters note that data does not support the argument that section 1716.2 (fall protection required at heights above 15 feet for residential-type construction framing work) was a landmark regulation with advanced safety procedures that is as effective as federal OSHA requirements in reducing fall injuries. Accident data in Cal/OSHA's letter for total construction fatalities and construction fall fatalities in California by year does not show any sustained and







significant reduction in fall injuries compared to fall fatality data prior to the effective date of section 1716.2 (August 6, 2004).

Fact: The SRIA estimated a reduction in fatalities from residential construction at 2.8 per year. That amount is substantially under the total construction fatalities involving all commercial and institutional construction projects. One would not, therefore, expect any statistical differentials from the period prior to 2004 or after. We would note, however, that in the survey of framing contractors just completed, in 26 Million workers hours, these framing contractors had no fatal falls.

The computed linear regression of percent of construction fatalities from falls actually shows a slight increase from 2000 to 2022 (most recent data). In closing, Cal/OSHA supports the regulation for fall protection in residential-type construction proposed by Standards Board staff. Currently, title 8 regulations are lacking fall protection requirements for many activities in residential construction below 15 ft., the proposal will enhance worker safety and ensure that California regulations are at least as effective as federal OSHA and the other state OSHA programs that have already adopted fall protection requirements at 6 ft. working heights.

Response to Comment 4.4: The Board acknowledges the commenters' support for this proposal and appreciates the commenters' submission of the data on construction fall fatalities in California, which does not support the statement made by some stakeholders that existing section 1716.2 is as effective as federal OSHA requirements in reducing fall injuries.

Commenter 5-Kevin Bland.

Comment 5.1: The commentors state they were involved with the development and implementation of the original regulation for residential construction (section 1716.2); California workers engaged in residential framing have significantly benefited from the current standard in place for over 20 years; and California has led the way in reducing falls in residential construction. They add that it is vital California put the safety of its residential framing workers above the political pressures of the Federal OSHA's attempt to undermine the safe and effective process outlined in the current 1716.2 regulation.

Response to Comment 5.1: The Board is not persuaded by the commenters' arguments that the proposed amendments would undermine the safe and effective process outlined in the current 1716.2 regulation. The existing regulation (section 1716.2) adopted in 2004 instituted a uniform 15-foot trigger height as a means to improve compliance (by establishing a common trigger height for all trades working on a residential-type framing worksite) and prescribed work practices in lieu of requiring positive means of fall protection. Fed OSHA has been pointing out for many years (see the February 4, 2015, letter from Fed OSHA)1 that the existing regulation includes many exceptions to the general requirements for requiring fall protection, which leave California employees exposed to fall hazards where employees covered by OSHA's standard would be protected. For instance, employees are allowed to walk on the top plate and/or work on 4 inch or wider structural members without the use of fall protection. Similarly, an exception in section 1716.2 (e)(1) considers employees protected from falls between rafters or roof trusses when they are







walking/working on securely braced rafters or roof trusses on center spacing not exceeding 24 inches when more than 6 feet from an unprotected side or edge. Yet, the standard does not specify the configuration of the members, meaning that they could be laid on their sides or vertical as these members are typically installed, leaving gaps between the members where an employee can step into or fall through. Furthermore, the standard does not address what it means by securely braced - it is unclear if that means nailed down or otherwise braced - nor what the criteria for "secure" is. See also comment and response 11.1.

Fact: To claim that what secured means is unclear after nearly 20 years of enforcement of Section 1716.2 is frankly beyond reason. Secure is used in various other sections of title 8 and has been enforced. Secure means to be placed in a method to prevent tipping or falling. This response shows a lack of basic knowledge of framing construction and safety in framing tasks.

Additionally, the Board notes that the commenters have provided no data to support their statements that California has led the way in reducing falls in residential construction, whereas the comment letter submitted by Cal/OSHA includes construction fall fatalities data showing there is no sustained or significant reduction in fall injuries compared to fall fatality data prior to the effective date of section 1716.2 (August 6, 2004). Anecdotal statements are not sufficient to demonstrate that existing section 1716.2 is as effective as federal OSHA requirements in reducing fall injuries in residential construction. Fact: Please see information above on the survey of framing contractors.

(See also response and comment 4.4). Moreover, the January 24, 2024, letter submitted by Fed OSHA states, "OSHA's indices of effectiveness require that State Plans standards contain specific provisions for the protection of employees from exposure to hazards, by such means as containing appropriate provision for use of suitable protective equipment and for control or technological procedures with respect to such hazards, including monitoring or measuring such exposure." (29 CFR 1902.4(b)(2)(vii)). As currently written, the California standards do not require employers engaged in residential construction activities provide fall protection from 6 to 15 feet.

Fact: As we know, the fall height is not 6 or 15 feet, but between 9 and 9 and a half feet. Workers are required to work standing on a solid braced surface. This, opposed to ladders, unsafe and noncompliant PFAS, or fall protection plans.

Thus, as noted in the ISOR, the proposed amendments are required to ensure that section 1716.2 is commensurate with FedOSHA standards, as required by Labor Code section 142.3.

Comment 5.3: Commenters state the main and overriding purpose of the original 1716.2 regulation was to all but eliminate the use of fall protection plans in residential framing by detailing each task in the process of framing utilizing the safest methods and procedures and add their members have experienced almost zero falls using the 1716.2 methods over the last 20 years. They further state it has been demonstrated time and time again that on the first floor framing conventional fall protection does not work, and in fact, creates a greater hazard in most, if not all of the framing processes at that level. They state this is evidenced by the video provided to and shown to the Board during the public comment section of the Board meeting on December 14, 2023, in Folsom. Additionally, they request this video, in its entirety, be incorporated herein by reference and be made part of the official rulemaking record for this proposal.

Response to Comment 5.3: The Board is not persuaded by the commenters' arguments and notes clarifications related to this comment letter were sought by the Board, including requesting any report or







information detailing the framing tasks or methods evaluated, or new statistical or workers' compensation data to include in the rulemaking record. No data was provided.

Fact: Please see above information on the survey of framing contractors.

The Board agrees with the commenter that fall protection plans do not offer positive means of protecting workers against falls and emphasizes that prior to using a site-specific fall protection plan, employers need to show the use of conventional fall protection systems is infeasible or creates a greater hazard. See also response and comment 2.1. Anecdotal statements, like the one stated by the commenters that their members have experienced almost zero falls, are not sufficient to demonstrate the current language of section 1716.2 is as effective as federal OSHA regulations. Particularly when construction fall fatalities data, provided in the January 16, 2024, comment letter submitted by Cal/OSHA, shows there is no sustained or significant reduction in fall injuries compared to fall fatality data prior to the effective date of section 1716.2 (August 6, 2004). (See response and comment 4.4). Furthermore, as stated in the letter received on February 4, 2015, from Mr. Ken Nishiyama Atha of Fed-OSHA by the Board and in the letter received on January 24, 2024, from James Wulff of Fed OSHA, "In the Federal standards, injury and illness rates are not a consideration in the Assistant Secretary's determination of indices of effectiveness for elements of State plan program."

Fact: We agree to an extent with this comment. Data is helpful and informative, but the main discussion on effective fall protection regulations involves engineering and physics. Neither Fed/OSHA nor Cal/OSHA has been willing to have a decision maker engage in a relevant discussion regarding the engineering and physical issues. Fortunately, prior Cal/OSHA staffers were willing to have those meetings and conversations, even going to construction jobsite to understand the issue. That is why those staffers supported the implementation and continuation of 17.16.2.

Regarding the argument that conventional fall protection does not work on the first floor in residential framing operations, see response and comment 1.3. Regarding the belief that prescribed work practices or a common trigger height provide equivalent safety as the provision of fall protection, see response to comment 5.1. Furthermore, the Board is not persuaded by the commenters' arguments expressed in the video shown by the commenters to the Board during the public comment section of the Board meeting on December 14, 2023, in Folsom. See response to comment 7.1. By responding to the comments in the video, the video is now part of the rulemaking record. As explained in the ISOR, the proposed amendments are necessary to raise awareness among employers that they are required to use a method of positive fall protection, and to ensure California's framing standards are commensurate with comparable Fed-OSHA standards.

Fact: Framing contractors in California have been required to use positive fall protection at 9 feet since 2004. The awareness has been there. No one at Fed/OSHA or Cal/OSHA has ever been willing to meet face to face to discuss the belief of the Carpenters Union, the framing contractors in California, and the workers themselves, that 1716.2 is superior to Fed/OSHA standards.

<u>Comment 5.4:</u> Commentors believe there is substantial evidence the hazards involved in installing scaffolds, guardrails, and "tie-off' systems for the first floor framing processes are greater than the actual framing activities involved. They request the proposed draft include a definitive option to utilize Appendix E to Subpart M of Part 1926 of the Federal regulation for all first floor framing activities and recommend this appendix be adopted into the Draft Regulation as Appendix A. Commenters attach proposed Appendix







A language, which they state is a verbatim copy of the applicable parts of Appendix E and applies specifically to residential framing construction.

Response to Comment 5.4: The Board is not persuaded by the commenters' arguments and declines to include such an appendix. First, Appendix E to Subpart M of Part 1926 of the Federal regulation are nonmandatory guidelines and as such cannot be enforced by Cal/OSHA. Additionally, Appendix E (or the Appendix A proposed by the commenters) include statements that are not consistent with existing title 8 requirements. These inconsistencies can cause confusion or mislead employers into believing they are in compliance with title 8 regulations when they are not. Inconsistencies observed include not specifying the fall protection plan must be prepared by a qualified person as required by section 1671.1, not including requirement for control lines as per section 1671.2(a), and not including requirements for the safety monitor as per section 1671.2(b), among others.

Fact: This fails to understand the basic construction of wood framing and the limitations of same. Further, it completely ignores the fact that this came DIRECTLY from Fed-OSHA's Subpart M. Failure to include this appendix will invite chaos in compliance and enforcement of the alternative fall protection plan.

Thus, the Board believes the recommendation to develop a template or guideline would be best left for Cal/OSHA to do as part of outreach and/or educational materials. The Board also does not agree with the commenters' statement that the use of conventional fall protection presents a greater hazard than the actual framing operations. Rather, it demonstrates the importance of planning ahead of time and ensuring fall protection is planned into the work process.

Fact: Again, this response shows a lack of basic understanding of framing activities and exposures. Furthermore, any fall protection for "short duration" and "limited exposure" exemptions currently allowed by the existing regulations are deficiencies Fed OSHA has enumerated as areas where employees are not being afforded the same coverage or protections afforded by OSHA's standards. Please see response to comments 5.1, 5.3 and 11.1.

Comment 5.5: Commentors state if the Board decides perimeter fall protections must still be installed, then commenters provide the following language: (e) Work on Top Plate, Joists and Roof Structure Framing. (1) When employees are walking/working on top plates, joists, rafters, trusses, beams or other similar structural members over 6 15 feet or more above the surrounding grade or floor level below, fall protection shall be provided by one or more of the following methods around the perimeter of the structure: scaffolding, guardrails, safety nets, personal fall protection systems. For work on the interior of the structure, a fall protection plan consistent with Appendix A shall be used. (f)Work on Floors and Other Walking/Working Surfaces. When working on floors and other walking/working surfaces that are 6 15 feet or more above the surrounding grade or floor level below and will later be enclosed by framed exterior walls, employees directly involved with the layout and construction of framed stud walls shall be protected from falling by one or more of the following methods around the perimeter of the structure: personal fall protection systems, scaffolding, safety nets, standard guardrails as specified in Section 1620 around all unprotected sides or edges. For work on the interior of the structure, a fall protection plan consistent with Appendix A shall be used. (1) Floor, roof, and wall opening shall be guarded as required by Section 1632. (g) Work on Starter Board, Roof Sheathing and Fascia Board. (1) When installing starter board, roof sheathing, and fascia board, employees shall be protected from falls when 6 15 feet or more above the







structure's exterior surrounding grade or floor level below by one or more of the following methods: scaffolding, safety nets, guardrails, personal fall protection systems. For work on the interior of the structure, a fall protection plan consistent with Appendix A shall be used.

Response to Comment 5.5: The Board is not persuaded by the commenters' arguments and declines to adopt the proposed modifications. The term "the interior of the structure" is not a clear or well defined term and could be easily misconstrued by the regulated community resulting in appeals or incorrect citations, ultimately making this a non-enforceable regulation.

Fact: The regulated community, the carpenters and framing contractors, have an absolutely clear understanding of interior walls. It is evidenced in all framing plans (aka blueprints). The regulated community has been protecting the "exterior" of framed structures at the second story under 1716.2 for 20 years and the Division has enforced it as such. To now claim an misunderstanding is frankly baffling.

OSHSB is charged with promulgating reasonable and enforceable standards. Regarding the recommendation to use Appendix A see response to comment 5.4. The Board is also not persuaded by the commenters' arguments that fall protection should be limited to the perimeter of the structure. The Board is relying on the 2020 OSHA Guidance Document titled "Fall Protection in Residential Construction", the 2011 OSHA Fact Sheet titled "Reducing Falls During Residential Construction: Installing Roof Trusses" and the March 21, 2024, OSHA Directorate of Construction presentation to remind employers there are fall protection methods that can be used. Ultimately, if the employer demonstrates the use of conventional fall protection systems is infeasible or creates a greater hazard, the employer can use a fall protection plan in accordance with sections 1671.1 and 1671.2.

Comment 5.6: Commentors state the bids and contracts for construction are very competitive and if conventional fall protection is required on all first floors of residential structures, they will need time to develop fall protection programs, as well as purchase supplies. Commenters also state the reroofing industry is being moved from a 20 foot trigger height. Commenters request should the Board adopt a new regulation that the effective enforcement date of a proposed regulation be delayed for 12 months past the adoption date. Lastly, commenters state they continue to oppose the imposition of the less safe Federal regulation on California workers.

Response to Comment 5.6: The Board understands the commenters' concern about the need for residential construction companies to plan ahead for bids and contracts, and as such the Board is willing to consider requesting that OAL delay the effective date of the proposed amendments. The Board disagrees with the commenters' statement that the trigger height for re-roofing operations would be lowered from 20 feet to 6 feet under the proposed amendments. Please see response to comment 1.5. The Board further disagrees with the commenters' statement that the proposed amendments would be less safe than the current regulation. Please see response to comments 4.1, 4.2, 4.3, 4.4, 5.1, 5.3 and 5.4.

Commenter 23-Kevin Bland.







Comment 23.2: The commenter made the following comments in response to a Board Member's clarification that the proposal offers options for providing fall protection and does not require work from ladders. Commenter notes in other States working off ladders is an option utilized many times by employers to avoid having to show conventional fall protection systems are infeasible or prepare site-specific fall protection plans. Commenter states prime contractors from other States have shared they comply with federal requirements by forcing work from ladders even when workers believe it is unsafe. Workers in other jurisdictions have stated Fed OSHA allows work from ladders and they still have falls.

Response to Comment 23.2: The Board is not persuaded by these arguments. The proposal provides options and does not mandate employees work off ladders.

Fact: The options suggested by Fed/OSHA are either not workable, or are not in compliance with their use. For instance, PFAS need 5,000 Lbs of anchor strength. The housing unit under construction does not have that strength. PFAS regulation state the employee can't make contact with the level below. At 9 feet, the PFAS will allow the employee to hit the ground. Netting regulations don't allow the employee to make contact with the level below, or any other obstruction. At 9 feet, the employee will hit the ground, and likely hit the bracing below. Therefore, the only real option for employers under Fed/OSHA for the interior work is off of ladders.

Furthermore, as stated in the 2020 OSHA Guidance Document titled "Fall Protection in Residential Construction", the 2011 OSHA Fact Sheet titled "Reducing Falls During Residential Construction: Installing Roof Trusses" and the March 21, 2024, OSHA Directorate of Construction presentation to the Board, there are various fall protection methods that can provide suitable protection to framing employees including but not limited to the use of scaffolds. Please see responses and comments 4.2, 4.3, 5.1, 5.3, 5.4, and 11.1. The Board thanks the commenter for their input and participation in the rulemaking process.

Commenter 25-Kevin Bland.

Comment 25.1: The commenter made the following comments in response to a Board Member's questions about the meaning of "infeasible" versus "impractical" and how employers are currently providing protection to workers engaged in framing activities. The commenter states workers are protected by following a prescribed process of laying down joists giving workers a platform to stand on and by telling the workers if they are going to walk on them, the joists must be supported structurally. Commenter states this alternative fall protection process is laid out in section 1716.2 and they created this regulation because conventional fall protection is not a feasible option. Commenter states on the exterior of the second floor of a two story home it makes sense to put scaffold or bracket scaffold around the top.

Response to Comment 25.1: The Board notes existing section 1671.1 allows a fall protection plan when it can be shown that the use of conventional fall protection is impractical or creates a greater hazard. As stated in the ISOR, the amendments proposed for section 1671.1 will replace "impractical" with "infeasible" to be at least as effective as Fed OSHA regulations. Proposed amendments also include a note that clarifies the employer has the burden of establishing that conventional fall protection is infeasible or creates a greater hazard. This is important because while there might be framing tasks in which the use of conventional fall protection is infeasible, there are other framing activities where it is feasible. Likewise, the site where the construction work is being performed is not the same across the State.







Fact: Again, this shows a basic lack of understanding of wood framed structures. Stud wood framing from home to home, apartment to apartment, condo to condo is basically the same structure with merely different square footage. Studs is walls are all 16 inches on center with trusses and joists installed on the top plate of the walls. This is the same in every wood framed structure. To claim otherwise is indefensible.

This is why existing section 1671.1 requires a fall protection plan be developed and evaluated on a site-by-site basis. The process described by the commenter of laying down joists or other structural members gives workers a platform to stand on, it also leaves gaps between the members where an employee can step into or fall through. Likewise, telling the worker if they are going to walk on the structural members they have to be securely braced, does not guarantee it will actually happen; thus, increasing the risk of workers falling. The standard does not address what it means by securely braced, meaning it is unclear if that means nailed down or otherwise braced.

Fact: See response above to "secured" meaning.

Regarding the belief that prescribed work practices, or a common trigger height is an alternative to providing fall protection, see response to comment 5.1. With regard to the belief that fall protection should be limited to the perimeter of the structure, please see response to comment 5.5. With regard to the statement that existing section 1716.2 is at least as effective as Fed OSHA regulations, please see comments and responses to comments 4.1, 4.2, 4.3, 4.4, 5.1, 5.3, 5.4 and 11.1.

Commenter 26-Matt Kuzemchak.

Comment 26.3: Fed OSHA acknowledges concerns that their agency has not listened to stakeholders and states they have held conversations with some stakeholders but clarified the outcome is still likely to be the same.

Fact: It is an insult to California's carpenters that no decision maker at Fed/OSHA or currently at Cal/OSHA is willing to engage in a face to face meeting to discuss these very serious issues.

<u>Corrections to the inaccuracies in the SRIA issued for Cal/OSHA on the proposed residential fall protection regulations.</u>

What is the intent of the SRIA (Standardized Regulatory Impact Assessment) implemented by Senate Bill 617-2011?

Regulatory agencies in California are required to show the economic impact of <u>any</u> regulation on California business enterprises and individuals, per California Government Code Section 11346.3 (a)- A state agency proposing to adopt, amend, or repeal any administrative regulation shall assess the potential for adverse economic impact on <u>California business enterprises and individuals</u>, avoiding the imposition of unnecessary or unreasonable regulations or reporting, recordkeeping, or compliance requirements. The SRIA was intended to provide greater economic review for "major regulations", per the California State Administrative Manual Section 6600 item 7- "Major regulation" means any proposed rulemaking action adopting, amending or repealing a regulation subject to review by OAL that will have an economic impact on California business enterprises and individuals in an amount <u>exceeding fifty million dollars</u> (\$50,000,000) in any 12-month period between the date the major regulation is estimated to be filed with the Secretary of State through 12 months after the major regulation is estimated to be fully implemented







(as estimated by the agency), computed without regard to any offsetting benefits or costs that might result directly or indirectly from that adoption, amendment or repeal.

What are the inaccuracies in the Residential Fall Protection SRIA?

While the SRIA researchers as economists got many of the general economic assumptions correct, they apparently did not understand most of the specifics of residential construction work, and the fall protection issues involved. Kevin Bland and Bruce Wick spent several hours on the phone with the researchers, but the writers of the SRIA did not check back to ensure they had a correct understanding of the specific issues involved.

What were the wrong assumptions?

- 1. That framing contractors would utilize scaffolding 50% of the time, personal fall arrest systems 40% of the time, and Fall Protection plans 10% of the time. As explained to the researchers, scaffolding is used for exterior fall protection 100% of the time, and ladders would have to be used 100% of the time for interior fall protection. Fall Protection plans have to show infeasibility or a greater hazard, and housing units under construction cannot comply with the anchorage requirements of a personal fall arrest system, nor can nets be used for a fall height of 9 feet.
- 2. That the SRIA doesn't need to account for the increased fatalities and injuries to installers of fall protection, to those working off of ladders, and the much more severe pneumatic nail gun injuries.
 - a. Ladders present an unstable platform, much more subject to falls than working off of secure surfaces such as truss and joists.
 - b. Requiring interior work off of ladders has workers working overhead most of the day. This increases exertion and workload, leading to other fatigue injuries and ergonomic injuries. Ladder work also means workers are using their pneumatic nail gun around their head, neck, and chest level instead of around their feet. This will dramatically increase the number of serious and possibly fatal injuries.
- 3. That the existing housing stock of 14 million housing units subject to re-roofing is 25% single story housing. The researchers took the information that current housing construction is 25%, and apparently believed that was the historic mix of residential construction in California. For many decades, single story housing was the norm. While downtown housing construction became more multi-story over time, most housing remained single story until around 1990. Many older communities' housing stock is over 80% single story. A conservative estimate would be that 60% of the existing housing stock is single-story.
- 4. That the re-roofing industry will only incur costs at the single-story level. While the SRIA states that the trigger height for residential re-roofing will reduce from 20 feet(requiring fall protection for 3 story buildings with an eave height of 27 feet) to 6 feet (requiring fall protection for 2 story buildings with an eave height of 18 feet and for 1 story buildings with an eave height of 9 feet); their calculation only showed the costs for single story construction.







What then are the actual costs and benefits of the proposed fall protection changes for residential construction? Note: we have utilized the 32% increased inflationary costs since the SRIA was originally issued in 2019 to the present, per the SRIA researchers.

Actual cost differences of residential framing.

The SRIA did calculate the cost of what was called the stricter alternative, which was to utilize scaffolding 100% for exterior protection. That moves the costs from the SRIA's estimate of \$53.6 Millin to \$129.2 Million for the first year.

Actual cost differences of new residential roofing.

The SRIA did appear to get this right, at \$5.4 Million for the first year.

Actual cost differences of residential re-roofing.

The SRIA estimated residential re-roofing costs at \$25.3 Million for the first year. Due to missing the calculation for second story fall protection, and the underestimate of existing housing stock, the costs should be 2.5 times the estimate, or \$63.25 Million.

Actual benefits from fatal fall reductions.

The SRIA estimates that a fatal injury costs \$11.66 Million. The SRIA also estimated that the regulations would save 2.8 fatalities per year. But the SRIA did not separate the statistics included for slips, trips, and other falls. The SRIA also did not contemplate the increased likelihood of fatal falls by fall protection installers or employees working off of ladders, or the potential for fatal pneumatic nail gun injuries. A recent survey of 11 framing contractors showed that they worked 104 million worker hours under the current regulations since 2004, with no fatal injuries.

The likely number of reduced fatalities is zero. The SRIA estimate of benefits was \$32.63 Million. That number should be \$0.

Actual benefits from non-fatal fall reductions.

The SRIA estimates that the average non-fatal fall costs \$79,691. It also estimates that the regulation would prevent 100% of the 643.9 non-fatal falls per year.

The reality is the number of injuries from installing fall protection, use of ladders, and the ergonomic and pneumatic nail gun injuries from ladder use will increase exponentially.

Per the recent survey of OSHA 300 logs of framing contractors over 5 years, showing 26 Million worker hours, the expectation is that serious non-fatal injuries will increase from 21 to 133 per year.

Therefore, while a conservative estimate of the benefit would show a cost instead of a benefit, the SRIA should have at least shown zero cost benefit, instead of a benefit of \$51.3 Million.







Here is what the final cost and benefit summary by the SRIA was.

SRIA	\$ Millions
Framing	53.6
New Roofing	5.3
Re-Roofing	25.3
Total Actual Co	osts 84.2
Benefits-Fataliti	es 32.63
Benefits-Non-Fa	atal 51.3
Total Benefits	-83.93
Net Costs	.27

Here is what the final cost and benefit summary by the SRIA should be.

ACTUAL	\$ Mill	ions
Framing		129.2
New Roofing		5.3
Re-Roofing		63.25
Total Actual Cos	sts	197.75
Benefits-Fatalitie		0
Benefits-Non-Fat	al	0
Total Benefits	0	
Net Costs		197.75

This information and the calculations should be shown to the public and the Board members prior to any vote on the regulations.

Conclusion

We continue to oppose the imposition of the less safe Federal regulation on our California workers. Our sole intent is to provide the safest means for our carpenters to frame residential structures. It is our hope and desire that this Board stands with the safety of our California Carpenters and not fall with the Federal OSHA's political endeavor. Please put safety first.

Sincerely,

Kevin Bland on behalf of the Coalition

cc: Autumn Gonzalez, Acting Executive Officer

From: Dave Smith DIR OSHSB To: Dave Smith Cc:

Comments Residential Fall Protection Subject: Date: Friday, April 19, 2024 10:08:39 AM

Attachments:

Residential Fall Protection Comments 19 Apr 2024 Cover Letter.pdf
National Law Review Settlement Between Fed OSHA and The National Chimney Sweeps Guild.pdf

NCSG Settlement Agreement - Final Executed - 12-1-23 003.pdf Remarks re Fall Protection to Standards Bd 18 Apr 2024 Final .pdf UnivRichmondLawReview-OSHA-Enforcement-State-Plans232793998-1.pdf

CAUTION: [External Email]

This email originated from outside of our DIR organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe. If in doubt reach out and check with the sender by phone.

Dear Standards Board, please find attached these documents for the record, including the meeting yesterday 18 Apr 2024 of the Standards Board in Gilroy, CA:

- 1. Cover Letter
- 2. My remarks to the Stds Board outline 18 Apr 2024 in pdf
- 3. Settlement agreement between Fed OSHA and the Chimney Sweeps Guild NCSG Settlement Agreement Final Executed - 12-1-23.pdf
- 4. Article by Lawrence Halprin, attorney for the Chimney Sweeps Guild in the National Law Review National Law Review Article Between Fed OSHA and The National Chimney Sweeps Guild.pdf
- 5. Courtney M. Malveaux, OSHA Enforcement of the "As Effective As" Standard for State Plans: Serving Process or People?, 46 U. Rich. L. Rev. 323 (2019).

Available at: https://scholarship.richmond.edu/lawreview/vol46/iss1/12

Can you confirm receipt of this email? Thank you

Dave K Smith, CSP, ARM, CSHM Safety | Ergonomics | Risk | Expert **Dave Smith & Company Inc** M 1.925.683.3621 F 1.925.476.0290 T 1.925.988.9812 www.davesmithco.com

April 19, 2024

Occupational Safety and Health Standards Board 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833

Via EMAIL oshsb@dir.ca.gov

RE: Fall Protection in Residential Construction

Dear Standards Board,

Please find these electronically submitted documents regarding my remarks to the Standards Board Public Comments on April 18, 2024, and on documents relied upon for comment.

There was discussion by the Board as to what is meant by Federal OSHA's evaluation of a state OSHA plan to be "at least effective as" the Federal program. A 2011 article from the University of Richmond Law Review shows the history and discussion of this issue.

Accompanying documents

- My remarks to the Stds Board outline 18 Apr 2024 in pdf
- Settlement agreement between Fed OSHA and the <u>Chimney Sweeps Guild NCSG Settlement Agreement Final Executed 12-1-23.pdf</u>
- Article by Lawrence Halprin, attorney for the Chimney Sweeps Guild in the National Law Review National Law Review Article Between Fed OSHA and The National Chimney Sweeps Guild.pdf
- Courtney M. Malveaux, OSHA Enforcement of the "As Effective As" Standard for State Plans: Serving Process or People?, 46 U. Rich. L. Rev. 323 (2019). Available at: https://scholarship.richmond.edu/lawreview/vol46/iss1/12

Also referenced were documents already in the rulemaking file

Presentation by Vernon Preston and Damon Bonneau, Directorate of Construction-Occupational Safety and Health Administration (OSHA). Residential Fall Protection in Construction Presented at the March 21, 2024 Occupational Safety and Health Standards Board Meeting—San Diego, California.

OSHA Fact Sheet, Reducing Falls During Residential Construction: Installing Roof Trusses. DOC FS-3477 9-16-2011.

Thank you

Sincerely,

Dave K Smith, CSP, ARM, CSHM Safety Consultant – Safety | Risk | Ergonomics dks@davesmithco.com Good morning, I'm Dave Smith, a safety consultant in California.

First, last month in the meeting packet on the last page was a project plan. This is a great idea to show what projects are underway and a time line. Of course like all project plans there will be changes, delays or reschedules. A problem has been no one really knows if anyone is working on things, and when. This document answers those questions. Thank you to whoever had this idea to communicate.

Let's talk about residential construction fall protection.

Our consulting company worked with wood framing contractors before and after the adoption of 1716.2 Wood and Light Gauge Steel Frame Construction, Residential/Light Commercial. These procedures solved many problems of implementation and effectively reduced elevated fall exposures.

Why are we changing? Apparently Fed OSHA insists, on threat of declaring concurrent jurisdiction for all of the 300,000 plus construction contractors in California.

The root problem that we're all trying to solve is how to use personal fall protection where there is no anchorage to attach to. Without an anchorage, personal fall protection doesn't work.

Fed OSHA Already Deviates From A 6 ft Fall Trigger Height and Anchorage Ratings

Steel erection allows work to 15 feet in specific operations. Why? There is nothing to attach to, no anchorage.

Another trade - chimney sweeps.

Last December Fed OSHA and the Chimney Sweeps Guild settled litigation on fall protection. The Settlement Agreement reads like a Fall Protection Plan.

The chimney sweeps attorney noted the challenges: lack of permanent anchors, or anywhere to install an anchor. Very similar to residential construction.

Fed OSHA agreed by the settlement that using scaffolding exposes the worker to greater fall hazards during erecting and disassembling. Why? A longer time of fall exposure.

California Occupational Safety and Health Standards Board April 18 2024 RE Comments to the Board, Fall Protection in Construction

Aerial lifts are not always feasible due to access and space constraints, also a problem in residential construction.

The Settlement Agreement has practical alternative fall protection anchorages including tying off to vehicles and trees. Yes Trees. But not just any tree, it must be a mature tree. It's OK with Fed OSHA.

Most Existing Hazard Controls As Explained by Fed OSHA don't work for joists or roof trusses

I thank Fed OSHA for the presentation last month on residential fall prevention. Fourteen slides showed specific fall prevention methods. 9 of the 14 slides showed a building already put up. That's not the problem. The problem is what to do during floor joist or roof truss installation when there is nothing to attach to.

6 slides showed methods without a building.: TIME???

- 1. Mobile Work Platforms such as aerial lifts or forklift lift platforms. Like with the chimney sweeps, access is big unknown, and may vary between jobs.
- 2. Rolling scaffolds Use presumes access inside the house, and a level floor with no openings like plumbing or HVAC vents. Plus you have to get close enough to the work.
- 3. Bracket scaffolding Like the chimney sweeps, the time to install may increase fall risk, and the brackets may get in the way of joist or truss installation.
- 4. Nets I've never seen nets used in residential construction, other than pictures on websites or publications. This doesn't mean they couldn't be used, but nets require engineering calculations, testing, inspection, availability, and training. Plus if a net is installed, instead of a joist there would be nothing to step on and you'd fall into the net.
- 5. Cranes- The OSHA slide shows a crane hoisting a fully assembled roof structure onto what looks like existing walls. This is not the process in production home building. It would be great if a roof could be assembled on the ground, but then how is it installed and attached to the walls? In this slide, it looks like there are workers under the overhead load guiding it into position on the walls. Hoisting anything over people is a bad idea.

And we come to Ladders

Increased use of ladders Increases Fall Risk

Many framing industry commenters say that more ladder use increases risk of falls in their industry. I agree. In my work in residential framing, we had more serious injury incidents from falling from step ladders than following the procedures in 1716.2

If this passes, I agree with the many carpenters and framers that we will see more ladder use because all of the other methods are not feasible or practical.

Risks and hazard controls aren't in a vacuum

Transferring fall risk from existing methods to ladders may meet the 6 foot trigger height number but increases risk to the very carpenters who this proposal is supposed to protect.

No one knows the job better than the experienced and trained carpenters who do the job. The administrative hazard controls in 1716.2 were developed by labor and management, with Cal OSHA at the time.

This employee participation is critical to the success of real hazard controls.

From the Communication element of the IIPP, to Fed OSHA promoted Prevention through Design efforts, to the Cal/OSHA Voluntary Protection Program (VPP), active employee involvement in safety is required.

Employee participation in residential construction fall protection happened before and now we are throwing out the results, rejecting the employee involvement of the carpenters who do this work.

I urge the Board to reconsider the effort to rewrite what are more effective and feasible standards for specific work operations. Or, include as Appendices the existing 1716.1 and 1716.2 as authorized Fall Protection Plans.

Published on The National Law Review https://www.natlawreview.com

Settlement Between The National Chimney Sweep Guild and OSHA

Article By: Lawrence P. Halprin

On December 1, 2023, the National Chimney Sweep Guild (NCSG), a trade association consisting almost entirely of small businesses, entered into a precedent-setting settlement with the Occupational Safety and Health Administration (OSHA) to resolve its legal challenge to the 2016 Final Rule amending OSHA's Fall Protection Standards for General Industry. The settlement describes how those standards will be applied to employees in the Chimney Service Industry (CSI) performing roof top work on the 99% plus of single family homes and similar structures that lack fall protection anchorages. The highlight of the settlement is the authorized use of alternative ground-based anchors to secure fall protection lifelines and equipment for employees working on roofs.

The Anchorage Requirement

As a general rule, fall protection is required for vertical drops of four or more feet under the General Industry standards. 29 CFR Section 1910.140(c)(13) establishes the requirements for anchorages used in personal fall protection systems and states:

Anchorages ... must be: (i) Capable of supporting at least 5,000 pounds (22.2 kN) for each employee attached; or (ii) Designed, installed, and used, under the supervision of qualified person, as part of a complete personal fall protection system that maintains a safety factor of at least two.

Permanent Anchors are Not Installed on Single Family Homes

In general, there are no permanent anchors installed on residential roofs because homebuilders understandably choose to avoid liability issues likely to arise if the anchors are not safely used or maintained by the homeowner or a contractor over the life of the home. In addition to those issues, retrofitting a home with permanent roof anchors presents even greater challenges: lack of access to the underlying structural members in the eaves and peaks of finished homes necessary to properly retrofit anchors; homeowner refusal to allow those retrofits due to the risk of water leakage through the holes cut in the waterproof roof membrane to install anchors; homeowner resistance to the costs of installing the anchors; and the time the worker is working without fall protection to install the anchors. The vast majority of homeowners will not pay for the costs of installing roof anchors and will not approve drilling/cutting holes in their roofs for that purpose. Attaching temporary roof anchors to a finished home with nails or screws, and removing them after the job is complete presents all of those problems and the problem of patching holes that, again, the homeowners will not approve.

Other Alternatives are Infeasible and/or Pose a Greater Hazard

Other fall protection alternatives are generally economically infeasible and often technically infeasible. Installing scaffolding would be prohibitively expensive and would expose the worker to greater fall hazards during the time erecting and disassembling the scaffolding than the roof top tasks that need to be performed. For most businesses, owning or leasing an aerial lift is not financially viable. Very few homeowners are willing to pay the significant pass-through costs of

1 of 3

having a sweep rent an aerial lift for the General Industry tasks to be performed. Those costs include the lift rental fee and any additional charges and taxes, the time required to arrange for the rental, the time required to acquire and return the rental, and the cost of acquiring/renting, installing, and removing any required ground matting for the lift. An aerial lift is a large and heavy piece of equipment. Adequate and safe access to a residential roof with an aerial lift is often precluded by the presence of utility lines, adjacent structures, surrounding trees and vegetation, or the lack of a suitable surface on which to drive and ground the vehicle. Without proper matting, very few homeowners are willing to allow use of this equipment on their property because of concerns about damage to the driveway, lawn, or landscaping.

The Need for Alternative Anchorage Options

Considering the foregoing infeasibility and greater hazard constraints, employers need to use alternative anchorage options for roof top work. In general, the only feasible alternative is ground-based anchors (e.g., trees, motor vehicles, or structures) as alternative anchorages. Trees, motor vehicles, and other structures are not rated for 5,000-pound loads, generally are not designed and installed under the supervision of a Qualified Person (e.g., they are often "installed" by Mother Nature or the operator of a powered auger), and often may not be used under the supervision of a Qualified Person. Therefore, at least for Chimney Service Industry employees working on residential roofs, literal compliance with Section 1910.140(c)(13) of the final OSHA Fall Protection Standards was infeasible.

The Settlement Agreement provides practical alternative fall protective measures (e.g., tying off to ground objects such as trees, motor vehicles, and structures; using systems that secure to the roof without roof penetration; or using an aerial lift), but recognizes those alternatives may not be feasible or may present a greater hazard to workers depending on the circumstances. For example, a suitable tree may not be available. Currently, available systems that secure to the roof without roof penetration are generally economically infeasible because they have high acquisition costs (they were designed by engineers and are subject to patents/intellectual property rights) and their use is subject to significant slope limits.

Employers in the Chimney Service Industry (CSI) compete with independent contractors not subject to OSHA requirements. If the Final Rule had not been interpreted to permit alternative anchorages, it would have put many small businesses out of business, and would have resulted in many chimneys and related elements not being cleaned or maintained, increasing the risk of home fires and mold intrusion, or possibly being cleaned and maintained by unqualified homeowners lacking the required fall protection training and equipment. The fall protection alternatives (really the alternative anchorages) identified in the NCSG Settlement Agreement reflect an implicit rejection of the approach of the ANSI fall protection standards to the extent that those standards are based on the erroneous premise that traditional fall protection anchorages will always be available by retrofitting every residential roof with them.

Implementation of the Settlement Agreement

Appendices A and B of the Settlement Agreement identify safe harbor fall protection options with anchorages that may be used by Competent Persons. Any other alternative anchorages would have to be selected by Qualified Persons. The Settlement Agreement also addresses when personal "fall protection aids" (rather than personal "fall protection systems") may be used to provide fall protection for access to a Covered Task or to set up or remove the fall protection system used to perform a Covered Task.

To comply with the Settlement Agreement, the CSI employers generally must establish a written fall protection program, provide employees with the required training and equipment, staff the Covered Task with the appropriate personnel, and complete and implement a written Fall Prevention Plan

2 of 3 1/17/2024, 5:42 PM

for each job. Some CSI employers are already in compliance with the Settlement Agreement, but many are not. Given the time required for the remaining CSI employers to come into compliance, OSHA agreed to a one-year implementation schedule with the understanding that employers that had not implemented the Settlement Agreement would remain subject to the requirements of the Final Rule, as written, but also subject to the infeasibility and greater hazard defenses.

While the terms of the Settlement Agreement are expressly limited to the Chimney Service Industry, they are likely to have applicability to other commercial sectors performing General Industry work on residential roofs.

© 2024 Keller and Heckman LLP

National Law Review, Volumess XIII, Number 345

Source URL: https://www.natlawreview.com/article/settlement-between-national-chimney-sweep-quild-and-osha

3 of 3

University of Richmond Law Review

Volume 46 | Issue 1 Article 12

11-1-2011

OSHA Enforcement of the "As Effective As" Standard for State Plans: Serving Process or People?

Courtney M. Malveaux Commissioner, Virginia Department of Labor and Industry, Richmond, Virginia

Follow this and additional works at: https://scholarship.richmond.edu/lawreview

Part of the <u>Agency Commons</u>, <u>Labor and Employment Law Commons</u>, and the <u>Legislation</u>
Commons

Recommended Citation

Courtney M. Malveaux, OSHA Enforcement of the "As Effective As" Standard for State Plans: Serving Process or People?, 46 U. Rich. L. Rev. 323 (2019).

Available at: https://scholarship.richmond.edu/lawreview/vol46/iss1/12

This Essay is brought to you for free and open access by the Law School Journals at UR Scholarship Repository. It has been accepted for inclusion in University of Richmond Law Review by an authorized editor of UR Scholarship Repository. For more information, please contact scholarshiprepository@richmond.edu.

OSHA ENFORCEMENT OF THE "AS EFFECTIVE AS" STANDARD FOR STATE PLANS: SERVING PROCESS OR PEOPLE?

Courtney M. Malveaux *

I. Introduction

Since the passage of the Occupational Safety and Health Act of 1970 ("OSH Act") in 1971, the federal Occupational Safety and Health Administration ("OSHA") has perplexed many states tasked with its enforcement. Congress passed the OSH Act to nationalize workplace safety and health standards. It empowered OSHA to enforce these standards, either on its own or through an approved workplace safety and health plan operated by a state ("State Plan"). The OSH Act provides matching funds and oversight for states choosing to operate their own programs on the condition that participating states operate a regime that is "at least as effective as" that of federal OSHA.

But contrary to the goals of the OSH Act, OSHA frustrates states' efforts by imposing process-based requirements, regardless of results and despite congressional intent.⁵ Congress did not intend for OSHA to evaluate the "as effective as" standard

^{*} Commissioner, Virginia Department of Labor and Industry, Richmond, Virginia; J.D., 2002, Marshall-Wythe School of Law, College of William & Mary; M.A., 1998, George Washington University; B.A., 1993, Pennsylvania State University. Amanda Blair, W. Glenn Cox, Kathleen Greene, Elizabeth Southall, and Jay Withrow provided research.

^{1. 29} U.S.C. §§ 651-678 (2006 & Supp. III 2010).

^{2.} S. REP. No. 91-1282, at 1 (1970), reprinted in 1970 U.S.C.C.A.N. 5177, 5177.

^{3.} See 29 U.S.C. §§ 655(a), 657-659, 667.

^{4. 29} U.S.C. §§ 667, 672.

^{5.} See Office of Inspector Gen.—Office of Audit, U.S. Dep't of Labor, Report No. 02-11-201-10-105, OSHA HAS NOT DETERMINED IF STATE OSH PROGRAMS ARE AT LEAST AS EFFECTIVE IN IMPROVING WORKPLACE SAFETY AND HEALTH AS FEDERAL OSHA'S PROGRAMS, at 2–3 (2011) [hereinafter OIG REPORT].

through process-based criteria, as is demonstrated in the context of another regulatory law, the Clean Air Act.⁶

OSHA can restore the original purpose of the OSH Act by shifting toward a results-based analysis of state efforts to preserve employee safety and health. OSHA needs to rewrite its regulations, ease its focus on internal state processes, and take a fresh approach to its monitoring of State Plans to embrace the original meaning of the OSH Act. Despite these and other challenges, Virginia operates an extremely effective program that can be enhanced if OSHA turns its attention toward results.

II. BACKGROUND ON THE OCCUPATIONAL SAFETY AND HEALTH ACT

A. The Purposes of the OSH Act: Achieving Safe and Healthy Working Conditions

In 1971, growing concerns over workplace injuries, illnesses and fatalities, and the resulting impact of billions of dollars in lost productivity led Congress to pass the OSH Act. Congress sought to ensure "safe and healthful working conditions" for America's workforce and to "preserve our human resources." To accomplish this, Congress directed OSHA's Secretary of Labor to create and apply uniform national standards for occupational safety and health.9

Observing the varying quality of workplace safety and health plans already in place throughout the country, Congress declined to federalize the entire field of occupational safety. Instead, it authorized the Secretary of Labor to set mandatory occupational standards, provide for occupational health and safety research, and implement effective enforcement programs. States had the option to continue to assume responsibility for occupational safety and health by adopting their own State Plans subject to OSHA's

^{6.} Pub. L. No. 95-95, 91 Stat. 685 (codified as amended at 42 U.S.C. §§ 7401—7671q).

^{7.} H.R. REP. No. 91-1291, at 14 (1970).

^{8. 29} U.S.C. § 651(b).

^{9.} S. REP. No. 91-1282, at 1, reprinted in 1970 U.S.C.C.A.N. at 5177.

^{10.} See AFL-CIO v. Marshall, 570 F.2d 1030, 1033 (D.C. Cir. 1978).

^{11. 29} U.S.C. § 651(b).

oversight.¹² However, Congress enabled and required the Secretary of Labor to approve State Plans to develop and enforce safety and health standards that are "at least as effective in providing safe and healthful employment and places of employment as the [federal] standards."¹³

At the time of the OSH Act's passage, Congress observed that relatively few states had modern occupational safety and health requirements and those states that had such requirements did not devote adequate resources to enforce them. In addition, the patchwork of state laws often led to inconsistent results. To ameliorate this problem, Congress assigned OSHA the role of setting "up to date" standards and protections for the entire nation. It reserved a role for states choosing to operate their own plans ("State Plan States") through a grant program. OSHA would carry out its mandate by working with states in crafting their own occupational safety and health plans, administering the grants, and providing oversight. Congress envisioned that this system would foster federal-state cooperation and assist states in operating their own occupational safety and health programs.

B. Congress Intended OSHA to Base Its Standards on Measurable Outcomes

Congress sought results-oriented safety and health standards that would be embraced by federal OSHA and the State Plan States alike. For this purpose, it permitted the Secretary of Labor to adopt "National Consensus Standard[s]" during a two-year window following the effective date of the OSH Act, unless the Secretary of Labor determined that a standard did not result in improved safety or health for employees. Ongress intended that the Secretary of Labor would look to scientifically measurable criteria, including medical judgment, in developing these stand-

^{12.} Id. § 651(b)(11).

^{13.} Id. § 667(c)(2).

^{14.} S. REP. No. 91-1282, at 4, reprinted in 1970 U.S.C.C.A.N. at 5180.

^{15.} See, e.g., id. (discussing differing state laws pertaining to the production of the coal tar product betanaphthylamine).

^{16.} Id. at 5, reprinted in 1970 U.S.C.C.A.N. at 5181.

^{17.} Id. at 17, reprinted in 1970 U.S.C.C.A.N. at 5195.

^{18.} See 29 U.S.C. § 651(b)(11).

^{19.} See S. REP. No. 91-1282, at 17, reprinted in 1970 U.S.C.C.A.N. at 5195.

^{20.} Id. at 5, reprinted in 1970 U.S.C.C.A.N. at 5181-82.

ards.²¹ At the time of the OSH Act's inception, however, the lack of standardized incident reporting meant that OSHA could not measure states' effectiveness by comparing incident rates alone.²² The standards are revised continually because many of the original standards are out-of-date and must be constantly improved and replaced to embrace new knowledge and techniques.²³ Unfortunately, in the forty years since the OSH Act's inception, OSHA has not yet developed standards to meet its legislative mandate.

III. OSHA UTILIZES PROCESS-BASED MEASURES IN ITS REGULATIONS AND OVERSIGHT, FRUSTRATING STATE EFFORTS AND CONTRADICTING LEGISLATIVE INTENT

A. OSHA Uses Procedural Indices in Its Regulations to Measure State Plan Effectiveness

At a minimum, State Plan States must follow the OSH Act and OSHA indices. The OSH Act provides a list of criteria that must be met by a state in the development of its State Plan.²⁴ In its regulations, OSHA added a set of indices of its own, to ensure that State Plans are at least "as effective as" the federal program.²⁵ To obtain the approval of the Secretary of Labor to develop and enforce their own safety and health standards, State Plan

^{21.} Id. at 5-6, reprinted in 1970 U.S.C.C.A.N. at 5182. This intention is consistent with the Government Performance and Results Act, which requires the Office of Management and Budget to hold federal agencies accountable according to measurable outcomes, rather than procedures. See generally 5 U.S.C. § 306 (Supp. IV 2011) (outlining requirements for annual performance plans); 31 U.S.C. §§ 1115-16 (Supp. III 2010) (outlining requirements for agency strategic plans).

^{22.} H.R. REP. No. 91-1291, at 15. Specifically, Congress pointed out the problems caused by the lack of a standardized accident and disease reporting which could make "states with the least effective programs.. appear to have a more favorable accident record." *Id.*; see also Ryder Truck Lines, Inc. v. Brennan, 497 F.2d 230, 233 (5th Cir. 1974) ("It is noteworthy that the [OSH] Act does not establish as a sine qua non any specific number of accidents or any injury rate.").

^{23.} See S. REP. No. 91-1282, at 6, reprinted in 1970 U.S.C.C.A.N. at 5182-83.

^{24. 29} C.F.R. § 1902.3 (2010).

^{25.} Id. § 1902.3(d)(1) (providing that each "State [P]lan shall provide a program for the enforcement of the [s]tate standards which is, or will be, at least as effective as that provided in the Act, and provide assurances that the[s]tate's enforcement program will continue to be at least as effective as the [f]ederal program").

States must use standards²⁶ and programs²⁷ that are at least "as effective as" OSHA's.²⁸

In providing indices to measure whether State Plan standards are "as effective as" federal standards, OSHA promulgated regulations that were broad enough to allow flexibility to deal with inevitable changes prompted by new industries and work hazards. The indices contain a number of requirements, most of them relating to enforcement procedures, in which the Assistant Secretary of Labor must provide adequate methods to assure that such standards continue to be "as effective as" federal standards. Most of the listed indices also pertain to process over results. ³¹

^{26.} S. REP. No. 91-1282, at 17, reprinted in 1970 U.S.C.C.A.N. at 5194. The Act requires State Plans to "contain assurances that the state will develop and enforce standards at least as effective as those developed by the [S]ecretary [of Labor, and], that the state will have the same legal authority personnel and funds necessary to do the job." Id.

^{27.} Id. at 16, reprinted in 1970 U.S.C.C.A.N. at 5194-95. "[T]he plan must... establish and maintain an occupational safety and health program applicable to all employees of the state and its political subdivisions, and that such program will be as effective as that applicable to provide employers covered by the plan." Id.

^{28.} Id. at 17, reprinted in 1970 U.S.C.C.A.N. at 5195.

^{29.} See, e.g., id.

^{30. 29} C.F.R. § 1902.4(a) (2010). The indices require the Secretary of Labor to determine whether State Plans develop standards addressing the hazards of employee exposure to toxic materials and harmful physical agents. Id. § 1902.4(b). They require procedures that provide input from interested stakeholders such as employees, employers, standards-producing organizations, and the public. Id. § 1902.4(b)(2)(iii). They require State Plan States to provide for variances as necessary and to be ready to set standards promptly when faced with unforeseen hazards. Id. § 1902.4(b)(2)(iv)–(v). They require State Plan States to provide for the posting of information on workplace hazards for employees, to provide for protection of employees from exposure to hazards through protective equipment, and to monitor and measure exposure to hazards. Id. § 1902.4(b)(2)(vi)–(vii).

^{31.} Id. § 1902.4(c). The indices require State Plan States to inspect workplaces to assure safe and healthful working conditions for employees and to allow employees to bring violations to the attention of enforcing state agencies, under state protection against discharge or discrimination for doing so. Id. § 1902.4(c)(2)(i)-(v). They require State Plan States to see to it that employees are notified when the enforcing agency does not take compliance action in response to an employee complaint and that employees are informed of their protections and obligations under the Act, as well as their exposure to toxic materials and harmful physical agents. Id. § 1902.4(c)(iii)-(iv), (vi). State Plan States must also require "prompt restraint or elimination of any conditions or practices . . . which could reasonably be expected to cause death or serious physical harm" through abatement of such conditions or practices, and they must issue and post citations of violations or otherwise notify employees and employers of violations of standards. Id. § 1902.4(c)(2)(ii), (x). Employers are entitled to protections, such as safeguards for trade secrets, and are entitled to a right to review alleged violations, abatement periods, and proposed penalties through administrative or judicial review or other opportunities for full hearings on these issues. Id. § 1902.4(c)(2)(viii), (xi). The regulations require State Plan States to augment their enforcement efforts with voluntary compliance programs. Id. § 1902.4(c)(2)(xiii). Perhaps the most elusive and controversial requirement is that State Plan States must provide "effective sanctions against employers who violate [s]tate standards and orders." Id. §

This contradicts the definition of the term "effective" as "[p]erforming within the range of normal and expected standards; [p]roductive; [or] achieving a result."³²

B. OSHA Evaluates State Plans Through Inconsistent, Process-Based Measures, Rather than Measures of Effectiveness in Achieving Workplace Health and Safety

Rather than focusing on results, OSHA uses procedural measures to evaluate State Plans. In a recent audit of OSHA's monitoring of the twenty-seven State Plan States, the Office of the Inspector General ("OIG") concluded that OSHA has yet to devise a means to determine whether State Plans are "as effective as" OSHA.³³ It criticized OSHA's failure to evaluate the impact of its own enforcement efforts, leaving states without quantifiable data to demonstrate their own effectiveness by comparison.³⁴

In setting its own baselines in federal enforcement states, OSHA correctly uses criteria which comport with the intended goals of the Act—Days Away, Restricted, or Transferred ("DART") rates; and fatality rates. ³⁵ DART data are important because they measure lost productivity in the workplace, a primary concern cited in the OSH Act. ³⁶ The OIG also noted that OSHA uses outcome-based data when evaluating its overall effectiveness in both State Plan States and federal enforcement states: "injury and illness data; and fatality data." ³⁷

However, OSHA resists the use of this baseline data when assessing State Plan States. Instead, it favors activity-based measures over outcome-based measures mainly "because outcome

^{1902.4(}c)(2)(xi).

^{32.} Black's Law Dictionary 592 (9th ed. 2009).

^{33.} OIG REPORT, supra note 5, at 2.

^{34.} See id. The OIG noted that OSHA does use data, but it does not pertain to outcomes. See id. Rather, OSHA used "activity-based data including inspection counts, penalty amounts, injury and fatality rate trends, Integrated Management Information System [] [statistics] and recordkeeping, measures for timeliness and completion of inspections, violation classification, staffing benchmarks, and timely adoption of standards." Id. It is noteworthy that OSHA requires states to follow its staffing benchmarks in order to be "as effective as" OSHA but has no such benchmarks for OSHA's own enforcement. See id. at 7–8

^{35.} Id. at 7.

^{36.} See id.

^{37.} See id. at 2.

are lacking."³⁸ OSHA points to the fact that DART data are not available in ten states, though it declines to mention that the ten states missing the data are federal OSHA states.³⁹ Second, it points to states that lack sample sizes large enough to draw statistical conclusions about workplace injuries and illnesses.⁴⁰ OSHA also objects to the use of fatalities as a measure of effectiveness because of their unpredictability, and because the rise or fall in this number could be attributed in part to rising or falling unemployment numbers.⁴¹ Nevertheless, OSHA declines to demonstrate that these inherent dangers do not exist in the data it uses to evaluate its own program.

Further, when it comes to assessing states, OSHA protests the use of outcome-based measures exclusively because it finds them "extremely problematic," and because, in OSHA's view, they confound the purposes of the OSH Act. Therefore, process is now a primary driver for OSHA. Rather than setting its own consistent, outcome-based criteria for effectiveness, which would address the core purpose of the OSH Act in reducing or eliminating injuries, illnesses, and fatalities, OSHA uses activity-based measures to evaluate State Plans and relies on State Plan States to define effectiveness in their own contexts. ⁴³

^{38.} *Id*.

^{39.} Press Release, Bureau of Labor Statistics, U.S. Dep't of Labor, Workplace Injuries and Illness—2009 (Oct. 21, 2010) (on file with author).

^{40.} OIG REPORT, supra note 5, at 7.

^{41.} *Id.* With respect to the former, OSHA's concern may have been with employers self-reporting. Memorandum from David Michaels, Assistant Sec'y, Occupational Safety & Health Admin., to Elliot P. Lewis, Assistant Inspector Gen. for Audit, Office of Inspector Gen. 4 (Mar. 31, 2011) (on file with author).

^{42.} See id. at 1-2.

^{43.} OIG REPORT, supra note 5, at 2; Changes to State Plans: Revision of Process for Submission, Review and Approval of State Plan Changes, 67 Fed. Reg. 60,122, 60,123 (Sept. 25, 2002) (to be codified at 29 C.F.R. pts. 1902, 1952–55.) [hereinafter Changes to State Plans]. In response to the Government Performance and Results Act of 1993, OSHA was forced to begin looking at outcome-based measures for itself and for State Plans: "Over the years, OSHA's monitoring has changed from a system of measuring the states against [f]ederal performance on various indicators to the current reviews that measure state performance against the state's own goals." OIG REPORT, supra note 5, at 8. However, the Obama administration still relies heavily on activity measures and, in the recent Enhanced Federal Annual Monitoring and Evaluation effort in 2011, reverted dramatically to focusing on activities rather than performance-based outcomes. Is OSHA Undermining State Efforts to Promote Workplace Safety?: Hearing Before the H. Subcomm. on Workforce Prot., 112th Cong. 15 (2011) (prepared statement of Elliott P. Lewis, Assistant Inspector General for Audit, U.S. Department of Labor) [hereinafter Is OSHA Undermining State Efforts Hearing].

The result is as ironic as it is sad: "OSHA lacks the clear understanding of the impact of State [Plan] programs on safety and health." The experience has left most State Plan States in agreement that "OSHA's effectiveness measures need to be reevaluated and more outcome, rather than, output-oriented."

Despite these alleged flaws, a comparative study of the aforementioned data between federal OSHA enforcement and State Plans should provide a comparison between the two enforcement regimes on a level playing field. It is through such a comparison that OSHA can work with State Plan States to determine if they are "as effective as" OSHA.

C. OSHA Leaves State Plan States Guessing How to Implement the "As Effective As" Standard

In establishing indices for evaluating State Plans, the Secretary of Labor uses case-by-case, process-based criteria to assess the effectiveness of State Plans, leaving State Plan States without suitable guidance about how to create a program that embodies the goals of the OSH Act. ⁴⁶ Peter DeLuca, Administrator of the Oregon Occupational Safety and Health Division, submitted a comment to the proposed 2002 amendments citing the need to clarify the "as effective as" language. ⁴⁷ He pointed out that the "lack of clarity around 'at least as effective as' only stifles and discourages creativity" in State Plan States and restricts State Plan States' ability to find new ways to enhance workplace safety and health. ⁴⁸

In response to DeLuca's concerns, OSHA declined to clarify "as effective as," stating that it would be impracticable and inadvisable to create a "one size fits all" definition for the varied State Plans. 49 Rather than developing a multivariate scheme or other tool to measure effectiveness across states, OSHA re-delegated

^{44.} OIG REPORT, supra note 5, at 8.

^{45.} Id. at 13 exh.1.

^{46.} See id. at 4.

^{47.} See Changes to State Plans, supra note 43, at 60, 122.

^{48.} Id. at 60, 123.

^{49.} See id.

State Plan oversight to the states themselves, based on each state's own criteria. 50

OSHA's decision to leave the "as effective as" language undefined frustrates a major purpose of the statute and places the burden of determining effectiveness on the Secretary of Labor. ⁵¹ It cannot be denied that states have a variety of industrial mixes that alter the makeup of the challenges each faces, or that no two states face the same challenges. Some states may well have a significantly higher prevalence of high-hazard industries, while others may be blessed with relatively safe industry profiles. Despite these inevitable variances, however, to evaluate each state's processes individually, without measuring their outcomes, leaves state enforcers guessing how to meet OSHA's approval and tends to stifle and discourage State Plan States' creativity.

D. OSHA's Process-Based Measures Contradict Legislative Intent

While OSHA declined to adopt a "one size fits all" means to evaluate State Plan effectiveness,⁵² it embraced this approach with its National Emphasis Programs ("NEP"). Under NEPs, OSHA focuses inspection resources on particularly hazardous industries.⁵³ For the first forty years of the OSH Act, OSHA gave State Plan States the option to participate.⁵⁴ State Plan States did participate in NEPs quite frequently to address hazards such as combustible dust explosions.⁵⁵

Id.

^{50.} See id. To wit, OSHA stated that it leaves to each state the initial determination as to whether a particular requirement is "at least as effective as" at the time it adopts and begins to enforce the new requirement, and if OSHA disagrees, it must institute an adjudicatory rejection proceeding in which the burden of proof rests with OSHA, not the [s]tate.

^{51.} See 29 U.S.C. § 675(c)(2) (2006).

^{52.} Changes to State Plans, supra note 43, at 60, 123.

^{53.} See, e.g., Letter from Kevin Beauregard, Chair, Occupational Safety & Health State Plan. Ass'n, to David Michaels, Assistant Sec'y for Occupational Safety & Health, U.S. Dep't of Labor 1 (May 13, 2001) (on file with author) [hereinafter OSHSPA May 13th Memo].

^{54.} See OIG REPORT, supra note 5, at 1.

^{55.} Federal Program Change Summary Report: Combustible Dust National Emphasis Program, OCCUPATIONAL SAFETY & HEALTH ADMIN. (Oct. 15, 2008), http://www.osha.gov/dcsp/osp/standards_fpc/fpc_cpl_03_00_008.html (indicating that fifteen State Plan States intended to adopt the combustible dust NEP and that, as of October 15, 2008, eleven of those states had formally adopted the NEP).

In 2010, the Obama administration decided to mandate State Plan adoption of all future NEPs.⁵⁶ Now State Plans must conduct up to five inspections in each targeted industry each year.⁵⁷ OSHA mandates five inspections in each state, regardless of the size of the state, the number (or even the existence) of employers in such industries in each state, and the number (or absence) of fatalities, injuries, or missed workdays in such industries.⁵⁸ However, OSHA does not provide states with additional funding to carry out these mandates.⁵⁹

The Occupational Safety and Health State Plan Association ("OSHSPA"), an organization representing the twenty-seven State Plan States, took issue with "OSHA's position that a State

[t]o carry out this requirement, OSHA regulations provide that whenever "a significant change in the [f]ederal program would have an adverse effect on the 'at least as effective as' status of the State [P]lan if a parallel [s]tate change were not made," a [s]tate change "shall be required." A change in OSHA "policy or procedure of national importance" is an example of such a [f]ederal program change requiring [s]tate action.

Id. (citing 29 C.F.R. § 1953.4(b)(1)–(2) (2010)). Because OSHA's adoption of an NEP is "a change in policy or procedure of national importance," when so notified, State Plans are required to respond." Id. at 2 (citing 29 C.F.R. § 1953.4(b)(2) (2010)).

- 57. See, e.g., OSHSPA May 13th Memo, supra note 53, at 2.
- 58. See id. at 2-3 (showing that under the mandate, State Plans will be required to use their limited resources to address hazards that may not be problems in a particular state); OSHSPA July 6th Memo, supra note 56, at 1 ("A [s]tate strategic plan often includes statewide emphasis programs specific to prevalent industries... within an individual state that are accounting for the highest rates of... serious accidents. Requiring State Plans to adopt NEPs developed solely by OSHA could divert limited state resources from these critical areas...").
- 59. See OSHSPA May 13th, Memo, supra note 53, at 3. Because Virginia provides half of the funding for VOSH, NEPs implementation serves not only as an unfunded mandate but also as a federal mandate on how state funds are to be utilized. Id.

^{56.} See Is OSHA Undermining State Efforts Hearing, supra note 43, at 38 (written statement of Kevin Beauregard, Chair, Occupational Safety & Health State Plan Association); accord Nev.'s Workplace Safety & Health Enforcement Program: OSHA's Findings & Recommendations: Hearing Before the H. Comm. on Educ. & Labor, 111th Cong. 22 (2010) (prepared statement of Jordan Barab, Assistant Secretary for Occupational Safety & Health, U.S. Department of Labor) (announcing the Obama administration's plan to make all future OSHA NEPs mandatory for state programs). OSHSPA challenged the mandate on the grounds that there was no legal basis for requiring State Plans to adopt all future NEPs. See Memorandum from Kevin Beauregard, Chair, Occupational Safety & Health State Plan Ass'n, to David Michaels, Assistant Sec'y, Occupational Safety & Health Admin., U.S. Dep't of Labor 1 (July 6, 2010) (on file with author) [hereinafter OSHSPA July 6th Memol. Assistant Secretary Michaels responded by citing the OSH Act's requirement that State Plans be "at least as effective" as those of federal OSHA. Memorandum from David Michaels, Assistant Sec'y, Occupational Safety & Health Admin., U.S. Dep't of Labor, to Kevin Beauregard, Chair, Occupational Safety & Health State Plan Ass'n 1 (Oct. 12, 2010) (citing 29 C.F.R. § 1902.3(d)(1) (2010)) (on file with author). He stated that

Plan should use its limited resources to address a hazard that may be a problem elsewhere in the nation, but is not [a problem] in a particular [s]tate."60 Further, it objected to "federal micromanagement of [s]tate resources" via the five-inspection requirement because it "runs directly contrary to Congress's stated intent for the [s]tates to identify their own needs and responsibilities for assuring 'safe and healthful working conditions' in their [s]tate."61 OSHSPA pointed out that these provisions hold even if a state can achieve safety and health outcomes through cooperative programs, rather than through enforcement. 62 The state would have to comply "even if the [s]tate could demonstrate that previous enforcement and consultation inspections in the particular industry or emphasis area in their [s]tate resulted in high incompliance rates and/or a low percent-serious rate."63 OSHSPA found these positions to be "unsupportable."64 Further, it found them "contrary to Congress's stated intent that State Plans 'conduct experimental and demonstration projects' to address workplace hazards."65

Another example of the negative impact OSHA can have on State Plans occurred with its implementation of an NEP on recordkeeping, which was based on OSHA's perception that employers were intentionally underreporting injuries and illnesses. Initially, when OSHA issued this NEP on February 19, 2010, it developed the initiative "without any State Plan participation early enough in the development process to identify any negative

 $^{60.\} See\ id.;\ see\ also\ \mbox{OCCUPATIONAL SAFETY}\ \&\ \mbox{HEALTH\ ADMIN.,\ FED.\ ANNUAL\ MONITORING}\ \&\ EVALUATION\ (FAME)\ REPORT\ on\ VA.\ \mbox{OCCUPATIONAL\ SAFETY}\ \&\ \mbox{HEALTH\ PROGRAM:\ OCT.\ 1,\ 2008\ to\ SEPT.\ 30,\ 2009,\ at\ 7\ (2010)\ [hereinafter\ APRIL\ 30TH\ FAME\ REPORT]).$

^{61.} See OSHSPA May 13th Memo, supra note 53, at 2.

^{62.} See id. OSHA offers programs to assist employers in complying with its health and safety regulations. OSHA's On-Site Consultation Program, for example, provides free workplace safety evaluations to small businesses. On-Site Consultation, OCCUPATIONAL SAFETY & HEALTH ADMIN., http://www.oshagov/dcsp/smallbusiness/consult.html (last visited Oct. 12, 2011). The program is independent from OSHA's enforcement program and work site visits do not result in penalties or citations. Id.

^{63.} OSHSPA May 13th Memo, supra note 53, at 3.

^{64.} Id.

^{65.} Id. (citation omitted).

^{66.} OCCUPATIONAL SAFETY & HEALTH ADMIN. DIRECTIVE No. 10-07 (CPL 02), INJURY AND ILLNESS RECORDKEEPING NAT'L EMPHASIS PROGRAM, Exec. Summary, Abstract-3 (Sept. 28, 2010). OSHA focused on "establishments operating in historically high rate industries and reporting injury and illness rates slightly lower than the cut-off rates used by OSHA to compile its primary inspection targeting list under the Site-Specific Targeting [] program." *Id.*

resource impacts on State Plan programs in time to address them up front." The results of the NEP, in the absence of state involvement, were underwhelming. The initial NEP did not show the number of underreported violations cited and "not-incompliance" inspections. In a follow-up NEP, OSHA had to revise the inspection targeting criteria in order to include more establishments in violation of the recordkeeping regulations to support its hypothesis. 99

OSHA further exacerbates state concerns with the criteria used in its Federal Annual Monitoring and Evaluation ("FAME") reports. The FAME reports are OSHA's formal mechanism to evaluate the effectiveness of each State Plan and to provide State Plan States with OSHA's criteria for the continued delegation of OSHA's enforcement duties. ⁷⁰ In these reports, OSHA evaluates data such as the number of hazards located and the percentages of identified hazards that inspectors deem "serious," "other-thanserious," "willful," or "repeat." Counterintuitively, OSHA concludes that inspections uncovering compliant employers do not signify safe workplaces, but inadequate inspection targeting systems. ⁷² On the other hand, in federal enforcement states, OSHA

^{67.} OSHSPA May 13th Memo, supra note 53, at 3; see also Occupational Safety & Health Admin. Directive No. 10-02 (CPL 02), Injury & Illness Recordkeeping Nat'l Emphasis Program, Exec. Summary, Abstract-3 (Feb. 19, 2010). OSHA received an appropriation of approximately \$2 million for this initiative but allocated none of the additional funding to assist the twenty-seven State Plan States that invested hundreds to thousands of hours in compliance efforts, a result that "could constitute an unfunded mandate to State Plans." OSHSPA May 13th Memo, supra note 53, at 3.

^{68.} See Sara Ditta, OSHA Fails to Find 'Bad Actors' in Recordkeeping NEP, Suspends Program, INSIDEOSHAONLINE.com (Aug. 4, 2010), http://insideoshaonline.com/OSHAOnline-Daily-NEWS/OSHA-Daily/osha-fails-to-find-bad-actors-in-recordkeeping-nep-susp ends-program/menu-id-622.html.

^{69.} See Is OSHA Undermining State Efforts Hearing, supra note 43, at 38 (written statement of Kevin Beauregard, Chair, Occupational Safety & Health State Plan Association).

^{70.} Memorandum from Lee Anne Jillings, Acting Dir. for Directorate of Coop. & State Programs, Occupational Safety & Health Admin., to Reg'l Adm'rs, Occupational Safety & Health Admin. (Jan. 10, 2011) (on file with author) [hereinafter Jillings Memo].

^{71.} APRIL 30TH FAME REPORT, *supra* note 60, at 21–22. In these reports, OSHA evaluates State Plans according to in-compliance rates, not-in-compliance rates, percentages of serious violation rates; percentage of programmed inspections with serious, willful, or repeat violations; and numbers of violations found per inspection. OSHSPA May 13th Memo, *supra* note 53, at 3.

^{72.} See OSHSPA May 13th Memo, supra note 53, at 3. ("OSHSPA can provide countless examples of State Plan annual evaluation reports where OSHA monitoring personnel have used such indicators as high in-compliance rates and low percent serious violation rates in planned inspections to conclude that a state's targeting system was inadequate or not 'as effective as' OSHA's targeting system.").

views a similar decline in a more positive light. In its own strategic plan for 2011–2016, OSHA projects that its performance indicator for "[p]ercent of serious, willful, repeat violations in . . . [l]arge construction projects [and] [h]igh-hazard manufacturing industry" is "targeted to trend downward" in 2016. 73 Apparently, a quantum indicating ineffectiveness in State Plans is a goal when it is applied to OSHA.

As its next step, OSHA is considering additional constraints on State Plans by requiring them to follow its Severe Violators Enforcement Program ("SVEP"). OSHA launched this proposal in June 2010 to increase enforcement efforts in cases involving "significant hazards and violations by concentrating on employers who have demonstrated indifference to their occupational safety and health obligations through willful, repeated, or failure-to-abate violations." The SVEP proposal applies to situations involving fatalities, catastrophes, "[h]igh-[e]mphasis [h]azards," and other severe occupational hazards, hazardous chemicals, and egregious violations.

SVEP includes more mandatory inspections and follow-up inspections of identified companies, inspections at multiple locations of companies that have them, more intense examination of employers' history, and penalty increases. Freliminary data suggest that this initiative may increase the rate of contested citations.

^{73.} HILDA L. SOLIS, U.S. DEP'T OF LABOR, STRATEGIC PLAN: FISCAL YEARS 2011-2016 at 44 (2010).

^{74.} OCCUPATIONAL SAFETY & HEALTH ADMIN. DIRECTIVE NO. CPL 02-00-149, SEVERE VIOLATOR ENFORCEMENT PROGRAM (June 18, 2010), available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=4503.

^{75.} Id.

^{76.} See Putting Safety First: Strengthening Enforcement and Creating a Culture of Compliance at Mines and Other Dangerous Workplaces, Hearing Before the S. Comm. on Health, Educ., Labor, & Pensions, 111th Cong. 132–33 (2010) (statement of David Michaels, Assistant Secretary, Occupational Safety and Health Admin.); Press Release, U.S. Dep't of Labor, U.S. Dep't of Labor's OSHA Takes Action to Protect America's Workers with Severe Violator Program and Increased Penalties (Apr. 22, 2010), available at http://osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=17544 (signaling an intent to increase penalties for serious violations from \$1000 to up to \$4000).

^{77.} Marcus Baram, Swatting at Flies: Another Huge Company Fights a Small Fine over Safety Violations, HUFFPOST BUS. (May 20, 2011, 5:05 PM), http://www.huffington.post.com/2011/05/20/big-company-fights-small-fine_n_864756.html ("More companies seem to be disputing [OSHA] penalties.... Since 2008, the number of new cases heard by the [U.S. Occupational Safety and Health Review Commission ("OSHRC")] has nearly doubled

OSHA has not yet determined whether State Plans will have to increase penalties by the same or similar amounts. But it already measures State Plan effectiveness in part through penalty levels and identifies violations without demonstrating how those measures translate into effectiveness. 78 Such indices include the average number of violations per inspection. 79 While an effective State Plan may demonstrate a higher number of identified violations, an effective regime may also deter such violations in the first place, thus yielding lower numbers.80 Such a measure can vary from one industry to the next. OSHA also computes the average initial penalty per serious violation among private sector employers, but it does not provide empirical data to demonstrate that lower penalties would fail to deter violations. 81 On the other hand, in OSHA-run states, preliminary data indicates that recently enhanced penalties may be increasing legal contests. Under the OSH Act, legal challenges stay required abatement until they are resolved.82 Third, OSHA computes average penalties for serious safety and health violations by private sector employers.83 Again, OSHA has not demonstrated the effect of higher or lower penalty levels on employee safety or health.

Ironically, such a mandate could render State Plans less effective in reducing injuries or illnesses. If, in fact, legal challenges increase as they currently appear to be, they would stay required

from [thirteen] to [twenty-four] in 2010."); see also U.S. OCCUPATIONAL SAFETY & HEALTH REVIEW COMM'N, FY 2010 PERFORMANCE & ACCOUNTABILITY REPORT 6–7 (2010) [hereinafter OSHRC REPORT]. The workload of OSHRC administrative law judges has dramatically increased as a result of contested OSHA penalties. See, e.g., OSHRC REPORT, supra at 6 (noting that in FY 2010, the workload of administrative law judges has increased substantially over prior FYs and included a 60% increase in the number of cases disposed of with hearings).

- 78. See OIG REPORT, supra note 5, at 5-6.
- 79. See, e.g., id. at 15 exh.2.
- 80. See APRIL 30TH FAME REPORT, supra note 60, at 26. However, OSHA appears to assume the former over the latter. To wit.

Virginia conducted 2,474 programmed inspections during FY 2009 with an average of 2.9 violations per inspection compared to [f]ederal OSHA's 3.1 violations per inspection. Virginia's serious/willful/repeat rate was 65% compared to [f]ederal OSHA's rate of 81%. While there appears to be a significant difference between Virginia's rate and [f]ederal OSHA, the total [S]tate [P]lan rate is 44% so Virginia appears to be performing an adequate job in the classification of its violations.

Id.

- 81. See OIG REPORT, supra note 5, at 16.
- 82. See 29 U.S.C. § 659(C) (2010).
- 83. OIG REPORT, supra note 5, at 16.

abatement of workplace hazards while legal contests are pending. Increased legal challenges would also force cash-strapped states to divert funds from inspection positions and other health and safety-related positions to hire more attorneys to handle the caseload. Virginia Occupational Safety and Health ("VOSH") staff members have observed that SVEP has led to increased hostility among employers who are resisting heavy-handed enforcement during inspections, particularly small employers who are less able to afford higher penalties. In addition, OSHA may cause problems for small employers in economically depressed areas, when more cooperative measures or reduced penalties may encourage quick abatement.

IV. DESPITE OSHA'S PROCESS-BASED REQUIREMENTS, VIRGINIA ACHIEVES MEASURABLE OUTCOMES IN OCCUPATIONAL SAFETY AND HEALTH

When OSHA does evaluate State Plans, it offers recommendations that overwhelmingly relate to process, such as OSHA-approved file documentation, rather than results. ⁸⁷ Often, OSHA's "major" findings of fault in a State Plan are erroneous or insignificant. ⁸⁸ Rather than enhancing workplace safety and health in

^{84.} See VA. DEP'T OF LABOR AND INDUS., OCCUPATIONAL SAFETY & HEALTH FIELD OPERATIONS MANUAL ch. 11, at 24 (2001) [hereinafter VOSH FOM] (noting that the period for abatement of contested violations does not begin to run until the day following a court order).

^{85.} Apparently, increased penalties are causing an unexpected flood of legal challenges today in a similar context, federal enforcement of mining violations. Reducing the Growing Backlog of Contested Mine Safety Cases, COMM. ON EDUC. & THE WORKFORCE (Feb. 23, 2010), http://democrats.edworkforce.house.gov/hearing/reducing-growing-backlog-contest ed-mine-safety-cases.shtml ("As the result of stepped-up enforcement and tougher penalties after a spate of mine tragedies in 2005 and 2006, mine owners tripled the number of violations they appeal and are now litigating 67[%] of all penalties.").

^{86.} VOSH is Virginia's OSHA-approved occupational safety and health State Plan.

^{87.} See generally APRIL 30TH FAME REPORT, supra note 60, at 24–33. For example, despite OSHA's finding that VOSH was responding to and investigating complaints in a timely manner, OSHA issued VOSH a recommendation stating: "Written documentation should be contained in case files to justify why a non-formal complaint resulted in an inspection." Id. at 24. Additionally, OSHA commended VOSH for its prompt and thorough investigation of job-related fatalities but found that documentation of such incidents needed improvement. Id. at 24–25. OSHA issued VOSH a recommendation to that effect: "Ensure that interviews with employer representatives and employees [regarding job-related fatalities] are documented in case files." Id. at 26.

^{88.} See, e.g., Letter from Courtney Malveaux, Comm'r, Va. Dep't of Labor & Indus., to John M. Hermanson, Reg'l Admin., U.S. Dep't of Labor-Occupational Safety & Health Admin. (Oct. 14, 2010), available at http://www.osha.gov/dcsp/osp/efame/va_formal_respon

Virginia, this system requires VOSH to expend considerable time and resources on procedural issues, to its detriment. In fact, many State Plan States spend hundreds or thousands of staff hours on complying with OSHA's recordkeeping NEP, diverting critical resources from enforcement efforts. ⁸⁹ Currently, significant VOSH staff time that could be spent finding creative ways to enhance occupational safety and health is devoted to FAME reports, OSHA audits, authoring letters to industry participants in industries targeted by OSHA, and other tasks required by OSHA.

Despite these distractions, VOSH has demonstrated marked success in worker safety and health that certainly has contributed to a steady decrease each year in fatal accidents investigated by VOSH between 2005 and 2009, culminating in a 48% decrease over a five-year period. OSH continues to maintain injury and illness rates that fall consistently well below the national average.

VOSH points to a number of factors for its successes. It may have averted potential fatalities, injuries, and illnesses through its unique and well-tailored regulations. Over the years, VOSH has enacted additional unique regulations in the areas of confined space hazards in the construction and telecommunications industries; overhead high voltage line safety; fall protection in steel erection; reverse signal operation in construction and general

se.pdf [hereinafter Malveaux letter]. For example, OSHA issued the following recommendation: "Bulk samples should be taken by industrial hygienists whenever suspected combustible dust is encountered in a work place." APRIL 30TH FAME REPORT, *supra* note 60, at 28. In its corrective action plan response to the Enhanced Federal Annual Monitoring Report, VOSH stated: "This error was found in 1 of 102 case files. VOSH does not consider a less than [1%] error rate to rise to the level of a serious problem. This issue will be addressed at the annual VOSH training conference for [Compliance Safety and Health Officers] in 2011." Malveaux Letter, *supra* at 7.

^{89.} OSHSPA May 13th Memo, supra note 53, at 3.

^{90.} Malveaux Letter, *supra* note 88, at 2. According to its internal records, VOSH received reports of sixty-four fatalities in 2005, fifty-five fatalities in 2006, forty-five fatalities in 2007, thirty-nine fatalities in 2008, thirty-three fatalities in 2009, and twenty-four fatalities in 2010. *Id.*; VA. DEP'T OF LABOR & INDUS., VOSH FATALITIES—2010 (2010) (on file with author). As of September 7, VOSH has received reports of twenty-four fatalities in 2011. VA. DEP'T OF LABOR & INDUS., VOSH FATALITIES—2011 (2011) (on file with author).

^{91.} APRIL 30TH FAME REPORT, supra note 60, at 8; Malveaux Letter, supra note 88, at 2.

^{92.} See Malveaux Letter, supra note 88, at 2.

^{93. 16} VA. ADMIN. CODE § 25-70-10 (1996).

^{94.} Id. § 25-145-10 (Cum. Supp. 2011).

^{95.} Id. § 25-145-20 (Cum. Supp. 2011).

industry;⁹⁶ and compliance with manufacturers' instructions for vehicles, machinery, tools, and equipment.⁹⁷ VOSH also made Virginia an exemplar of vigilance, as one of the top states in the rate of occupational safety and health inspections performed per number of employers and a top state in overall on-time complaint responses.⁹⁸ Additionally, VOSH built a comparatively robust Voluntary Protection Program ("VPP") and a Safety and Health Achievement and Recognition Program ("SHARP"), which recruited forty-three member employers and thirty-eight member employers respectively to serve as leaders in workplace health and safety.⁹⁹ Finally, VOSH has held safety and health conferences over the past sixteen years to give participants in high-hazard industries, consultants, employers, contractors, and other stakeholders an opportunity to share best practices and mutual expectations.¹⁰⁰

An increased ability to focus on outcomes over process may free VOSH to expend staff time and resources in creative ways to enhance occupational safety and health. For example, VOSH is looking at broadcasting public service announcements on television, radio, and in new media to educate employees and employers on recurring hazards. Well-timed and aggressive public education campaigns addressing hazards such as high overhead voltage lines, trenches and excavation, and heat and fall protection could prevent fatalities. VOSH is also looking at replacing the general inspection list it receives from OSHA with data on identified workplace injuries from the Virginia Workers' Compensation Commission. Currently, the OSHA general inspection list points VOSH inspectors to closed businesses or worksites that no longer exist. These inspectors could be spending their time (and state-paid gasoline and vehicle wear and tear) traveling to worksites that exist, and where employees are actually getting hurt. In addition, more VOSH staff could devote their time to

^{96.} Id. § 25-97-30 (Cum. Supp. 2011).

^{97.} Id. § 25-60-120 (Cum. Supp. 2011); see also Malveaux Letter, supra note 89, at 2.

^{98.} Malveaux Letter, *supra* note 88, at 2; *see also* APRIL 30TH FAME REPORT, *supra* note 60, at 23–24 (indicating that during the period from October 1, 2008 to September 30, 2009, Virginia had a response rate of 99.73%).

^{99.} Malveaux Letter, supra note 88, at 2; see also April 30th FAME REPORT, supra note 60, at 44. Virginia is unique in that it is the only state that has certified correctional facilities in VPP. Id. at 8.

^{100.} See Va. Dep't of Labor & Indus., 16th Annual Virginia Occupational Safety and Health Conference (2011).

consultations that help employers proactively address workplace hazards. They could also assist more in certifications for employers striving to become exemplars in workplace safety and health in Virginia's VPP or SHARP programs. Finally, VOSH staff could spend more time hosting public outreach events to educate employees and employers in targeted industries and geographic areas on the most common hazards VOSH encounters.

Currently, however, VOSH staff devote significant time and resources to meetings and reports dealing with the procedural issues raised by OSHA's audits, as well as complying with NEPs of debatable value in Virginia's industry mix. The creative minds on VOSH's staff could be turned loose on initiatives, such as those mentioned above, in order to find new ways to cooperate with employers and prevent workplace incidents. OSHA may be pleasantly surprised at the ways VOSH could produce even better outcomes, if given more flexibility to explore ways to save lives and simultaneously conserve resources.

V. OSHA CAN USE THE CLEAN AIR ACT AND STATE PLAN INITIATIVE TO MOVE TOWARD OUTCOME-BASED MEASURES

A. OSHA Can Look to the Clean Air Act as an Example in Utilizing Outcome-Based Measures

The term "as effective as" is used in other federal regulatory contexts, but not generally in the context of shared state-federal regulatory regimes. ¹⁰¹ But the term is used in such a context in the National Ambient Air Quality Standards ("NAAQS") of the federal Clean Air Act. ¹⁰² These standards set maximum concentration levels for specific pollutants. ¹⁰³ They are harm-based standards that do not measure the amount of pollutants that emerge from a source, like a specific smoke stack, but rather the level of pollutants in an entire region's air quality that affects health outcomes. ¹⁰⁴

^{101.} See, e.g., 42 U.S.C. § 12182 (2006) (equal opportunity regulation); 46 U.S.C. § 3703a (2006) (shipping vessel construction); 46 U.S.C. § 55105 (2010) (shipping hazardous waste); 9 C.F.R. § 113.450 (2011) (Department of Agriculture); 12 C.F.R. § 215.8 (2011) (Federal Reserve); 46 C.F.R. § 163.002-9 (2010) (Coast Guard).

^{102. 40} C.F.R. § 51.908 (2010).

^{103.} See id. § 50.2(b).

^{104.} See id. § 50.1(e) (defining "ambient air" as "that portion of the atmosphere, exter-

The Clean Air Act provides states with grants and authority to enforce the NAAQS under a State Implementation Plan ("SIP"). ¹⁰⁵ Participating states measure and enforce requisite levels of pollutants in order to safeguard public safety. ¹⁰⁶ Rather than focusing on process, SIP leverages federal resources, so states can use technology-based standards that focus on measurable outcomes for health and air quality for entire communities.

Under the Clean Air Act, participating states must demonstrate that their measures, rules, and regulations are "at least as effective" as the national standards they implement. ¹⁰⁷ In demonstrating that its program is at least as effective as federal efforts, a participating state must measure emissions. ¹⁰⁸

This is not to say that the SIP program does not encounter problems similar to those highlighted by the Department of Labor. In fact, each enforcing state has different challenges. Therefore, expert vigilance is necessary to supplement the outcome-based criteria. Despite these challenges, the program requires enforcing states to operate a program "at least as effective" as that of the federal regulatory agency. It holds each state accountable to outcomes that measure the impact of industry on public safety. This result is consistent with the definition of "ef-

nal to buildings, to which the general public has access"); see also ENVTL. LAW INST., OPPORTUNITIES FOR ADVANCING ENVIRONMENTAL JUSTICE: AN ANALYSIS OF U.S. EPA STATUTORY AUTHORITIES 9 (2001) (discussing the provisions under NAAQS as "harmbased" standards).

^{105. 42} U.S.C. § 7410 (2006).

^{106.} See 40 C.F.R. § 7410; 40 C.F.R. § 51.112(a) (2010).

^{107.} See id. § 51.908(c) (2010).

^{108.} Id. § 51.112(a)-(b).

^{109.} Id. § 51 app. W.

It would be advantageous to categorize the various regulatory programs and to apply a designated model to each proposed source needing analysis under a given program. However, the diversity of the nation's topography and climate, and variations in source configurations and operating characteristics dictate against a strict modeling "cookbook." There is no one model capable of properly addressing all conceivable situations even within a broad category such as point sources. Meteorological phenomena associated with threats to air quality standards are rarely amenable to a single mathematical treatment; thus, case-by-case analysis and judgment are frequently required The judgment of experienced meteorologists and analysts is essential.

Id.

^{110.} See id. § 51.908.

^{111.} See id. § 51.112.

fective" as "[p]erforming within the range of normal and expected standards [p]roductive; [or] achieving a result." 12

B. OSHA Can Use an Enhanced Abatement Verification Process, Such as Virginia's, to Evaluate and Enhance State Plan Effectiveness

One way OSHA could evaluate and enhance effectiveness would be to require abatement verification in a manner similar to the VOSH program. OSHA requires State Plans to verify that hazards have been eliminated or "abated" through "abatement certification, documents, plans and progress reports." The OSHA Field Operations Manual requires abatement certification to include the receipt of certain abatement documents from an employer with information indicating that the subject hazards have been eliminated such as "photographic or video evidence." 114

OSHA generally requires abatement documentation only for "high gravity serious violations." Likewise, it generally does not require abatement documentation for "[m]oderate or low gravity serious violations." The OSHA area director has some discretion in these determinations, particularly if he or she chooses to require abatement documentation for moderate or low gravity serious violations in which the establishment had previously been cited "for a willful violation or a failure-to-abate notice . . . in the previous three years; or [] [i]f the employer has [a] history of a violation [causing] a fatality or . . . serious [bodily] harm to an employee in the [previous] three years." OSHA's abatement verification does not require a health or safety inspector to verify abatement through a follow-up visit or through direct visual evidence by photograph or otherwise.

^{112.} BLACK'S LAW DICTIONARY, supra note 32, at 592.

^{113.} OCCUPATIONAL SAFETY & HEALTH ADMIN., OSHA'S FIELD OPERATIONS MANUAL (FOM) ch. 7, at 7 (2011) [hereinafter OSHA FOM].

^{114.} *Id*.

^{115.} See id. ch. 7, at 14.

^{116.} Id.

^{117.} *Id*.

^{118.} See id. ch. 7, at 11. ("Where necessary, OSHA supplements these [verification] procedures with follow-up inspections and on-site monitoring inspections.").

VOSH, on the other hand, provides that "all willful and repeat citations require abatement verification (certification and documentation), such as written, videographic or photographic evidence of abatement." Therefore, VOSH expands the universe of OSHA violations requiring verification to include "willful" and "repeat" violations, regardless of whether they are deemed "high gravity serious." ¹²⁰

C. OSHA Can Alleviate State Confusion and Align with Legislative Intent by Using More Outcome-Based Measures to Define "As Effective As"

OSHA acknowledges that it needs to reform how it measures State Plan effectiveness and, in fact, has opened conversations with OSHSPA to do so. Fortunately, OSHA does not entirely lack indicia to determine State Plan effectiveness. Some of them do measure the efficiency of safety and health inspections. For example, OSHA measures the average number of days a State Plan takes to initiate an inspection and an investigation upon receipt of a complaint, which encourages diligence in state investigators. OSHA also measures the number of inspections completed per hundred hours worked by each safety and health inspector. It also computes the percentage of complaint investigations completed within one day of receipt of a complaint and within five days of receipt of a complaint, as well as the average numbers of days from the opening conference of an investigation to citation issuance. OSHA also looks at the average time lapse

^{119.} VOSH FOM, supra note 85, ch. 13, at 6.

^{120.} Compare OSHA FOM, supra note 115, ch. 7, at 14 ("Moderate or low gravity serious violations should not normally require abatement documentation"), with VOSH FOM, supra note 85, ch. 13, at 6 ("VOSH policy is that all serious violations, including moderate and low gravity violations, will require abatement documentation.").

^{121.} See Memorandum from Jordan Barab, Acting Assistant Sec'y, Occupational Safety & Health Admin., to Reg'l Adm'rs, Occupational Safety & Health Admin. (Nov. 24, 2009) (on file with author); see also Jillings Memo, supra note 70.

^{122.} See, e.g., APRIL 30TH FAME REPORT, supra note 60, at app. D.

^{123.} Id. at app. E.

^{124.} U.S. DEP'T OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMIN., IMIS REPORT: VIRGINIA 1 (Oct. 3, 2010).

^{125.} APRIL 30TH FAME REPORT, supra note 60, at app. D.

from receipt of a contest to a first-level decision by the State Plan, ¹²⁶ a good measure of the efficiency of the judicial process.

There are many ways OSHA can overcome the challenges it faces in quantifying effectiveness. One possible solution is to curb the problem of small sample sizes of reported incidents by calculating numbers in each state over a period of several years. For example, OSHA could look at a small state's fatality rates instead of raw fatality numbers, or look at three- to five-year rolling averages to increase sample sizes. Such an analysis may not produce statistically significant conclusions about a state's enforcement efforts in a particular year, but this approach could yield valuable insight as to trends over a longer period of time. OSHA could also tackle the problem of the effect of economic factors, such as the likelihood of economic slowdown leading to fewer workplace incidents on fatality numbers by correcting for a quantifiable economic measure like economic growth rates or employment numbers. OSHA encounters varying industry mixes in the several states, and it could deal with this patchwork by using pro rata measures, weighted by industry type, calculated through data collected in local emphasis program initiatives. That way, if, for example, one state has a high percentage of employees in high-hazard construction industries, OSHA could project a higher number of expected workplace incidents when comparing it to a state with a predominately low-hazard industry mix. Additionally, OSHA could compensate for the lack of Bureau of Labor Statistics data on workplace injuries and illnesses in ten states by substituting this data with other reliable measures, such as workers' compensation claims. Furthermore, OSHA can adapt to the lack of information regarding the effect of enforcement efforts on workplace safety and health by requiring state and federal inspectors to verify abatement of all serious violations, rather than just those of the highest severity. This verification would have to be based on direct evidence, not on the word of the employer. Finally, OSHA could test a sampling of employers with past reported incidents to determine whether the number of reported incidents reduced over time after the State Plan implemented inspection or enforcement efforts by the State Plan.

VI. CONCLUSION

In using procedural criteria to evaluate whether State Plans are "as effective as" OSHA, OSHA has frustrated partnering State Plan States and contradicted legislative intent. By shifting the focus to outcomes in terms of safety and health in the workplace and by measuring its own effectiveness in comparison, OSHA can gain new footing with Virginia and other State Plan States to the benefit of men and women in America's workforce.

IN THE UNITED STATES COURT OF APPEALS FOR THE SEVENTH CIRCUIT

NATIONAL CHIMNEY SWEEP GUILD, et al.,

Docket No. 17-1087

Petitioner,

v.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, UNITED STATES DEPARTMENT OF LABOR,

Respondent.

STIPULATION AND SETTLEMENT AGREEMENT Between the National Chimney Sweep Guild and the U.S. Department of Labor

Following extensive negotiations, the Secretary of Labor ("Secretary") and the National Chimney Sweep Guild ("NCSG") have reached a full and binding settlement of the Petition for Review filed in this Court. This matter involves a challenge to a final rule promulgated on November 18, 2016, by the Occupational Safety and Health Administration ("OSHA"), entitled Walking-Working Surfaces and Personal Protective Equipment (Fall Protection Systems) ("Walking-Working Surfaces Rule"). *See* 81 Fed. Reg. 82494.

The Secretary and NCSG stipulate and agree as follows:

1. This Stipulation and Settlement Agreement, incorporating by this reference the

attached Settlement Agreement, shall be effective upon execution by both parties, which occurred on December 1, 2023.

- Within fifteen days of execution of this Stipulation and Settlement Agreement, NCSG shall file a motion with the United States Court of Appeals for the Seventh Circuit for voluntary dismissal, with prejudice, of its petition for review in this matter.
- 3. Within fifteen days of execution of this Stipulation and Settlement Agreement, NCSG shall also withdraw from the Secretary's consideration the Petition for a Partial Administrative Stay or Variance, Re-Opening of the Rulemaking Record and Reconsideration, which NCSG and the Ned Stevens Petitioners filed with the Secretary on June 8, 2017. This withdrawal shall be accomplished by letter to the Secretary of Labor.
- 4. Within fifteen days of execution of this Stipulation and Settlement Agreement,
 NCSG shall inform its members of the settlement and post a copy of the Stipulation
 and the Settlement Agreement on its website.
- OSHA shall distribute this Stipulation and Settlement Agreement to all OSHA Regional and Area Offices, including its compliance safety and health officers ("CSHOs"). OSHA shall also instruct its Regional Offices, Area Offices, and CSHOs to implement this Stipulation and Settlement Agreement during any inspection of a Chimney Service Industry employer (as defined in the attached Settlement Agreement) worksite that involves potential non-compliance with 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), or 1910.140¹. Such inspections must be performed pursuant to this Stipulation and Settlement Agreement if they occur after

2

¹ The reference to 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140 includes the current versions and any future renumbered versions of 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140. However, this stipulation and Settlement Agreement will cease to be effective to the extent it is superseded by any substantive changes to any of these standards.

the effective date of this Stipulation and Settlement Agreement and the employer, when asked, informs OSHA that the employer's fall protection practices include the options outlined in the attached Settlement Agreement at the worksite that is the subject of the inspection.

- 6. NCSG will conduct outreach to the Chimney Service Industry and encourage them to adopt the fall protection practices described in this Settlement Agreement, document those practices, and communicate these practices to all of their employees who perform Covered Tasks. The objective of having and communicating the documented fall protection practices is to enable the employee(s) at the site being inspected, even if not owners or supervisors, to advise CSHOs of their fall protection practices so the appropriate inspection can be conducted without delay.
- 7. OSHA shall provide Chimney Service Industry employers until December 1, 2024 (twelve months from the date of execution) to implement this Settlement Agreement. Employers who are in the process of implementing this Settlement Agreement must comply with the requirements of 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140 to the extent such compliance is feasible, and does not pose a greater hazard, pursuant to Occupational Safety and Health Review Commission precedent.
- 8. OSHA shall distribute this Stipulation and Settlement Agreement to all the responsible agencies operating state plans pursuant to Section 18 of the OSH Act, and encourage those agencies to adhere to the terms of this Stipulation and Settlement Agreement as if it referenced the relevant provisions of any applicable standards, whether or not identical to 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140.
- 9. Each party agrees to bear its own attorney fees, costs, and expenses which arise or

have arisen out of and are incidental to the instant matter before this Court.

FOR THE SECRETARY OF LABOR:

FOR NATIONAL CHIMNEY SWEEP GUILD:

Kristen Lindberg, Esq.

U.S. Department of Labor

Office of the Solicitor

200 Constitution Ave., NW

Room S-4004

Washington, D.C. 20210

Executed on November ____, 2023

December 1,2023

Matt Mair, President

National Chimney Sweep Guild

1255 SW Prairie Trail Parkway

Ankeny, Iowa 50023

Lawrence P. Halprin, Esq.

Keller & Heckman LLP

1001 G Street, NW

Suite 500W

Washington, D.C. 20001

Attorney for NCSG

Executed on November 21, 2023

SETTLEMENT AGREEMENT

TABLE OF CONTENTS

I.	GEN	NERAL	3	
II.	DEFINITIONS			
III.	EMPLOYERS QUALIFYING TO OPERATE UNDER THIS			
	SETTLEMENT AGREEMENT			
IV.	SAFETY PROGRAM REQUIREMENTS APPLICABLE TO ALL			
	FALL PROTECTION OPTIONS UNDER THIS AGREEMENT			
	A.	Safety Program for Rooftop Work	8	
	B.	Comprehensive Training Program	8	
	С.	Requirements With Respect to the Covered Tasks	11	
V.	SECTION 1910.28(a)(2)(ii) ASSESSMENT			
	A.	General	14	
	В.	Scope	14	
VI.	FAL	FALL PROTECTION OPTIONS FOR COVERED TASKS1		
	A.	Preference for Ground Level Work	15	
	В.	Installed Fall Protection	15	
	C.	Fall Protection Options	15	
	D.	Exception to Fall Protection Requirement	17	
APP	ENDIC	CES	18	
APP	ENDIX	X A - TRAVEL RESTRAINT SYSTEMS	A-1	
I.	Use of Travel Restraint Systems			
	A.	Purpose	A-1	
	B.	Equipment	A-1	

STIPULATION AND SETTLEMENT AGREEMENT Between the National Chimney Sweep Guild

and the U.S. Department of Labor

	C.	General Conditions for Use	A-1	
II.	Chimney-Based Travel Restraint Systems			
	A.	Description	A-2	
	В.	Conditions for Use	A-2	
III.	Ground-Based Anchorage Travel Restraint Systems			
	A.	Approved Ground-Based Anchorages	A-2	
	1.	Mature Tree	A-2	
	2.	Structural Member	A-3	
	3.	Vehicle	A-4	
IV.	ROOF TOP TRAVEL RESTRAINT SYSTEMS USING A NON-			
	PENETRATING ROOF ANCHORAGE		A-5	
	A.	Description	A-5	
	В.	Conditions of Use	A-5	
APP	ENDIX	X B - PERSONAL FALL ARREST SYSTEMS	B-1	
I.	Use of Personal Fall Arrest Systems			
	A.	Description	B-1	
	B.	General Conditions for Use	B-1	
II.	ROOF TOP PERSONAL FALL ARREST SYSTEMS USING A NON-			
	PENETRATING ROOF ANCHORAGE			
	A.	Description	B-1	
	В.	Conditions of Use	B-1	
APP	ENDIX	C - NON-EXCLUSIVE LIST OF COVERED TASKS	C-1	
ΔPD	ENDIY	X D - MODEL TEMPLATE	D_1	

SETTLEMENT AGREEMENT

I. GENERAL

- A. This Settlement Agreement, executed December 1, 2023, between the U.S. Department of Labor, Occupational Safety and Health Administration ("DOL/OSHA"), and the National Chimney Sweep Guild ("NCSG"), which includes Appendices A, B, C, and D, will be referred to herein as the "Agreement." It contains procedures and requirements ("Fall Protection Options") agreed to by DOL/OSHA and NCSG under which employers in the Chimney Service Industry may satisfy the fall protection requirements of 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), and 1910.140, whenever applicable, which were promulgated as part of OSHA's Walking-Working Surfaces Rule for General Industry, 81 Fed. Reg. 82494 (November 18, 2016). This agreement does not address compliance with any other OSHA requirements. The Fall Protection Options provided for under this Agreement apply only to "Covered Tasks," as defined in Section II.C below, when performed by employers in the Chimney Service Industry. They do not apply to, and may not be used for, any work performed by an employer outside the Chimney Service Industry. They do not apply to, and may not be used for, construction activities, except as specifically permitted herein.
- **B.** This Agreement identifies Fall Protection Options that will be deemed compliant with 29 CFR §§ 1910.28(b)(1), 1910.29(j), and 1910.140 when used pursuant to the conditions specified in this Agreement. Where the Fall Protection Options under this Agreement do not apply or are not being utilized, the employers in the Chimney Service Industry shall be subject to the fall protection requirements of 29 C.F.R. § 1910.28, § 1910.29(j) and 1910.140, as written.
 - 1. The anchorages identified in Appendices A and B, selected and used by or under the supervision of a Competent Person per the specific criteria set

out in the relevant Appendix, will be deemed to satisfy 1910.140(c)(13)(ii).¹

- 2. The anchorages identified in Appendices A and B, selected by or under the supervision of a Qualified Person in accordance with the relevant Appendix, and used by or under the supervision of a Qualified Person or Competent Person in accordance with the relevant Appendix, which, as part of a complete fall protection system, maintain a safety factor of at least two, will be deemed to satisfy 1910.140(c)(13)(ii).²
- C. OSHA shall ensure that no citation for failure to comply with the fall protection requirements of 29 C.F.R. §§ 1910.28(b)(1), 1910.29(j), or 1910.140 shall be issued if and when a Chimney Service Industry employer is in compliance with the terms of this Agreement applicable to the activity at a worksite inspected by OSHA.

¹ For example, a worker is using a travel restraint system consisting of a harness attached by a carabiner to a rope grab with a vertical lifeline that is threaded through the rope grab, run over the peak of the roof and down the other side of the roof to a tree, and attached to the tree with an appropriate knot. Except for the tree and the knot, all individual components selected by the sweep to assemble the travel restraint system meet the technical specifications in 29 CFR § 1910.140 and are being used in accordance with any instructions and specifications provided by the manufacturer. The tree that is serving as an anchor meets all criteria in Appendix A, Section III.A.1. In that situation, a Competent Person is authorized to select the individual components, assemble, and install this travel restraint system, and to use or supervise its use to perform the Covered Task. Rope grab means a deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.

² For example, a worker is using a travel restraint system consisting of a harness attached by a carabiner to a rope grab with a vertical lifeline that is threaded through the rope grab, run over the peak of the roof and down the other side of the roof to a tree, and attached to the tree with an appropriate knot. Except for the tree and the knot, all individual components selected by the sweep to assemble the travel restraint system meet the technical specifications in 29 CFR § 1910.140 and are being used in accordance with any instructions and specifications provided by the manufacturer. The tree that is serving as an anchor meets all criteria in Appendix A, Section III.A.1 subject to modification as provided by Appendix A, Section I.C, General Conditions of Use. In that situation, a Qualified Person is authorized to specify or select the anchor; and either a Qualified Person or a Competent Person is authorized to select the other individual components, assemble, and install this travel restraint system, and to use or supervise its use to perform the Covered Task.

II. DEFINITIONS

- **A.** "Chimney Service Industry" means businesses engaged in the maintenance, repair, and installation of chimney and venting systems serving fireplaces and heating appliances.
- **B.** "Competent Person" means a person who is capable of identifying existing and predictable hazards in any personal fall protection system or any component of it used under this Agreement, as well as in their application and uses with related equipment, and who has authorization to take prompt, corrective action to eliminate the identified hazards;
- C. "Covered Tasks" refers to the group of tasks covered by this agreement. Covered tasks are limited to tasks performed by Chimney Service Industry employers on residential roofs or roofs on residential-type structures that have been converted to commercial use (e.g., a dentist's office). Covered Tasks are limited to general industry tasks, and do not extend to construction tasks. They include but are not limited to the Covered Tasks listed in Appendix C.
- **D.** "Qualified Person" means a person who, by possession of a recognized degree, certificate, or professional standing, <u>OR</u> who by extensive knowledge, training, and experience has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project within the scope of this Agreement.⁴

³ The initial installation of a chimney cap, which OSHA views as a construction activity, is deemed to fall within the definition of Covered Tasks for purposes of this Agreement only. The removal and replacement of an existing chimney cap may be part of either a Section 1910.28(a)(2)(ii) Assessment or a Covered Task, depending on the circumstances.

The most important aspect of a Qualified Person is that they have the "demonstrated ability" to solve or resolve problems relating to the subject matter, work, and project. When the person the employer designates as

⁴ The following explanatory material is designed to further explain what is meant by a Qualified Person. It consists of direct quotes of materials extracted from the Preamble to the Walking-Working Surfaces Rule (81 Fed. Reg. 52494). The definition of "qualified" in the rule (29 C.F.R. § 1910.21(b)) allows employers to have crew chiefs, supervisors, operations personnel, or other individuals train workers, provided they have the necessary "degree" or "extensive knowledge" outlined in the definition of qualified, and specified in 29 C.F.R. § 1910.30(a). 29 C.F.R. § 1910.30(a)(2) does not require that trainers possess a degree if they have the necessary knowledge, training, and experience. 81 Fed. Reg. 82640, col. 3.

- E. "Fall Protection Aid" means a device designed to be hooked onto (rather than being bolted or nailed to) an appropriate component of the roof, such as the roof ridge or eave, and used by an employee to prevent a fall while traveling to or from a Covered Task, or while setting up and removing the Fall Protection Option that will be used while performing the Covered Task. A Fall Protection Aid may only be used as an anchorage for a personal fall protection system while performing a Covered Task if it is specifically designed for that purpose and installed and used per the manufacturer's instructions and specifications (in which case it also would be a Non-Penetrating Roof Anchorage).
- F. "Non-Penetrating Roof Anchorage" means a multipurpose device that secures to (rather than being bolted or nailed to) an appropriate component of the roof (e.g., the roof ridge, roof eave/soffit) and may serve as an anchorage for a personal fall protection system (either a Travel Restraint System or a Personal Fall Arrest System). A Non-Penetrating Roof Anchorage may only be used as an anchorage for a personal fall protection system *while performing a Covered Task* if it is used in accordance with Section IV.B of Appendix A. A Non-Penetrating Roof Anchorage must be installed and used as part of a complete personal fall protection system that maintains a safety factor of at least two pursuant to 29 C.F.R. § 1910.140(c)(13)(ii).

Qualified Persons must possess the type of qualifications (*i.e.*, recognized degree, certificate, or professional standing or extensive knowledge, training, and experience) that makes them capable of designing anchorages that successfully meet the requirements of the Walking-Working Surfaces Rule. Or, the Qualified Person must have demonstrated ability to solve and resolve the issues relating to the subject matter, work, or work project. 81 Fed. Reg. 82655, col. 3, and 82656, col. 1.

a Qualified Person has demonstrated the ability to solve or resolve problems, which may include performing various complex calculations to ensure systems and components meet required criteria, the qualifications of that person are adequate. In addition, an employer may need to select different Qualified Persons for different projects, subject matter, or work to ensure the person's professional credentials or training, experience, and knowledge are sufficient to solve or resolve the problems associated with the subject matter, work, or project. 81 Fed. Reg. 82650, col. 1.

⁵ Whenever used in this Settlement Agreement, the requirement to use a system or component according to/per/consistent with the manufacturer's instructions and specifications does not include a direction from the manufacturer that the purchaser/user must obtain training from the manufacturer or its representative before using the product.

G. "Roof Hook Ladder" means a straight ladder with attached ridge hooks designed to hook over the roof ridge and hold the ladder in position. Where the location and characteristics of the work, and the manner in which the Roof Hook Ladder is installed, will prevent the Roof Hook Ladder from being dislodged, it can be used:

(1) without fall protection for tasks that are performed when working from the ladder; (2) as a Fall Protection Aid; or (3) as a Non-Penetrating Roof Anchorage, provided the criteria for use as a Fall Protection Aid or Non-Penetrating Roof Anchorage in this Agreement are met.

III. EMPLOYERS QUALIFYING TO OPERATE UNDER THIS SETTLEMENT AGREEMENT

- **A.** Each employer electing to operate under this Settlement Agreement shall, before commencing activities under this Settlement Agreement, ensure it has:
 - Documented its Safety Program for Rooftop Work, as described in Section IV;
 - 2. Identified, in its Safety Program for Rooftop Work, the Covered Tasks that will be performed by its employees and any restrictions on the Covered Tasks that may be performed by a particular employee;
 - 3. Identified, in its Safety Program for Rooftop Work, the Fall Protection Options (described below) that will be installed and utilized by its employees, and any restrictions in the Fall Protection Options that may be installed or utilized by a particular employee;
 - 4. Obtained and provided its employees with the equipment necessary to perform the Covered Tasks and to install and utilize the Fall Protection Options that the employer has chosen to include in its Safety Program for Rooftop Work, consistent with any restrictions placed on the Covered Tasks performed or Fall Protection Options installed or used by a particular employee per Paragraphs III.A.2 and 3, above; and
 - 5. Provided its employees with the training necessary to perform the Covered Tasks and implement the Fall Protection Options that the

employer has chosen to include in its Safety Program for Rooftop Work, consistent with any restrictions placed on the Covered Tasks performed or Fall Protection Options installed or used by a particular employee per Paragraphs III.A.2 and 3, above.

B. Each employer electing to operate under the Settlement Agreement shall ensure their Qualified Persons, Competent Persons, and employees implement the provisions of this agreement as applicable to each.

IV. SAFETY PROGRAM REQUIREMENTS APPLICABLE TO ALL FALL PROTECTION OPTIONS UNDER THIS AGREEMENT

A. Safety Program for Rooftop Work

- 1. The employer must develop and implement a written Safety Program for Rooftop Work addressing the Covered Tasks performed by its employees.
- 2. The Safety Program for Rooftop Work must include a comprehensive training program for training on the use of the Fall Protection Options authorized by this Agreement.

B. Comprehensive Training Program

1. General

- a. The Comprehensive Training Program must include the training requirements listed in Paragraph IV.B.2, below, for all personnel performing or supervising work using any Fall Protection Option identified in Appendix A or Appendix B of this Agreement as well as the training requirements listed in Paragraph IV.B.2, below, for all personnel who will be a Competent Person under this Agreement (Note: Redundant training is not required to the extent the employer verifies the employee already has the required knowledge from prior training and/or experience.)
- b. All training must comply with 29 C.F.R. § 1910.30.
- c. All required training must also be provided to an employee before that employee performs or supervises work using any Fall Protection Option identified in Appendix A or Appendix B of this Agreement.

d. The Comprehensive Training Program must be developed and conducted by a Qualified Person and the Program must include a written certification by a Qualified Person that the Program conforms with this Agreement.

2. Fall Hazards and Fall Protection

a. Overview

The training program, per 29 C.F.R. § 1910.30, shall enable each employee to recognize the hazards of falling as well as the fall hazards at the worksite, and shall train each employee in the procedures to be followed to minimize these hazards.

 Minimum Training for all Employees Performing Work Under this Agreement

The employer must ensure that each employee performing work under this Agreement is trained by a Qualified Person in at least the following topics:

- (1) The nature of the fall hazards in the work area and how to recognize them;
- (2) The proper procedures to be followed to minimize those hazards;
- (3) The proper procedures for installing, inspecting, operating, maintaining, and disassembling the personal fall protection systems and other equipment that the employee uses to address fall hazards;
- (4) The proper use of personal fall protection systems and other equipment that the employee uses to address fall hazards, including, but not limited to, identification and evaluation of proper anchor points, proper hook-up, anchoring, and tie-off techniques, and methods of equipment inspection and storage, as specified by the manufacturer;
- (5) The proper care and storage of the personal fall protection systems and other equipment that the employee uses to address fall protection hazards; and
- (6) Fall/slip recovery procedures and techniques.

- c. Additional Training for Competent Persons
 - (1) The employer must ensure that each employee who will be a Competent Person under this Agreement is trained by a Qualified Person to:
 - (i) conduct and document the hazard assessment;
 - (ii) select and use the appropriate Fall Protection Options; and
 - (iii) complete the job-specific Fall Prevention Plan, using Appendix D or equivalent.⁶
 - (2) The employer must ensure that each employee who will be a Competent Person under this Agreement demonstrates the ability to identify existing and predictable hazards in the personal fall protection systems or components used under this Agreement, as well as in the application or uses of related equipment.

d. Training Format

An appropriate portion of the required training in the use of personal fall protection systems must be a hands-on demonstration, which can be in a classroom setting or through properly supervised on-the-job training, to ensure the training is effective and understood. 29 C.F.R. § 1910.30 does not otherwise require or prohibit a specific format for delivering training to workers. Employers may use video-based, web-based or computer-based training, provided that:

- A Qualified Person developed or prepared the training;
- A Qualified Person is available to answer any questions workers may have;
- The training content complies with the requirements in 29 C.F.R. § 1910.30; and
- The employer provides the training in a manner each worker understands (29 C.F.R. § 1910.30(d)).

⁶ The term "Fall Prevention Plan" is used here to distinguish it from the term "Fall Protection Plan" as used in 29 C.F.R. 1910.28(b)(1)(ii) and 1926.502(k).

C. Requirements With Respect to the Covered Tasks

1. Overview

The Safety Program for Rooftop Work must include the following requirements with respect to the Covered Tasks. The employer will conduct a hazard assessment and then develop and implement a written Fall Prevention Plan, based on that hazard assessment, for each job where this Agreement is implemented. The employer will also ensure its employees meet the requirements applicable for their roles as trained employees, Competent Persons, and/or Qualified Persons.

2. Hazard Assessment

A Competent Person will conduct a hazard assessment based on the Covered Task and conditions at each individual worksite, taking into account factors such as weather conditions (e.g., wind, rain, snow, moss, moisture, temperature), condition of the roof, access to the roof and to the location where the Covered Task will be performed, roof pitch, type of surface, nature of Covered Task, presence of skylights or utility lines, required equipment and materials, time to perform the Covered Task, and number of employees assigned to the job and on the roof. The hazard assessment will be documented in the written Fall Prevention Plan created for each job where this Agreement is implemented.

3. Fall Prevention Plan

The Fall Prevention Plan must be completed by a Competent Person or a Qualified Person. The Plan must be specific to the Covered Tasks being performed and the jobsite conditions. A flexible, generic template may be used for this purpose if it adequately addresses the tasks and conditions at the jobsite. The template in Appendix D is an example of an acceptable template for this purpose. The Fall Prevention Plan will establish acceptable roof working conditions, work practices, and fall protection measures to be implemented for particular Covered Tasks under the particular worksite conditions, including:

- a. Selection of the appropriate method and location of access to the roof and work area(s) (e.g., placing the ground ladder at the location that will provide the highest overall level of safety for the Covered Task);
- b. Selection of the appropriate fall protection measures;
- c. Selection of the appropriate PPE (e.g., selecting shoes that achieve adequate traction with the surface of the roof).
- 4. At least one of the workers installing or supervising the installation of the fall protection system must be a Competent Person. At least one of the workers using or supervising the use of the fall protection system must be a Competent Person.
- 5. A Qualified Person must design any fall protection system used under this Agreement that is not: 1) installed and used per the specifications in this Agreement; or 2) installed and used in a manner for which the system was designed, and consistent with the manufacturer's instructions and specifications for the use of the system or its components.⁷
- 6. The same individual may be both a Competent Person and a Qualified Person. Where the circumstances require the participation of both a Competent Person and a Qualified Person, that requirement is satisfied by one individual who meets the requirements of both definitions.
- 7. All workers performing work under this Agreement must have had at least the training required under Section IV.B.2.a-b.
- 8. Work on the Covered Tasks
 - a. Employers will ensure that their employees implement the applicable requirements of the Fall Prevention Plan for the Covered Task, including

⁷ For example, a worker is using a travel restraint system consisting of a harness attached by a carabiner to a rope grab with a vertical lifeline that is threaded through the rope grab, run over the peak of the roof and down the other side of the roof to a tree, and attached to the tree with an appropriate knot. Except for the tree and the knot, all individual components selected by the sweep to assemble the travel restraint system meet the technical specifications in 29 CFR § 1910.140 and are being used in accordance with any instructions and specifications provided by the manufacturer. The tree that is serving as an anchor meets all criteria in Appendix A, Section III.A.1. In that situation, a competent person is authorized to select the individual components, assemble, and install this travel restraint system, and to use or supervise its use to perform the Covered Task.

location and method of roof access, proper use of appropriate fall protection measures, and proper use of appropriate PPE.

- b. Employers will ensure their employees use caution while walking on a roof and maintain a low center of gravity.
- c. Unless it is infeasible or poses a greater hazard pursuant to Occupational Safety and Health Review Commission precedent, employers will ensure employees use a Fall Protection Aid, a Roof Hook Ladder, a Non-Penetrating Roof Anchorage, or a Travel Restraint System described in Appendices A and B to access (travel to or from) the Covered Tasks, or while setting up and removing the Fall Protection Option that will be used while performing the Covered Tasks.
- 9. Weather Hazards: When adverse weather (such as high winds, rain, snow, or sleet) creates a hazardous condition (such as a slippery roof) that is not eliminated or adequately controlled, Covered Tasks will be suspended until the hazardous condition no longer exists or is adequately controlled.
- 10. Prompt Rescue: When using fall arrest systems to perform Covered Tasks under this Agreement, the equipment set-up will include self-rescue devices and employers will require employees performing Covered Tasks to carry mobile telephones to summon help. For Covered Tasks not requiring fall arrest systems, employers will encourage employees to carry mobile telephones to summon help.
- 11. Employer Enforcement, Investigations, and Retraining
 - a. Employers shall ensure unannounced safety spot checks are performed and documented. Each worker engaged in Covered Tasks under this Agreement shall be spot checked for compliance with this Agreement a minimum of once per year.
 - Employers shall take immediate action to correct any observed or reported violations of this Agreement and retrain employees as required.
 All retraining shall be documented.

c. Employers shall conduct investigations into any observed or reported incidents or near misses that involve falls from height. This investigation and analysis of causal factors shall be completed within two weeks of the incident. Employers must implement appropriate changes, if necessary, to prevent similar incidents in the future, and must document such changes.

V. ASSESSMENTS UNDER 29 C.F.R. § 1910.28(a)(2)(ii) ("SECTION 1910.28(a)(2)(ii) ASSESSMENTS")

A. General

Pursuant to 29 C.F.R. § 1910.28(a)(2)(ii), with one exception, fall protection is not required when employees are: (1) inspecting, investigating, or assessing workplace conditions or work to be performed prior to the start of rooftop work⁸ or (2) conducting a good faith inspection, investigation, or assessment of workplace conditions and the rooftop work that was performed to confirm all rooftop work has been completed. The exception is that employees must use any fall protection system or equipment meeting the requirements of 29 C.F.R. § 1910.29 that has been installed and that is available and adequate (e.g., in good condition and appropriate location) for workers to use for pre-work and post-work assessments (see 29 C.F.R. § 1910.28(a)(2)(ii)).

B. Scope

The following rooftop activities fall within the scope of a Section 1910.28(a)(2)(ii) Assessment: inspecting flashing, shingles, roof vents, and chimneys (which includes removing the chimney cap with a screwdriver or screw gun to allow inspection of the crown and inside of the chimney cap and flue with the aid of a flashlight and/or camera, and then replacing the chimney cap with a screwdriver or screw gun) while on the roof. Incidental chimney cleaning activities, such as brief removal of creosote,

⁸ This means a Section 1910.28(a)(2)(ii) Assessment may be performed before or after an employer has first performed some non-assessment tasks that do not involve accessing the rooftop.

may also be considered part of the Section 1910.28(a)(2)(ii) Assessment for purposes of this Agreement.

VI. FALL PROTECTION OPTIONS FOR COVERED TASKS

A. Preference for Ground Level Work

To the extent practical – and permitted by the homeowner, any applicable legal requirements (e.g., pandemic restrictions), and the design of the house (e.g., chimney, damper, flue, fireplace) – employers will ensure employees perform chimney inspection and cleaning activities from inside the house.

B. Installed Fall Protection

Employees must use any existing fall protection system or equipment meeting the requirements of 29 C.F.R. § 1910.29 that has been installed and is available and adequate (e.g., in good condition and appropriate location) for workers to use to access the location where the rooftop task will be performed and/or to perform the Covered Task. The requirement to use existing fall protection anchors is contingent on a Competent Person determining, by visual inspection, that the existing roof anchors are firmly installed, in good condition (e.g., free of significant corrosion), and in an appropriate location to provide fall protection while accessing the location where the Covered Task will be performed and/or performing the Covered Task. Where there are no existing fall protection while accessing the location where the Covered Task will be performed and/or performing the Covered Task, employers may utilize one or more of the following Fall Protection Options.

C. Fall Protection Options

When fall protection is required, employees performing Covered Tasks under this Agreement shall be protected from falls by any of the Fall Protection Options described in Paragraphs 1 through 4, below, which is not infeasible and does not

create a greater hazard (pursuant to Occupational Safety and Health Review Commission caselaw), and may use a combination of these options. A Fall Protection Aid may be used by an employee to prevent a fall while traveling to or from a Covered Task, or while setting up and removing the Fall Protection Option that will be used while performing the Covered Task.

- 1. A Travel Restraint System that complies with the requirements in Appendix A of this Agreement and is otherwise subject to 29 C.F.R. § 1910.140.
- 2. A Personal Fall Arrest System that meets the requirements in Appendix B of this Agreement and is otherwise subject to 29 C.F.R. § 1910.140.
- 3. Working from an aerial work platform that complies with 29 C.F.R. § 1910.67.
- 4. Working from portable ladders where the physical conditions at the worksite permit. The use of ladders shall be in compliance with 29 C.F.R. § 1910.23. Note: Employers shall ensure that employees move ladders from location to location around the worksite as often as necessary to safely access the areas where work is to be performed.

Additions, modifications, and updates to the Fall Protection Options described in Paragraphs 1 through 4, above, that are designed to make them safer or more efficient while providing substantially equivalent protection may be requested by NCSG, but are permitted only after consultation with the OSHA National Office, Directorate of Enforcement Programs, and receipt of written approval from OSHA. Consent to modifications or updates may not be unreasonably withheld and all parties must negotiate any changes in good faith.

D. Exception to Fall Protection Requirement

For chimney sweeping and chimney cap installation only: If all means of performing chimney sweeping or installing chimney caps under Sections VI.A, B, and C, above, are infeasible and/or create a greater hazard (pursuant to Occupational Safety and Health Review Commission caselaw), the employer may allow employees to enter onto a roof to perform those tasks without fall protection when the following conditions are met:

- 1. A Competent Person has determined, by visual inspection, that the work surface is in good condition and capable of supporting the employee;
- 2. Employees shall not enter onto any portion of a roof where the roof pitch is greater than 4 in 12;
- 3. Employees shall keep their centers of gravity low whenever walking on or working from the roof; and
- 4. Employees shall take an access path that minimizes the time spent within 6 feet of the edge of the roof.

APPENDICES

APPENDIX A

TRAVEL RESTRAINT SYSTEMS

I. Use of Travel Restraint Systems

A. Purpose

A Travel Restraint System is designed and used to prevent an employee from going over the edge of a walking-working surface rather than arresting a fall after going over the edge. A Travel Restraint System shall not be relied upon to arrest a fall because it is not designed to handle the potential forces generated in free fall.

B. Equipment

A Travel Restraint System generally consists of an assembly of components – anchorage, anchorage connector, lanyard (or other means of connection), ascent/descent device, lifeline, and body support (harness or belt) – that an employer uses to eliminate the possibility of an employee going over the edge of a walking-working surface.

C. General Conditions for Use

Except as provided in this Agreement, use of a Travel Restraint System shall be subject to all applicable provisions in 29 C.F.R. § 1910.140. The Travel Restraint Systems described in this Appendix A may be used for Covered Tasks. These descriptions are requirements when the systems are being installed by a Competent Person, and safe harbor guidance if the person designing the Travel Restraint System is a Qualified Person. A Qualified Person may, in the exercise of his/her knowledge, training and/or experience, determine that some of the criteria listed below may be modified.

II. Chimney-Based Travel Restraint Systems

A. Description

While it may be set up in a variety of ways, a Chimney-Based Travel Restraint System generally means a combination of a line tightly wrapped around a chimney to which a lanyard and body support (belt or harness) are attached.

B. Conditions for Use

- 1. A Competent Person must determine that the chimney is suitable for this purpose and that the Travel Restraint System can be safely attached to the chimney. A non-enclosed chimney or vent (a/k/a a manufactured chimney or vent with no chase) is not suitable for this purpose.
- 2. A brick or stone chimney shall be in good condition and solid, with no loose, missing, or damaged grout or cement mortar and no loose brickwork.
- 3. The chimney may not be within six feet of the gable edge of the roof.
- 4. The restraint lines shall be padded where they touch angled, sharp, or rough surfaces.

III. Ground-Based Anchorage Travel Restraint Systems

A. Approved Ground-Based Anchorages

The following objects may be used as a single anchorage for a Travel Restraint System when the listed requirements are met.

- 1. **A mature tree** that, based upon visual inspection prior to use, meets the following requirements:
 - a. The tree has a trunk that appears to be at least 6.5 inches in diameter.
 - b. The tree shall be inspected prior to use by striking the trunk with a rubber mallet in at least three locations to determine if the inside of the tree is solid.

- c. The tree is substantially in line with and on the opposite side of the roof from the work being performed.
- d. The rope and/or webbing between the tree and the eaves is at as shallow an angle as possible to minimize the risk of anchor sling slippage and to maintain lateral load on the trunk.
- e. The anchor sling is installed as low to the ground as possible, is secure and remains in place (does not slide up the trunk). If nails or screws are used to secure the slings, they shall be placed above the sling (not through) and a minimum of three shall be used, spaced around the area where the sling contacts the trunk.
- f. If necessary, the rope/webbing shall be protected from any visible contact with tree sap.
- g. The tree trunk shall be substantially free of visible fungus, rot, cracks, splits, or decay.
- h. The tree trunk shall be close to vertical (i.e., not leaning significantly).
- i. The bark of the tree shall be healthy, primarily intact, and not loose.
- i. The tree shall not lean or give when pushed or pulled.
- k. The tree roots shall be substantially free of visible fungus or rot.
- 1. The tree roots shall not be bound between structures.
- m. The tree roots shall not be shallow.
- n. The tree crown shall have no or very few dead branches.
- o. The ground around the tree shall be free of large cracks or fissures.
- p. The ground around the tree shall show no evidence of upheaval.
 Note: Workers shall tie off to the largest-diameter tree available that meets the above requirements.
- 2. **A structural member** (such as a wooden structure or a metal structure) that, based upon visual inspection prior to use, meets the following requirements:
 - a. A wooden structure that is:
 - (1) Made from 4x4 lumber (which is actually $3\frac{1}{2}$ inches by $3\frac{1}{2}$ inches) or

equivalent (e.g., two 2"x4" lumber joined to form 4 x 4 lumber), or larger lumber.

- (2) Free of rot, cracks, and decay.
- (3) Substantially in line with and on the opposite side of the roof from the work being performed.
- b. A metal structure that is:
 - (1) Solidly connected to the building structure.
 - (2) Free of rust and corrosion.
 - (3) Substantially in line with and on the opposite side of the roof from the work being performed.
- c. The following shall not be used as anchorage points:
 - (1) Handrails;
 - (2) Pipes;
 - (3) Utility conduits;
 - (4) Vents; and
 - (5) Any other structure not intended or designed to be load bearing.
- 3. **A vehicle** that, based upon visual inspection prior to use, meets the following requirements:
 - a. Has a gross vehicle weight of at least 4,000 pounds.
 - b. The vehicle shall be parked on a clean, dry, stable surface.
 - c. The vehicle shall be in line with and on the opposite side of the roof from the work being performed, with the restraint line in line with the length of the vehicle.
 - d. The restraint line shall not cross the vehicle travel ways.
 - e. The vehicle shall be parked with the ignition off.
 - f. A vehicle with an automatic transmission shall be in "park." A vehicle with a manual transmission shall be in gear.
 - g. The vehicle shall have the parking brake set, wheels chocked to restrain movement of the vehicle in both directions, and doors locked.

- h. The keys to the vehicle shall remain with the worker performing the roof work.
- i. A tag shall be placed near the ignition warning that the vehicle is not to be moved.
- j. The restraint lines shall be connected to approved connection points on the vehicle, and shall be padded where they touch angled, sharp, or rough surfaces. The only approved connection points are the following:
 - (1) Around wheels;
 - (2) Through openings in rims;
 - (3) B pillar;
 - (4) Frame; and
 - (5) Axles.

IV. Roof Top Travel Restraint Systems Using Non-Penetrating Roof Anchorages

A. Description

A Non-Penetrating Roof Anchorage is one that secures onto a suitable component of the roof but is not nailed, screwed, or bolted to the roof component.

B. Conditions of Use

- 1. In cases where a system or its components are assembled, installed, and used in a manner consistent with the manufacturer's instructions and specifications for their use, and in accordance with their intended use, a Competent Person may assemble, install, or use it, or supervise the system's assembly, installation, or use. Otherwise, the determination that this system is safe and appropriate to use for fall protection under the circumstances at the site must be made by a Qualified Person.
- 2. This system may only be relied upon to provide fall protection while performing the work where the location and characteristics of the work, and the way the

Non-Penetrating Roof Anchorage is installed, will not dislodge the Non-Penetrating Roof Anchorage.

3. The roof slope is not more than the slope for which the system or its components are rated by the manufacturer.

APPENDIX B

PERSONAL FALL ARREST SYSTEMS

I. Use of Personal Fall Arrest Systems

A. Description

A personal fall arrest system means a system used to arrest an employee in a fall from a walking-working surface. A personal fall arrest system consists of a body harness, anchorage, and connector. The means of connection may include a lanyard, deceleration device, lifeline, or a suitable combination of these.

B. General Conditions for Use

Except as provided in this Agreement, use of a Personal Fall Arrest System shall be subject to all applicable provisions in 29 C.F.R. § 1910.140. The Personal Fall Arrest Systems described in this Appendix B may be used for Covered Tasks. These descriptions are requirements when the systems are being installed by a Competent Person, and safe harbor guidance if the person designing the Personal Fall Arrest System is a Qualified Person. A Qualified Person may, in the exercise of his/her knowledge, training and/or experience, determine that some of the criteria listed below may be modified.

II. Roof Top Personal Fall Arrest Systems Using Non-Penetrating Roof Anchorages

A. Description

A Non-Penetrating Roof Anchorage is one that secures onto a suitable component of the roof but is not nailed, screwed, or bolted to the component.

B. Conditions of Use

1. In cases where a system or its components are assembled, installed, and used in accordance with the manufacturer's instructions and specifications for their use,

and in accordance with their intended use, a Competent Person may assemble, install, or use the system, or supervise the system's installation or use.

Otherwise, the determination that this system is safe and appropriate to use as a personal fall arrest system under the circumstances at the site must be made by a Qualified Person.

- 2. This system may only be relied upon to provide fall protection while performing the work where the location and characteristics of the work, and the way the Non-Penetrating Roof Anchorage is installed, will not dislodge the Non-Penetrating Roof Anchorage.
- **3.** The roof slope is not more than the slope for which the system or its components are rated by the manufacturer.

APPENDIX C

NON-EXCLUSIVE LIST OF COVERED TASKS

The following is a non-exclusive list of Covered Tasks. These tasks are only covered by this Agreement to the extent they fall within the scope of General Industry activities rather than Construction activities.

- 1. Chimney sweeping
- 2. Install, remove and replace chimney covers or caps
- 3. Waterproof or paint chimney
- 4. Repair chimney crowns or chase covers
- 5. Repair chimney chase
- 6. Repair grouted/mortared joints
- 7. Replace metal chimney liners.
- 8. Replace broken/missing clay chimney liner tiles.
- 9. Replace broken/missing masonry units.
- 10. Repair flashing
- 11. Repair roof flue or mechanical exhaust vents
- 12. Replace shingles

The term "Covered Tasks" includes any other similar chimney maintenance or repair tasks that do not constitute construction.

SPECIAL ACCESS TASKS

In some situations, the only practical means of accessing the top of the chimney to perform a Covered Task is by placing the feet of a portable ladder on the surface of the roof and leaning it against the chimney. In those situations, two types of ladders may be used and fall protection must be carefully planned. Use of a portable ladder for this purpose must comply with 29 C.F.R. 1910.23(c)(4).

Ladder Options:

- 1. Use a straight portable ladder lashed tightly against the chimney at two different heights with both legs sitting firmly on the surface of the roof to provide firm support and prevent movement of the ladder. An appropriate rigid spacer may be used at the bottom between the ladder and the chimney to provide a slight incline that makes it easier to climb and descend the ladder.
- 2. Use a folding portable ladder with the back legs lashed tightly against the chimney at two different heights and both front legs sitting firmly on the surface of the roof, or a level platform designed for this purpose, in order to provide firm support and prevent movement of the ladder.

Fall Protection:

A Competent Person must determine whether a Chimney-Based Travel Restraint System is required in addition to any other fall protection systems that have been set up to perform the Covered Tasks.

APPENDIX D

MODEL TEMPLATE FOR

FALL PREVENTION PLAN FOR COVERED TASKS

(for purposes of illustration)

This written plan must be completed, and the fall protection measures required under the December 1, 2023, NCSG-OSHA Settlement Agreement must be in place before performing Covered Tasks under the Settlement Agreement. If, after the rooftop work begins, the nature or scope of the tasks to be performed is modified or there is a change in conditions, the Competent Person must review this plan and either determine that it continues to be effective or make any necessary changes before continuing work. This plan must be provided to OSHA upon request.

Customer:	Date:	Time:
Address:		
Names of employees assigned to job:		
Task(s) to be performed:		

		DIRECTIONS FOR USE OF THIS FORM
		 For each Covered Task to be performed, identify: (1) the Covered Task; (2) the location on the roof where it will be performed; (3) the method and location of roof access; (4) whether the Covered Task requires a portable ladder on the roof to reach the top of a chimney; and (5) the fall protection option(s) that will be employed. Multiple tasks should be grouped and covered by one set of entries if the Hazard Assessment and Implementation Plan (e.g., same fall protection plan) for the grouped tasks is the same. Tasks performed with different fall protection set-ups must not be grouped.
		HAZARD ASSESSMENT & IMPLEMENTATION PLAN
		Covered Task (or Grouped Tasks) 1
Item	Yes	Item
#	/No	
1		Location of Covered Task (or grouped Covered Tasks) on roof, including estimated distance to edge of roof:

STIPULATION AND SETTLEMENT AGREEMENT

Between the National Chimney Sweep Guild and the U.S. Department of Labor

2	Location of Roof Access, including estimated distance from access to Covered Task: Method of Roof Access:
3	Slope(s) of Roof: Composition of Roof Surface(s):
4	Does the roof have the structural integrity to support the workers and work to be performed without supplemental equipment? If "no," specify the Special Measures that will be required in Item 14.
5	Does the roof provide an adequate walking/working surface for the job (e.g., good traction, even surface)? If "no," specify the Special Measures that will be required in Item 14.
6	Are there any obstacles to accessing the roof or performing the Covered Tasks that need to be addressed? If "yes," identify the obstacles and specify the Special Measures that will be required in Item 14.
7	Does the Task Require a Portable Ladder on the Roof to Reach the Top of a Chimney? If "yes," enter "X" in applicable blank to identify ladder.) Use a straight portable ladder lashed tightly against the chimney at two different heights with both legs sitting firmly on the surface of the roof to provide firm support and prevent movement of the ladder. Use a folding portable ladder with the back legs lashed tightly against the chimney at two different heights and both front legs sitting firmly on the surface of the roof to provide firm support and prevent movement of the ladder.
8	Was a fall hazard assessment performed and was it based on the Covered Task(s) to be performed and conditions at the worksite, taking into account factors such as weather conditions (e.g., wind, rain, snow, moss, moisture, temperature), condition of the roof, access to the roof and to the location where the Covered Task will be performed, roof pitch, type of surface, presence of skylights or utility lines, required equipment and materials, time to perform the Covered Task, and number of employees assigned to the job and on the roof?
9	Does the roof have guardrails or anchors for a personal fall protection system that would provide complete fall protection when accessing and performing the Covered Task? If "yes": use them and skip to Item 11. If "no": proceed to Item 10 to develop and implement a Fall Prevention Plan before work is allowed to proceed.

	Fall Protection Options
10.A	Is fall protection required during access to and from the Covered Task(s)? Y or N
	If "No," explain why by checking applicable box below and skip to Question 10.B. Fall
	protection is Not required because task will be:
	Performed from Roof Hook Ladder that can be set up without using fall protection.
	Performed from portable ground ladder.
	Performed from Aerial Work Platform.
	Other. Explain:
	If "Yes," place an "X" in the box next to each measure that will be used.
	Use Existing Fall Protection Anchorages located at:
	Use a Fall Protection Aid. Specify aid:
	Use a Travel Restraint System with a Ground-Based Anchorage
	Specify Anchorage:
	Use a Roof Top Travel Restraint System with a Non-Penetrating Roof
	Anchorage
	Specify Anchorage:
	Use a Roof Top Personal Fall Arrest System with a Non-Penetrating Roof
	Anchorage
	Specify Anchorage:
	Use a Personal Fall Arrest System with a Ground-Based Anchorage*
	Specify Anchorage:
	*This approach is not authorized by the Settlement Agreement with OSHA. It may be used, in compliance with relevant OSHA standards, if fall protection is required and
	the fall protection options in the Agreement are infeasible or pose a greater hazard,
	pursuant to Occupational Safety and Health Review Commission precedent. Such use
	must be documented.

STIPULATION AND SETTLEMENT AGREEMENT

Between the National Chimney Sweep Guild and the U.S. Department of Labor

	Is interim fall protection required while setting up or removing the fall
10.B	protection that will be used while performing the Covered Task(s)? Y or N.
	If "No," explain why by checking applicable box below and skip to Question 10.C. Fall
	protection is Not required because task will be:
	Performed from Roof Hook Ladder that can be set up without using fall protection.
	Performed from portable ground ladder.
	Performed from Aerial Work Platform.
	Other. Explain:
	If "Yes," place an "X" in the box next to each measure that will be used.
	Use Existing Fall Protection Anchorages located at:
	Use a Fall Protection Aid. Specify aid:
	Use a Travel Restraint System with a Ground-Based Anchorage
	Specify Anchorage:
	Use a Roof Top Travel Restraint System with a Non-Penetrating Roof
	Anchorage
	Specify Anchorage:
	Use a Chimney-Based Travel Restraint System
	Ose a Chimney Dasea Travel Restraint System
	Use a Roof Top Personal Fall Arrest System with a Non-Penetrating Roof
	Anchorage
	Specify Anchorage: Use a Personal Fall Arrest System with a Ground-Based Anchorage*
	Use a Personal Fall Arrest System with a Ground-Based Anchorage*
	Specify Anchorage:
	*This approach is not authorized by the Settlement Agreement with OSHA. It may be
	used, in compliance with relevant OSHA standards, if fall protection is required and
	the fall protection options in the Agreement are infeasible or pose a greater hazard
	pursuant to Occupational Safety and Health Review Commission precedent. Such use
	must be documented.
10.0	Is fall protection is required while performing the Covered Task(s)? Y or N
10.C	If "No," explain why by checking applicable box below and skip to Question 11. Fall
	protection is Not required because task will be:
	Performed from Roof Hook Ladder that can be set up without using fall protection.
	Performed from portable ground ladder.
	Performed from Aerial Work Platform.
	Other. Explain:
	If "Yes," place an "X" in the box next to each measure that will be used.
	Use Existing Fall Protection Anchorages located at:
	OSC Existing Fan i Totection Amenorages located at.
	Use a Fall Protection Aid. Specify aid:
	Use a Travel Restraint System with a Ground-Based Anchorage
	Specify Anchorage:
	Use a Roof Top Travel Restraint System with a Non-Penetrating Roof
	Anchorage
	Specify Anchorage:

	Use a R Anchor Sp Use a P Spe * This approach is used, in compliance the fall protection	rage pecify Anchorage: personal Fall Arrest System pecify Anchorage: pecify Anchorage: pecify Anchorage: pecify Anchorage pec	estraint System rrest System with a Non-Penetrating Roof em with a Ground-Based Anchorage* ettlement Agreement with OSHA. It may be tandards, if fall protection is required and nt are infeasible or pose a greater hazard, th Review Commission precedent. Such use
11		juipment (other than PPE) r	required to perform the planned tasks. sport them in Item 14.
12	Identify any PPE rec	quired to perform the planno	ed tasks.
13	Identify any measure	es needed to protect individ	duals from falling objects.
14	Identify any Special	Measures required for the j	job.
15	•	0 0	l Prevention Plan and determined that it provides ls for the work to be performed.
	Name	Date	Signature

 From:
 Michael Donlon

 To:
 DIR OSHSB

 Subject:
 Residential Fall Protection

 Date:
 Monday, April 22, 2024 1:06:05 PM

 Attachments:
 OSHSB Res Fall Pro 042224.pdf

CAUTION: [External Email]

This email originated from outside of our DIR organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe. If in doubt reach out and check with the sender by phone.

Please see the attached comments for the residential fall protection rulemaking.

Regards,

Michael Donlon, PE, CSP

MD Safety Service LLC

(916) 834-1896

mdonlon@mdsafetyservice.com www.mdsafetyservice.com



MD Safety Service LLC

Michael Donlon, PE, CSP mdonlon@mdsafetyservice.com (916) 834-1896

Autumn Gonzales, Acting Executive Officer Occupational Safety and Health Standards Board 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833

April 22, 2024

Re: Fall Protection in Residential Construction

Dear Ms. Gonzales,

This rulemaking is unnecessary because California's fall protection regulations are more effective than OSHA's. Looking at the data available one statistic stands out. Deaths in construction by slips, trips, and falls. These are fatalities so most are falls from elevation. It is all of construction, but California has a history of targeting the regulations to the work and California's fall protection trigger heights are equal to or higher than OSHA's. So, this talks to a philosophy that works versus one that does not. California targets the regulation at the hazard and OSHA implements an arbitrary 6-foot rule.

California has about 900,000 construction workers and had 29 fatal falls in construction in 2022. That is 3.2 deaths from falls per 100,000 construction workers. There are two states, under OSHA jurisdiction, with the 6-foot rule, that have a similar number of constructions workers. Texas has about 800,000 construction workers and has 5.7 deaths from falls per 100,000 construction workers. That is 56% more deaths from falls than California. Florida has about 600,000 construction workers and has 7.7 deaths from falls per 100,000 construction workers. That is 83% more deaths from falls than California. These states, are under OSHA jurisdiction, follow the 6-foot rule, have fewer construction workers but more deaths from falls than California. Outside California most states follow OSHA regulations and the 6-foot rule. Nationwide there are around 8 million construction workers and 5.1 deaths from falls per 100,000 construction workers. That is 46% more deaths from falls than California.

2022 Deaths in construction by slips, trips, and falls				
State	Construction	Fatal slips,	Per 100,000	% Difference
	employees (rounded)	trips & falls		
CA	900,000	29	3.2	
TX	800,000	46	5.7	56%
FL	600,000	46	7.7	83%
All States	8,000,000	410	5.1	46%

The effectiveness of regulations must be measures in lives not lost, not in feet. California does it better. The philosophy of getting input from the workers and creating safe work practices is better than picking an arbitrary number. California's fall protection rules are more effective.

Regards,

Michael Donlon, PE, CSP MD Safety Service LLC



From: Neidhardt, Amalia@DIR

To: Gonzalez, Autumn@DIR; DIR OSHSB

Subject: FW: 2nd 15-Day Notice of Proposed Modifications - Fall Protection in Residential Construction

Date: Friday, July 12, 2024 4:14:58 PM

Attachments: image002.png

image004.png image005.png image006.png

OSHA Position Res Fall Protection Letter.pdf

From: Donnald, Mark L. - OSHA < Donnald. Mark. L@dol.gov>

Sent: Friday, July 12, 2024 4:10 PM

To: Neidhardt, Amalia@DIR <ANeidhardt@dir.ca.gov>; Dietrich, Cathy@DIR <CDietrich@dir.ca.gov>

Cc: Wilsey, Peter - OSHA <Wilsey.Peter@dol.gov>; Wulff, James - OSHA <Wulff.James@dol.gov>; Brooks, Eric - OSHA

<Brooks.Eric@dol.gov>; Delicana, Loren - OSHA <Delicana.Loren@dol.gov>; Engard, Derek J. - OSHA <engard.derek@dol.gov>

Subject: RE: 2nd 15-Day Notice of Proposed Modifications - Fall Protection in Residential Construction

CAUTION: [External Email]

This email originated from outside of our DIR organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe. If in doubt reach out and check with the sender by phone.

Hello Ma'am,

Attached above is OSHA's position on Fall Protection in Residential Construction. If you have any questions, please don't hesitate to reach out. Thank you for your time.

Respectfully,

Mark Donnald









CONFIDENTIALITY NOTICE: This communication with its contents, to include attachments (if any) may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use, or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. Delivery of this message to any person other than the intended recipient is not intended to waive any right or privilege. If you have received this transmission in error, please contact the sender by reply e-mail, delete the original email from your system and destroy all copies with its contents of the communication.

From: Dietrich, Cathy@DIR < CDietrich@dir.ca.gov>

Sent: Thursday, June 27, 2024 1:39 PM

To: Engard, Derek J. - OSHA < engard.derek@dol.gov >

Cc: Wilsey, Peter - OSHA < Wilsey, Peter@dol.gov >; Delicana, Loren - OSHA < Delicana, Loren@dol.gov >; Gonzalez, Autumn@DIR

<a href="mailto:ARGonzalez@dir.ca.gov>; Ibarra, Ruth@DIR RIbarra@dir.ca.gov>

Subject: Notice of Proposed Modifications

CAUTION: This email originated from outside of the Department of Labor. Do not click (select) links or open attachments unless you recognize the sender and know the content is safe. Report suspicious emails through the "Report Phishing" button on your email toolbar.

Hi Derek,

Please find the second Notice of Proposed Modifications to Fall Protection in Residential Construction below.

 $\underline{https://www.dir.ca.gov/oshsb/documents/Fall-Protection-in-Residential-Construction-2nd-15-Day.pdf}$

If you have any questions, please email or call me.

Thank you, Cathy

Cathy Dietrich Program Analyst Occupational Safety and Health Standards Board 916.274.5728



U.S. Department of Labor

Occupational Safety and Health Administration Ronald Dellums Federal Building 1301 Clay Street, Suite 1080N Oakland, CA 94612



July 12, 2024

Amalia Neidhardt Principal Safety Engineer Occupational Safety and Health Standards Board 2520 Venture Oaks Way, Suite 350 Sacramento, California 95833

Amalia Neidhardt:

This letter is in response to the June 26, 2024, Second Notice of Proposed Modifications to California Code of Regulations Title 8: Sections 1671.1 Fall Protection Plan; 1716.2 Residential-type Framing Activities, Wood and Light Gage Steel Frame Construction; 1730 Roof Hazards; and 1731 Residential-type Roofing Activities as it relates to Fall Protection in Residential Construction.

We acknowledge the efforts made by the Occupational Safety and Health Standards Board to address items not as least as effective (ALAE) as the OSHA standard in the first proposed modification and as outlined in OSHA's April 30, 2024, letter. However, our initial review indicated areas of concern with the second notice of proposed modifications and OSHA reserves the right to comment further, as needed.

Section 1716.2(e)(2) Residential-type Framing Activities, Work on Top Plate, Joists and Roof Structure Framing provides an alternative to a fall protection plan. Section 1671.1 now contains a presumption that conventional fall protection is feasible and will not create a greater hazard. However, the proposed language allows for employers to follow (A) through (C) in lieu of the requirement to prove infeasibility. This alternative, which applies only to framing work, adds a degree of ambiguity and broad interpretation to render ineffective the general requirement for conventional fall protection.

In addition, Section 1730(a) Roof Hazards states that during roofing operations the employer shall comply with the provisions of Section 1509 with an exception that this does not apply to residential-type roofing activities as defined in Section 1731. California employers are required to establish, implement, and maintain an Injury Illness Prevention Program, it is not clear why employers engaged in roofing operations do not need to follow Section 1731 and raises ALAE questions when compared to 29 Code of Federal Register 1926.20 and 1926.21.

OSHA recognizes that State Plans have varied procedures for adopting occupational safety and health standards and regulations. However, as you are aware, OSHA-approved State Plans must have and enforce standards in a manner that is ALAE as OSHA, as required by section 18(c)(2) of the Occupational Safety and Health Act of 1970 ("OSH Act"), 29 U.S.C. § 667(c)(2). This has been a long-standing issue and California must have the ability to

adopt required standards and regulations within the regulatory timeframe permitted by OSHA, which is generally six months.

In the interest of providing California workers the same, or higher, level of protection under OSHA's program, the requirements must be described in a manner which makes clear to residential construction employers what requirements apply to residential construction activities. Therefore, we respectfully request that these concerns be addressed in an expeditious manner in addition to the other related California standards mentioned below to avoid reaching an adverse ALAE determination with respect to the California State Plan.

- Construction Safety Orders, Article 24, Section 1669, General
- Construction Safety Orders, Article 24, Section 1670, Personal Fall Arrest Systems, Personal Fall Restraint Systems and Positioning Devices
- Construction Safety Orders, Article 24, Section 1671, Safety Nets General
- Construction Safety Orders, Article 30, Section 1724, Roofing-General

Should you have any questions or concerns, please contact me at (619) 557-2910 or engard.derek@dol.gov.

Sincerely,

Mark Donnald Assistant Area Director for Derek Engard Area Director
 From:
 Bland, Kevin D.

 To:
 DIR OSHSB

Cc: Bruce Wick; Donluan, Alba; jodi@hutechgroup.com; richard.grant.harris@gmail.com

Subject: Response to 2nd 15 Day Notice - Residential Fall Protection Rulemaking Proposal

Date: Monday, July 15, 2024 1:43:58 PM

Attachments: Coalition comments -Response to 2nd 15 Day Notice - Residential Framing Fall Protection - 07-15-2024.pdf

CAUTION: [External Email]

This email originated from outside of our DIR organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe. If in doubt reach out and check with the sender by phone.

Dear Standards Board:

Attached please find our comment letter in response to your 2nd 15 Day notice in the Residential Fall Protection proposed rulemaking.

Thank you,

Kevin

Kevin D. Bland | Ogletree Deakins

Park Tower, 695 Town Center Drive, Fifteenth Floor | Costa Mesa, CA 92626 | Telephone: 714-800-7935 | Mobile: 949-813-1120 kevin.bland@ogletree.com | www.ogletree.com | Bio

This transmission is intended only for the proper recipient(s). It is confidential and may contain attorney-client privileged information. If you are not the proper recipient, please notify the sender immediately and delete this message. Any unauthorized review, copying, or use of this message is prohibited.







April 17, 2024

Chair Joseph Alioto and Board Members Occupational Safety & Health Standards Board Department of Industrial Relations, State of California 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833

Submitted electronically: oshsb@dir.ca.gov

SUBJECT: 2nd 15 DAY NOTICE RESPONSE TO FALL PROTECTION IN

RESIDENTIAL CONSTRUCTION, CSO SECTIONS 1671.1, 1716.2, 1730 AND 1731 COMMENTS ON PROPOSED TEXT

FOR ADOPTION.

Dear Chair Alioto and Members of the Board:

The California Framing Contractors Association along with the Residential Contractors Association and the Housing Contractors of California submit this letter to provide comment on the Fall Protection in Residential Construction 2nd 15 day notice to draft regulations (the "Draft Regulation"). The Coalition represents employers both Union and Non-Union, large and small who engage in residential framing. Our recommended revisions are essential to employee safety in residential framing construction.

Many members of the Coalition were involved with the development and implementation of the original regulation for residential construction (Section 1716.2) and have significant experience with how to effectively and safely prevent injuries and falls during the framing activities. California workers engaged in residential framing have significantly benefitted from the current standard that has been in place and effective in California for over 20 years. California has lead the way in reducing falls in residential construction with the development of the current regulation. Hundreds of thousands of both union and non-union carpenters have been trained on each task and process under 1716.2 over the past 20 years. It is vital that California puts safety of its residential framing workers above the political pressures of the Federal attempt to undermine the safe and effective processes outlined in the current 1716.2 regulation.

We take the safety and health of our employees very seriously – and though we oppose the Draft Regulation, we hope the below comments provide helpful input regarding improving the final text, should it be passed by the Standards Board.

Incorporation Statement:

The previous rationale provided in our previous comment letters and testimony provided at the Board meetings during the hearing and public comment are hereby incorporated by reference in support of our position and concerns in addition to the specific responses set forth below.

Changes to 15 day notice of proposed Section 1716.2 (e)(2):







Below changes must be made to section 1716.2 (e)(2) to ensure consistent safety, enforcement, and compliance for the working men and women in residential framing construction in California. Suggested revisions in "red" below:

- (2) When walking/working on top plates, joists, rafters, trusses, beams or other similar structural members for interior framing activities between 6 and 15 feet above the surrounding grade or floor level below and all requirements in paragraphs (A) through (C) are met, the employer may use the Appendix A fall protection plan or establish a fall protection plan with safety monitors and controlled access zones as described in Sections 1671.1 and 1671.2, instead of the conventional fall protection methods specified in subsection (e)(1):
- 1. For structural members, they shall either be securely braced or during installation, are laid on their sides on the top plate; and,
- 2. <u>either the center spacing between structural members shall not exceed 24 inches</u> or plywood sheathing shall be laid down to cover the spacing between structural members; <u>and</u>
- 3. Employees are more than 6 feet from an unprotected exterior side or edge.

Appendix A rationale:

There is no rational basis for Federal OSHA to not allow California to incorporate in its proposal the use of Appendix A in the 1716.2 proposal. Appendix A is word or word identical to Federal OSHA's Appendix E of subpart M as it relates to residential construction. The appendix is accepted and an integral part of Fed OSHA's fall protection regulation as it relates to residential fall protection. By including Appendix A, the fall protection process outlined in the plan, will insure consistent safety measures from contractor to contractor in the industry. This consistency ensures that employees are trained consistently and provides clarity. Further, this appendix has a very narrow application in the California standard that is much more effective that the Federal standard in that it is limited in use to "interior" framing activities. This is not the case in the Federal regulation in that it applies to all residential construction with no narrowing language such as what is proposed above.

Addition of "exterior" to subsection (2)(c):

In reviewing this second 15-day notice, there was an oversight in (c) that was not identified. In the original 1716.2, this language was intended and interpreted in the context of the regulation to mean the exterior. Now, with the revisions proposed, it is necessary to clarified clearly what side or edge that this is in reference to for this section. Without this revision, the section for interior framing is rendered useless because not all structural members such as joists and trusses span the entire distance from perimeter wall to perimeter wall. In order to frame from an interior wall with







in this section, one could, and likely would, consider the side in which the truss or joist ends at an interior wall would not be in compliance with the condition of (c) during the installation process. This renders the section infeasible in practice. In previous written and oral comments, the infeasibility of conventional fall protection on interior walls has been thoroughly explained to proven. Thus, this single word, "exterior" solves that issue.

Clarity of intent of subsection (2)(A)(B) and (c):

It is our understanding that a fall protection plan can be used without further burdens beyond meeting the requirements of subsections (A), (B), and (C). In other words, if the framing is "interior" and those three subsections are complied with, a fall protection plan is accepted. If this is the intent of the Board for this section, then this is acceptable as long as revisions are made to include BOTH Federal OSHA's Appendix E as 1716.2 Appendix A AND the addition of the word "exterior" in subsection (2)(C).

Rule Making Notice Defect:

This second 15-day notice made a significant change to Title 8 Section 1671.1. It strikes an important note, that should not be stricken.

The problem continues to be that the changes are improperly noticed. We reiterate our concerns as expressed below in our previous letter, and also request no changes be made to current Section 1671.1 due to the improper notice.

This rulemaking proposal has been noticed as a "Residential Fall Protection" proposal. However, the draft regulation contains a substantial change to Title 8 section 1671.1. This section applies to ALL construction. There has been no effort to include any other trades or contractors effected by the proposed change. The proposed change is substantial as is shown below:

(a) This section applies to all construction operations when it can be shown by the employer that the use of conventional fall protection is impractical infeasible or creates a greater hazard.

NOTE: There is a presumption that conventional fall protection is feasible and will not create a greater hazard. Accordingly, the employer has the burden of establishing that conventional fall protection is infeasible or creates a greater hazard.

First, the plain language indicates that this applies to "all construction" therefore, this section should be stricken from this proposal based on the lack of notice to all construction stakeholders. Further, Appendix E to Subpart M of Part 1926 of the Federal regulation provides a sample plan for use in residential construction that recognizes the hazards and infeasibility associated with residential framing activities (more on this late in this letter). OSHA and Cal-OSHA seems to ignore all the evidence that has been presented that conventional fall protection is infeasible, not practical and that it will create a greater hazard. Finally, for reference, see the CFR Section 1926.502(k) (fall protection plans) which does not incorporate any reference to the note or the presumption. To this end, the proposed changes to Section 1671.1 should be stricken from the proposed draft along with the note.







Effective Date of Proposed Regulation if Adopted

The cost of housing in California is skyrocketing. The bids and contracts for construction are very competitive. As you may know, if fall conventional fall protection is required on all first floors of residential structures, additional equipment must be purchased and the labor costs must be accounted for in bidding and contracts. Most bidding and contracts are done at least a year ahead of the actual work beginning. Also, the equipment suppliers will have a hard time ramping up availability for fall protection equipment needs of both the framing and roofing industry. The reroofing industry has not had to provide fall protection before, as they are being moved from a 20 foot trigger height. They will need time to develop fall protection programs, as well as purchase supplies. Therefore, should the Board adopt a new regulation, we request that the effective enforcement date of a proposed regulation be delayed for 12 months past the adoption date.

Conclusion

We continue to oppose the imposition of the less safe Federal regulation on our California workers. Our sole intent is to provide the safest means for our carpenters to frame residential structures.

Sincerely,

Kevin D. Bland

Kevin D. Bland, Esq.

cc: Autumn Gonzalez, Acting Executive Officer

Occupational Safety and Health Standards Board

Business Meeting Petition 603

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD 2520 Venture Oaks Way, Suite 350

Sacramento, California 95833 (916) 274-5721

In the Matter of a Petition by:)	
Ricardo Beas) Safety Professional)) Applicant.	PETITION FILE NO. 603
The Occupational Safety and Heap PROPOSED DECISION.	alth Standards Board hereby adopts the attached
	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
	JOESEPH M. ALIOTO JR., Chairman
	KATHLEEN CRAWFORD, Member
	DAVE HARRISON, Member
	NOLA KENNEDY, Member
	CHRIS LASZCZ-DAVIS, Member
	DAVID THOMAS, Member
By:Autumn Gonzalez, Chief Counse	

DATE: August 15, 2024

Attachments

PETITION NO. 603

Petitioner requests to rescind the COVID-19 Prevention Non-Emergency Regulations (Title 8 sections 3205 through 3205.3), based on new information provided by confirmed scientific studies and federal health authorities. The Petitioner contends that recent findings by the federal Center for Disease Control and other scientific authorities have reduced the recommendations for Covid-19 protection. Therefore, the current Title 8 standards for Covid-19 are no longer needed.

The Petitioner contends that the COVID-19 non-emergency regulations pose an inconvenient, time consuming, costly, and unnecessary burden on employers in the state of California and are no longer necessary. One concern is that the regulations refer to the recommendations of the California Department of Public Health which have continued to vary since the inception of this recent version of the regulations and have required employers to be aware of and take action on. The Petitioner further contends that all other states that have rescinded similar regulations pertaining to COVID-19 and requests that the Board do the same.

HYPERLINKS TO PETITION NO. 598 DOCUMENTS:

PROPOSED PETITION DECISION

BOARD STAFF EVALUATION

CAL/OSHA EVALUATION

ORIGINAL PETITION (RECEIVED 03/11/2024)

Occupational Safety and Health Standards Board

Business Meeting Proposed Variance Decisions

CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS AUGUST 15, 2024, MONTHLY BUSINESS MEETING OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED DECISIONS FOR BOARD CONSIDERATION, HEARD ON July 24, 2024

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
1. 20-V-272M1	City of South San Francisco	Elevator	GRANT
2. 22-V-249M1	USA Construction Management	Elevator	GRANT
3. 22-V-358M1	11668 Darlington LLC	Elevator	GRANT
4. 22-V-382M1	CLG Nesbro Century City, LLC	Elevator	GRANT
5. 22-V-383M1	CLG Nesbro Century City, LLC	Elevator	GRANT
6. 22-V-407M1	Fairfield Fashion Valley LLC	Elevator	GRANT
7. 23-V-153M1	Pinnacle 350 Hoover, LLC	Elevator	GRANT
8. 23-V-232M1	The Lair QOZB LLC	Elevator	GRANT
9. 24-V-260	123 Huntington LLC	Elevator	GRANT
10. 24-V-305	Taylor Farms	Elevator	GRANT
11. 24-V-306	Merced Holdings, LP	Elevator	GRANT
12. 24-V-307	Aldersly, a California Corporation	Elevator	GRANT
13. 24-V-308	ZARA USA, Inc.	Sleep Mode Escalators	GRANT
14. 24-V-309	ZARA USA, Inc.	Elevator	GRANT
15. 24-V-310	Burbank Boyz II, LLC	Elevator	GRANT
16. 24-V-311	John Wayne Airport	Sleep Mode Escalators	GRANT
17. 24-V-312	AREC RR Woodlake JV, LLC	Elevator	GRANT
18. 24-V-313	Cal Poly Humbolt	Elevator	GRANT
19. 24-V-314	Cal Poly Humbolt	Elevator	GRANT
20. 24-V-315	Cedars-Sinai	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
21. 24-V-316	Homefed Village 8 LLC	Elevator	GRANT
22. 24-V-317	Homefed Village 8 LLC	Elevator	GRANT
23. 24-V-318	Christian Church Homes (CCH)	Elevator	GRANT
24. 24-V-319	JPI Development LLC	Elevator	GRANT
25. 24-V-320	JPI Development LLC	Elevator	GRANT
26. 24-V-321	1540 7th Street Owner, LLC	Elevator	GRANT
27. 24-V-322	Resources for Community Development	Elevator	GRANT
28. 24-V-323	IDB, LLC	Elevator	GRANT
29. 24-V-324	Applied Materials, Inc.	Elevator	GRANT
30. 24-V-325	United Playaz	Elevator	GRANT
31. 24-V-326	Tulip, LP	Elevator	GRANT
32. 24-V-327	Tulip, LP	Elevator	GRANT
33. 24-V-328	2535 Alsace Ave (LA) OZ Owner, LLC	Elevator	GRANT
34. 24-V-329	URSA 1037 Dewey Ave LLC	Elevator	GRANT
35. 24-V-330	Eastvale Palace LLC	Elevator	GRANT
36. 24-V-331	CCDC	Elevator	GRANT
37. 24-V-332	5223 Lindley, LP	Elevator	GRANT
38. 24-V-333	San Mateo County Historical Association	Elevator	GRANT
39. 24-V-334	14th & Callan Street Owner, LLC	Elevator	GRANT
40. 24-V-335	Del Sur Family Housing, L.P.	Elevator	GRANT
41. 24-V-336	Del Sur Family Housing, L.P.	Elevator	GRANT
42. 24-V-337	Tuolumne Economic Development Authority, Inc.	Elevator	GRANT
43. 24-V-338	1280 N Sweetzer LLC	Elevator	GRANT
44. 24-V-339	City of Ontario	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
45. 24-V-340	MirKa South River Village, LP	Elevator	GRANT
46. 24-V-341	Campus Pointe Annex Hotel LLC	Elevator	GRANT
47. 24-V-342	1413 Howe Ave LP	Elevator	GRANT
48. 24-V-343	SC103 SPE LLC	Elevator	GRANT
49. 24-V-344	Redcar Properties	Elevator	GRANT
50. 24-V-345	Lucia Mar Unified School District	Elevator	GRANT
51. 24-V-346	Millenia Lot 19 Owner LLC	Elevator	GRANT
52. 24-V-347	Millenia Lot 19 Owner LLC.	Elevator	GRANT
53. 24-V-348	Millenia Lot 19 Owner LLC	Elevator	GRANT
54. 24-V-349	Sorenson Engineering, Inc.	Elevator	GRANT
55. 24-V-350	LoveFrom 809-831, LLC	Elevator	GRANT
56. 24-V-351	Kuvera Partners	Elevator	GRANT
57. 24-V-352	Montecito, L.P.	Elevator	GRANT
58. 24-V-353	Serenade 43, LP	Elevator	GRANT

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 20-V-272M1 Proposed Decision Dated: July 25, 2024
City of South San Francisco	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached aring Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON, Member	ADOPTED ON THE DATE INDICATED ABOVE IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application to Modify
Permanent Variance by:

City of South San Francisco

Permanent Variance No.: 20-V-272M1

PROPOSED DECISION

Hearing Date: July 24, 2024

Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
20-V-272	City of South San Francisco	SSF Police Operations & 911
		Dispatch Center
		900 Antoinette Lane
		South San Francisco, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit, in accordance with section 426.
- 2. At the hearing Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code fo Regulations, title 8.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 20-V-272.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 20-V-272 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- Cal/OSHA has evaluated the request for modification of variance location address, finds
 no issue with it, and recommends that the application for modification be granted
 subject to the same conditions of the Decision and Order in Permanent Variance No. 20V-272.
- 4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 20-V-272 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 20-V-272, to be:

SSF Police Operations & 911 Dispatch Center

1 Chestnut Ave.

South San Francisco, CA

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 20-V-272M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 20-V-272, and 20-V-272M1, shall have the following address designation:

SSF Police Operations & 911 Dispatch Center
1 Chestnut Ave.
South San Francisco, CA

2. Permanent Variance No. 20-V-272, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 20-V-272M1.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024

Michelle Lorio

Michelle Iorio, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 22-V-249M1 Proposed Decision Dated: July 25, 2024
USA Construction Management	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Health	Standards Board hereby adopts the attached aring Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON, Member	ADOPTED ON THE DATE INDICATED ABOVE IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized

In the Matter of Application to Modify Permanent Variance by: USA Construction Management	Permanent Variance No.: 22-V-249M1 PROPOSED DECISION
	Hearing Date: July 24, 2024 Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
22-V-249	USA Construction Management	7711 N. Ventura Ave., Building 2 Panorama City, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Ocupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural Matters

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit, in accordance with section 426.
- 2. At the hearing, James Day, with TK Elevator, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 22-V-249.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 22-V-249 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- 3. Cal/OSHA has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 22-V-249.
- 4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 22-V-249 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 22-V-249, to be:

7710 N. Ventura Canyon Ave. Panorama City, CA

D. Decision and Order

1. Permanent Variance Application No. 22-V-249M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator

being the subject of Permanent Variance Nos. 22-V-249, and 22-V-249M1, shall have the following address designation:

7710 N. Ventura Canyon Ave. Panorama City, CA

2. Permanent Variance No. 22-V-249, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 22-V-249M1.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024 Michelle Lorio

Michelle Iorio, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 22-V-358M1 Proposed Decision Dated: July 25, 2024
11668 Darlington LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached aring Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON, Member	ADOPTED ON THE DATE INDICATED ABOVE IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 22-V-358M1
11668 Darlington LLC	PROPOSED DECISION
	Hearing Date: July 24, 2024 Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Preexisting Variance Holder of Record
22-V-358	Benjamin Cohanzad

 This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on July 24, 2024, in Sacramento, California, via videoconference, by the Board, with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2. At the hearing, Fuei Saetern, with KONE, Inc., appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-4	Cal/OSHA Review of Variance Application
PD-5	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. <u>Findings of Fact</u>

- The Applicant requests modification of the variance holder specified within Board records for each elevator the subject of previously granted Permanent Variance No. 22-V-358.
- Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states that the person or entity named in Application section 1, 11668 Darlington LLC, became the owner of the conveyance(s) subject to the existing variance referenced in Application section 2, as the term conveyance owner is defined per California Code of Regulations, title 8, section 403(o).
- 3. Cal/OSHA has evaluated the request for modification of person or entity of record holding Permanent Variance No. 22-V-358, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 22-V-358.
- 4. The Board finds the Application section 3, declaratory statements of the Applicant signatory to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which, in substantial part, grant of preexisting Permanent Variance No. 22-V-358 was based.
- 5. The Board finds the current person or entity having custody of each elevator the subject of Permanent Variance No. 22-V-358, to be in fact:

11668 Darlington LLC

D. Decision and Order

1. Variance application 22-V-358M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 22-V-358, and Permanent Variance No. 22-V-358M1, shall be:

11668 Darlington LLC

- 2. Permanent Variance No. 22-V-358, only being modified as specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 22-V-358M1.
- 3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 4. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed for its issuance or per duly adopted superseding procedural rules.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: 7/25/2024

Michelle Lorio
Michelle Iorio, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 22-V-382M1 Proposed Decision Dated: July 25, 2024
CLG Nesbro Century City, LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Health	Standards Board hereby adopts the attached aring Officer.
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING
NOLA KENNEDY, Member	MAY BE FILED BY ANY PARTY WITH THE STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be

provided to the employees' Authorized

In the Matter of Application to Modify

Permanent Variance by:

CLG Nesbro Century City, LLC

Permanent Variance No.: 22-V-382M1

PROPOSED DECISION

Hearing Date: July 24, 2024

Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent	Applicant Name	Preexisting Variance
Variance No.		Address of Record
22-V-382	22 V 292 CLC Nochro Contury City II C	10310 W. Santa Monica Blvd. 1-9
22-V-382 CLG Nesbro Century City, LLC		Los Angeles, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. <u>Procedural</u>

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit, in accordance with section 426.
- 2. At the hearing Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code fo Regulations, title 8.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 22-V-382.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 22-V-382 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- Cal/OSHA has evaluated the request for modification of variance location address, finds
 no issue with it, and recommends that the application for modification be granted
 subject to the same conditions of the Decision and Order in Permanent Variance No. 22V-382.
- 4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 22-V-382 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 22-V-382, to be:

10310 W. Santa Monica Blvd. Los Angeles, CA

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 22-V-382M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 22-V-382, and 22-V-382M1, shall have the following address designation:

10310 W. Santa Monica Blvd. Los Angeles, CA

2. Permanent Variance No. 22-V-382, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 22-V-382M1.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024

Michelle Iorio, Hearing Officer

Michelle clorio

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 22-V-383M1 Proposed Decision Dated: July 25, 2024
CLG Nesbro Century City, LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached ring Officer.
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
Division in manager	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST
CITRIS LASZCZ-DAVIS, METIBEI	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
	read, and/or a copy thereof must be
	provided to the employees' Authorized

In the Matter of Application to Modify

Permanent Variance by:

PROPOSED DECISION

CLG Nesbro Century City, LLC

Hearing Date: July 24, 2024

Permanent Variance No.: 22-V-383M1

Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent	Applicant Namo	Preexisting Variance
Variance No.	Applicant Name	Address of Record
22 1/ 202	CLC Nochra Contuny City II C	10310 W. Santa Monica Blvd. 1-9
22-V-383 CLG Nesbro Century City, LLC		Los Angeles, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. <u>Procedural</u>

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit, in accordance with section 426.
- 2. At the hearing Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code fo Regulations, title 8.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 22-V-383.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 22-V-383 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- Cal/OSHA has evaluated the request for modification of variance location address, finds
 no issue with it, and recommends that the application for modification be granted
 subject to the same conditions of the Decision and Order in Permanent Variance No. 22V-383.
- 4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 22-V-383 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 22-V-383, to be:

10310 W. Santa Monica Blvd. Los Angeles, CA

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 22-V-383M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 22-V-383, and 22-V-383M1, shall have the following address designation:

10310 W. Santa Monica Blvd. Los Angeles, CA

2. Permanent Variance No. 22-V-383, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 22-V-383M1.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: <u>July 25, 2024</u>

Michelle Iorio, Hearing Officer

Michelle clorio

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 22-V-407M1 Proposed Decision Dated: July 25, 2024
Fairfield Fashion Valley LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached ring Officer.
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
,	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized

In the Matter of Application to Modify
Permanent Variance by:

Pairfield Fashion Valley LLC

PROPOSED DECISION

Hearing Date: July 24, 2024
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
22-V-407	Fairfield Fashion Valley LLC	7020 Friars Rd. San Diego, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit, in accordance with section 426.
- 2. At the hearing Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code fo Regulations, title 8.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 22-V-407.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 22-V-407 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- Cal/OSHA has evaluated the request for modification of variance location address, finds
 no issue with it, and recommends that the application for modification be granted
 subject to the same conditions of the Decision and Order in Permanent Variance No. 22V-407.
- 4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 22-V-407 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 22-V-407, to be:

7050 Friars Rd. San Diego, CA

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 22-V-407M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 22-V-407, and 22-V-407M1, shall have the following address designation:

7050 Friars Rd. San Diego, CA

2. Permanent Variance No. 22-V-407, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 22-V-407M1.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024

Michelle Iorio, Hearing Officer

Michelle clorio

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 23-V-153M1 Proposed Decision Dated: July 25, 2024
Pinnacle 360 Hoover, LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached ring Officer.
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	THE FORECOING VARIANCE REGISTON WAS
	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
DAVID HARRISON, WEITIBEI	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
	read, and/or a copy thereof must be
	provided to the employees' Authorized

In the Matter of Application to Modify

Permanent Variance by:

Permanent Variance No.: 23-V-153M1

PROPOSED DECISION

Pinnacle 360 Hoover, LLC

Hearing Date: July 24, 2024

Location: Zoom

A. Subject Matter

1. The above person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, for each elevator the subject of Permanent Variance No. 23-V-153, approved by the Board on July 20, 2023.

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on July 24, 2024, in Sacramento, California, via videoconference, by the Board, with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, Fuei Saetern, with KONE, Inc., appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-4	Cal/OSHA Review of Variance Application
PD-5	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. <u>Findings of Fact</u>

- 1. The Applicant requests modification of the conveyance information specified within Board records for elevators the subject of previously granted Permanent Variance No. 23-V-153M1.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, indicates that in the original application for variance [23-V-153] it was stated that seven (7) suspension ropes would be provided for elevator numbers 1 through 4, but the correct number of suspension ropes for elevators numbers 2 and 4 should have been six (6).
- 3. Cal/OSHA has evaluated the request for modification of person or entity of record holding Permanent Variance No. 23-V-153, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 23-V-153, except as modified below to reduce the maximum suspended load listed in the existing permanent variance decision in order to reflect the use of fewer suspension ropes:

Revisions exclusive to OSHB File Number 23-V-153, Decision and Order, Appendix 1:

Monospace 500 Suspension Ropes Appendix 1 Table				
OSHB	Elevator	Minimum	Maximum Speed	Maximum
File No.	ID	Quantity of Ropes	in Feet Per Minute	Suspended Load
		(Per Condition 3)	(Per Condition 6)	(Per Condition 7)
23-V-153	2	6	150	10,497
23-V-153	4	6	150	10,497

4. The Board finds the Application section 3, declaratory statements of the Applicant signatory to be credible, uncontroverted, and consistent with available, sufficient facts, and that modification of Permanent Variance No. 23-V-153, such that Decision and Order Appendix 1 Table is modified per above section 3, will provide for occupational safety and health equivalent to the Elevator Safety Order requirements from which variance was granted under Permanent Variance No. 23-V-153.

D. Decision and Order

1. Variance application 23-V-153M1 is conditionally GRANTED, to the limited conditional extent that Permanent Variance No. 23-V-153 Decision and Order Appendix 1 Table is modified as follows:

Monospace 500 Suspension Ropes Appendix 1 Table				
OSHB	Elevator	Minimum	Maximum Speed	Maximum
File No.	ID	Quantity of Ropes	in Feet Per Minute	Suspended Load
		(Per Condition 3)	(Per Condition 6)	(Per Condition 7)
23-V-153	2	6	150	10,497
23-V-153	4	6	150	10,497

- 2. Permanent Variance No. 23-V-153, only being modified as specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 23-V-153M1.
- 3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 4. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed for its issuance or per duly adopted superseding procedural rules.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: 7/25/2024 <u>Michelle Jorio</u>
Michelle Iorio, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 23-V-232M1 Proposed Decision Dated: July 25, 2024
The Lair QOZB LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, He	n Standards Board hereby adopts the attached aring Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	Date of Adoption: August 15, 2024 THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON, Member	ADOPTED ON THE DATE INDICATED ABOVE IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized

In the Matter of Application to Modify
Permanent Variance by:

The Lair QOZB LLC

PROPOSED DECISION

Hearing Date: July 24, 2024
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent	Applicant Namo	Preexisting Variance
Variance No.	Applicant Name	Address of Record
23-V-232 The Lair QOZB LLC		2440 Shattuck Avenue
		Berkeley, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. <u>Procedural</u>

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit, in accordance with section 426.
- 2. At the hearing Wolter Geesink with Otis Elevator Company, and Dan Leacox of Leacox & Associates, appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code fo Regulations, title 8.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 23-V-232.
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance 23-V-232 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- Cal/OSHA has evaluated the request for modification of variance location address, finds
 no issue with it, and recommends that the application for modification be granted
 subject to the same conditions of the Decision and Order in Permanent Variance No. 23V-232.
- 4. The Board finds the above subpart D.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 23-V-232 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 23-V-232, to be:

2055 Haste St. Berkeley, CA

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 23-V-232M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 23-V-232, and 23-V-232M1, shall have the following address designation:

2055 Haste St. Berkeley, CA

2. Permanent Variance No. 23-V-232, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 23-V-232M1.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: <u>July 25, 2024</u>

Michelle Iorio, Hearing Officer

Michelle Lorio

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance regarding:

Otis Gen2S/Gen3Edge Elevator with Retractable Aprons & Medical Emergency Elevator Car Dimensions (Group IV) Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: July 25, 2024

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DAVID THOMAS, Member	-,
	Note: A conv of this Decision must be

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

In the Matter of Application for Permanent Variance Regarding:

Permanent Variance Nos.: See section A.1

table below

Otis Gen2S/Gen3Edge Elevator with Retractable Aprons & Medical Emergency Elevator Car Dimensions (Group IV)

PROPOSED DECISION

Hearing Date: July 24, 2024

Location: Zoom

A. <u>Subject Matter</u>

1. Each below listed applicant ("Applicant") has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-260	123 Huntington LLC	Bldg. C 123 W. Huntington Drive Arcadia, CA	1

2. This Proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. <u>Procedural</u>

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration.
- 2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Mark Wickens and Jose Ceja, appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

¹ Unless otherwise noted, all references are to title 8, California Code of Regulations.

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per Section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S elevators at the locations and in the numbers stated in the above section A.1 table.
- 2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
- 3. The Board incorporates by reference the relevant findings in previous Board decisions:
 - a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
 - b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
 - c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
 - d. Items D.3 and D.4 of the Proposed Decision adopted by the Board on December 15, 2016 for Permanent Variance No. 16-V-249 regarding shallow pit aprons.
- 4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and positions stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent

safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- <u>Car top railing</u>: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- <u>Speed governor over-speed switch</u>: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- Governor rope diameter: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- <u>Pitch diameter</u>: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- <u>Suspension means</u>: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions are to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- <u>Inspection transfer switch</u>: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room);
- <u>Seismic reset switch</u>: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room);
- <u>Minimum Inside Car Platform Dimensions</u>: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a); and
- <u>Platform Guard</u>: 2.15.9.2 and 2.4.1.5 (to permit the use of a two-section retractable platform guard (apron) where the depth of the pit is not sufficient enough to prevent the platform guard from contacting the floor when the car is resting on its fully compressed buffers or bumpers).

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group IV devices that are designed, equipped, and installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master File [referred to in previous proposed decisions as the "Gen2 Master File") maintained

by the Board, as that file was constituted at the time of this hearing) and are subject to the following conditions:

- 1. The suspension system shall comply with the following:
 - a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
 - b. Steel coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
 - e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by Cal/OSHA.
- 2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.
- 3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.
- 4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person or organization that installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;

- e. The month and year the flat coated steel belts were first shortened;
- f. The name or trademark of the manufacturer of the flat coated steel belts; and
- g. Lubrication information.
- 5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts;
 - b. The belt width and thickness in millimeters or inches; and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
- 6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
- 7. If there is an inset car top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.
 - b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.
 - c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
 - d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.
 - e. The applicant shall provide durable signs with lettering not less than $\frac{1}{2}$ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

- 8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
- 11. The governor speed-reducing switch function shall comply with the following:
 - a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
 - b. The velocity encoder shall be coupled to the driving machine motor shaft. The "C" channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from "C" channel of the encoder shall be verified with the "A" and "B" channels for failure. If a failure is detected then an emergency stop shall be initiated.
 - c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
 - d. It shall be used in conjunction with approved car-mounted speed governors only.
 - e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
 - f. A successful test of the speed-reducing switch system's functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - g. A successful test of the traction monitoring system's functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

- 12. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).
- 13. In lieu of a straight vertical face (one piece) platform guard (aprons) required by Section 3141 [ASME A17.1-2004, Section 2.15.9.2], a two-section retractable platform guard consisting of a stationary upper section guard plate and a moveable lower section guard plate shall be installed and conformed to the following:
 - a. The stationary upper section guard plate shall have a straight vertical face, extending below the floor surface of the platform; the height shall be not less than 920 mm (36.2 in.).
 - b. The moveable lower section guard plate shall:
 - i. Comply with ASME A17.1-2004, Section 2.15.9.3;
 - ii. Be provided with rubber bumper at the center of the bottom edge of the plate to absorb the impact when the toe guard strikes the concrete pit floor;
 - iii. Be provided with an electrical switch that indicates to the control system that the retractable platform guard is in its extended position (when car is away from the bottom landing) and be provided with a second electrical switch that indicates to the control system that the moveable lower section is in its retracted position (when the car is at the bottom landing), thereby overriding the first switch. Failure of either of these electrical switches or of the mechanical parts that activate these electrical switches shall cause the controller to remove power from the driving machine and brake.
 - c. The two-section retractable platform guard shall be provided with smooth metal guard plates of not less than 1.5 mm (0.059 in) thick steel, or material of equivalent strength and stiffness, adequately reinforced and braced to the car platform and conforming to ASME A17.1-2004, Sections 2.15.9.1 and 2.15.9.4.
 - d. The overall height of the two-section retractable platform guard shall be not less than 1220 mm (48 in.) when the moveable lower section is in the fully extended (deployed) position.

- 14. All medical emergency service elevators shall comply with the following:
 - a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;
 - The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position."
 - b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
 - c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
 - 15. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
 - 16. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
 - 17. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
 - 18. The Applicant shall be subject to the Suspension Means Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
 - 19. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
 - 20. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024

Michelle Lorio
Michelle Iorio, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

<u>Suspension Means – Replacement Reporting Condition</u>

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

- A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.

- g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
- h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

1.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance regarding:

Otis Gen2S/Gen3Edge/Gen3Core Elevator & Medical Emergency Elevator Car Dimensions (Group IV) Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: July 25, 2024

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
WATHERN CRAWFORD, Marshar	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance regarding:	Permanent Variance No.: See Section A.1 Table Below
Otis Medical Emergency Elevator Car Dimensions (Group IV)	PROPOSED DECISION
	Hearing Date: July 24, 2024
	Location: Zoom

A. Subject Matter

 Each below listed applicant ("Applicant") has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows

Permanent Variance No.	Applicant Name	Variance Location Address
24-V-305	Taylor Farms	1207 Abbott St. Salinas, CA
24-V-306	Merced Holdings, LP	2270 E. Yosemite Ave. Merced, CA
24-V-332	5223 Lindley, LP	5225 Lindley Ave. Tarzana, CA
24-V-336	Del Sur Family Housing, L.P.	16610 Templeton St. San Diego, CA
24-V-342	1413 Howe Ave LP	1413 Howe Ave. Sacramento, CA
24-V-344	Redcar Properties	10301 Jefferson Blvd. Culver City, CA
24-V-345	Lucia Mar Unified School District	Paulding Middle School 600 Crown Hill St. Arroyo Grande, CA

¹ Unless otherwise noted, all references are to the California Code of Regulations, title 8.

- 2. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.
- 3. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with section 426.
- 4. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 5. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit	
PD-1	Permanent variance applications per section A.1 table	
PD-2	OSHSB Notice of Hearing	
PD-3	Cal/OSHA Review of Variance Application	
PD-4	Review Draft-1 Proposed Decision	

 Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue.
 On July 24, 2024, the hearing and record closed, and the matter taken under submission by the Hearing Officer.

B. Findings of Fact and Applicable Regulations

- 1. Applicant requests a permanent variance from section 3041, subdivision (e)(1)(C), which states:
 - (1) All buildings and structures constructed after the effective date of this order that are provided with one or more passenger elevators shall be provided with not less than one passenger elevator designed and designated to accommodate the loading and transport of an ambulance gurney or stretcher maximum size 22 ½ in. (572 mm) by 75 in. (1.90 m) in its horizontal position and arranged to serve all landings in conformance with the following:

•••

(C) The elevator car shall have a minimum inside car platform of 80 in. (2.03 m) wide by 51 in. (1.30 m) deep.

The intent of this language is to ensure that there is enough space to accommodate the access and egress of a gurney and medical personnel inside of a medical service elevator.

This standard is made applicable to Group IV by section 3141.7, subdivision (b), which reads, "Elevators utilized to provide medical emergency service shall comply with Group II, section 3041(e)."

2. Applicant proposes to comply with the requirements of the 2019 California Building Code, section 3002.4.1a in the design of its medical emergency service elevator. That section requires:

The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

The purpose of this requirement is to ensure that an elevator designated for emergency medical service will accommodate a minimum of two emergency personnel with an ambulance gurney or stretcher.

C. <u>Conclusive Findings</u>

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

D. <u>Decision and Order</u>

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

1. All medical emergency service elevator(s) shall comply with the requirements of the 2019 California Building Code section 3002.4.1a:

The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

- 2. All medical emergency service elevator(s) shall be identified in the building construction documents in accordance with the 2019 California Building Code, section 3002.4a.
- 3. Dimensional drawings and other information necessary to demonstrate compliance with the conditions of this permanent variance decision shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
- 4. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing the elevators shall be provided a copy of this variance decision.
- 5. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
- 6. Applicant shall notify its employees and their authorized representative, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 7. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with then in effect administrative procedures of the Board.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: 7/25/2024

Michelle Lorio
Michelle Iorio, Hearing Officer

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance regarding:

Otis Gen2S/Gen3Edge/Gen3Core Elevator & Medical Emergency Elevator Car Dimensions (Group IV) Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: July 25, 2024

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
WATHERN CRAWFORD, Marshar	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance Nos.: See section A.1 table below
Otis Gen2S/Gen3Edge/Gen3Core Elevator & Medical Emergency Elevator Car Dimensions	PROPOSED DECISION
(Group IV)	Hearing Date: July 24, 2024
	Location: Zoom

A. Subject Matter

1. Each applicant ("Applicant") below has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-307	Aldersly, a California Corporation	326 Mission Ave. San Rafael, CA	2
24-V-316	Homefed Village 8 LLC	Luminary at Cota Vera - Building 5 6020 Moonglow Dr. Chula Vista, CA	1
24-V-317	Homefed Village 8 LLC	Luminary at Cota Vera - Building 4 6030 Moonglow Dr. Chula Vista, CA	1
24-V-318	Christian Church Homes (CCH)	22500 Grand St. Hayward, CA	2
24-V-319	JPI Development LLC	225 W. Duarte Rd. Monrovia, CA	2
24-V-320	JPI Development LLC	155 W. Duarte Rd. Monrovia, CA	1
24-V-321	1540 7th Street Owner, LLC	1540 7th St. Santa Monica, CA	1
24-V-322	Resources for Community Development	797 S. Almaden Ave. San Jose, CA	2

 $^{^{\}mathrm{1}}$ Unless otherwise noted, all references are to title 8, California Code of Regulations.

-

	1		
24-V-331	CCDC	305 E. St. Chula Vista, CA	2
24-V-333	San Mateo County Historical Association	Taube Family Carriage Gallery 2200 Broadway St. Redwood City, CA	1
24-V-334	14th & Callan Street Owner, LLC	100 Callan Ave. San Leandro, CA	2
24-V-335	Del Sur Family Housing, L.P.	16610 Templeton St. San Diego, CA	2
24-V-341	Campus Pointe Annex Hotel LLC	5078 N. Chestnut Ave. Fresno, CA	2
24-V-343	SC103 SPE LLC	Pacifica Place Lot 103 1000 Gateway Irvine, CA	5
24-V-346	Millenia Lot 19 Owner LLC	Millenia Lot 19 - Building 3 1929 Axia Way Chula Vista, CA	1
24-V-347	Millenia Lot 19 Owner LLC.	Millenia Lot 19 - Building 2 1916 Axia Way Chula Vista, CA	1
24-V-348	Millenia Lot 19 Owner LLC	Millenia Lot 19 - Building 1 1910 Axia Way Chula Vista, CA	1
24-V-349	Sorenson Engineering, Inc.	32032 Dunlap Blvd. Yucaipa, CA	1
24-V-350	LoveFrom 809-831, LLC	809 Montgomery St. San Francisco, CA	1
24-V-351	Kuvera Partners	6764 Hollywood Blvd. Los Angeles, CA	2
24-V-352	Montecito, L.P.	1265 Montecito Ave. Mountain View, CA	1
24-V-353	Serenade 43, LP	4030 43rd St. San Diego, CA	1

^{2.} This Proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration.
- 2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Mark Wickens and Jose Ceja, appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit	
PD-1	Permanent variance applications per Section A.1 table	
PD-2	OSHSB Notice of Hearing	
PD-3	Cal/OSHA Review of Variance Application	
PD-4	Review Draft-1 Proposed Decision	

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter taken under submission by the Hearing Officer.

C. <u>Findings of Fact</u>

- 1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S elevators at the locations and in the numbers stated in the above section A.1 table.
- 2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
- 3. The Board incorporates by reference the relevant findings in previous Board decisions:
 - a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
 - b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
 - c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
 - d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.

4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. <u>Decision and Order</u>

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- <u>Car top railing</u>: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- <u>Speed governor over-speed switch</u>: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- Governor rope diameter: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- <u>Pitch diameter</u>: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- <u>Suspension means</u>: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- <u>Inspection transfer switch</u>: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- <u>Seismic reset switch</u>: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).

• <u>Minimum Inside Car Platform Dimensions</u>: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

- 1. The suspension system shall comply with the following:
 - a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
 - b. Steel coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
 - e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by Cal/OSHA.
- 2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.
- 3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.
- 4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;

- b. The manufacturer's rated breaking strength in (kN) or (lbf);
- c. The name of the person or organization that installed the flat coated steel belts;
- d. The month and year the flat coated steel belts were installed;
- e. The month and year the flat coated steel belts were first shortened;
- f. The name or trademark of the manufacturer of the flat coated steel belts; and
- g. Lubrication information.
- 5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts;
 - b. The belt width and thickness in millimeters or inches; and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
- 6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
- 7. If there is an inset car top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.
 - b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.
 - c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
 - d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.
 - e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).
- 8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
- 11. The governor speed-reducing switch function shall comply with the following:
 - a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
 - b. The velocity encoder shall be coupled to the driving machine motor shaft. The "C" channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from "C" channel of the encoder shall be verified with the "A" and "B" channels for failure. If a failure is detected then an emergency stop shall be initiated.
 - c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
 - d. It shall be used in conjunction with approved car-mounted speed governors only.
 - e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
 - f. A successful test of the speed-reducing switch system's functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - g. A successful test of the traction monitoring system's functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction

monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

- 12. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).
- 13. All medical emergency service elevators shall comply with the following:
 - a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;
 - The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position."
 - b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
 - c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
- 14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
- 15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.

- 17. The Applicant shall be subject to the Suspension Means Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
- 18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
- 19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024

Michelle Iorio, Hearing Officer

Michelle Lorio

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

<u>Suspension Means – Replacement Reporting Condition</u>

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

- A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.

- g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
- h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

1.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance by: ZARA USA, Inc.	Permanent Variance No.: see section A.1 table of Proposed Decision Dated: July 25, 2024
ZARA USA, IIIC.	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached aring Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	Date of Adoption: August 15, 2024 THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION. YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2. Note: A copy of this Decision must be posted for the Applicant's employees to
	read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance by:	Permanent Variance Nos.: See section A.1 table below
ZARA USA, Inc.	PROPOSED DECISION
	Hearing Date: July 24, 2024 Location: Zoom

A. <u>Subject Matter</u>

1. Each applicant ("Applicant") below has applied for permanent variance from certain provisions of the Elevator Safety Orders, found at title 8, of the California Code of Regulations¹, with respect to a conveyance, or conveyances, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Escalators
24-V-308	ZARA USA, Inc.	Zara - The Grove 6333 W. 3rd St.	1
		Los Angeles, CA	

- 2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.
- 3. The safety orders at issue are section 3141.11, incorporated ASME A17.1-2004, sections 6.1.4.1., and 6.1.6.4, and section 3141.2 incorprated ASME A17.1-2004, sections 8.7.6.1.1 [8.7.1.1] and 8.7.6.1.6.

B. Procedural

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, all references are to California Code of Regulations, title 8.

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit			
PD-1	Permanent variance applications per section A.1 table			
PD-2	OSHSB Notice of Hearing			
PD-3	Cal/OSHA Reviews of Variance Application			
PD-4	Review Draft-1 Proposed Decision			

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Based upon the record of this proceeding, the Board finds the following: Applicant proposes to perform alterations to one(1) existing escalators that include a "sleep mode" capability that will cause the escalator to run at a reduced speed when not in use to conserve energy. This arrangement does not comply with the Elevator Safety Orders that prohibit the intentional variation of an escalator's speed after start-up, and thus variance is requested from California Code of Regulations, For this reason, the Applicant requires a permanent variance from the provisions of California Code of Regulations, Title 8, Elevator Safety Orders, Group IV, Section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring.
- 2. ASME A17.1-2004, section 8.7.8.1.6 states:

8.7.8.1.6 Handrails. Any alteration to the handrails or handrail system shall require conformance with 6.1.3.2.2, 6.1.3.4.1 through 6.1.3.4.4, 6.1.3.4.6, 6.1.6.3.12, and 6.1.6.4.

- 3. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (Permanent Variance No. 13-V-153). In this previous variance decision it was concluded by the Board, that a variance also be granted from section 3141.11 [ASME A17.1-2004, section 6.1.6.4] regarding handrail speed monitoring. ASME A17.1-2004, section 6.1.4.1, states:
 - 6.1.4.1 Limits of Speed. The rated speed shall be not more than 0.5 m/s (100 ft/min), measured along the centerline of the steps in the direction of travel. The speed attained by an escalator after start-up shall not be intentionally varied.

- The purpose of this regulation is to ensure that the speed of the escalator during normal operation is kept constant to prevent passengers from losing their balance.
- 4. The Applicant contends that equivalent safety is achieved through the use of a controller that is capable of varying the escalator drive motor speed in conjunction with dual redundant sensors strategically placed at each end of the unit to detect passenger traffic. When the sensors indicate a lack of traffic approaching the escalator, for a specified amount of time not less than three times the amount of time to transfer a passenger between landings, the control system will initiate the "sleep mode" function, decelerating the escalator to a "crawling speed", no less than 0.05 m/s (10 ft./min). If passenger traffic is detected while the escalator is in "Sleep Mode," a signal will be sent to the controller to "wake up" resulting in the escalator accelerating to normal operating speed within 1.5 seconds at a rate no greater than 1 ft/sec².
- Per Applicant, the sensors used to detect passenger traffic would provide coverage able to detect passengers at a distance greater than a walking person could travel in 2 seconds, which will ensure the escalator is running at normal speed prior to passenger boarding.
- 6. Applicant proposes that if passenger traffic is detected approaching the escalator opposite the motion of the escalator steps while in "sleep mode", an alarm will sound and the escalator will exit "sleep mode" and accelerate until it reaches normal operating speed at a rate no greater than 1 ft/sec². This arrangement is intended to discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.
- 7. As proposed, the sensors used to detect passenger traffic are to be installed and arranged in a double redundant, fail-safe fashion with two sensors installed at each end of the escalator providing the same coverage field. This arrangement is intended to allow for passenger traffic detection in the case of any single sensor failure and provide for signal comparison by the controller to detect sensor failure. In the event of a detected failure of any one of the passenger traffic sensors, "sleep mode" would be disabled and the escalator would remain at normal operating speed until all sensors have resumed normal function. In addition, the passenger traffic sensors are to be wired to the escalator controller in a fail-safe manner that prevents "sleep mode" activation if the wiring is cut or disconnected.
- 8. ASME A17.1-2004, section 8.7.6.1.1 states:
 - 8.7.6.1.1. General Requirements. Any alteration to an escalator shall comply with 6.1.6.1, 6.1.6.1.1, 6.1.6.2.1, 6.1.6.3.1, 6.1.6.3.5, 6.1.6.7, 8.7.1.1, and 8.7.1.2.
- 9. Cal/OSHA has applied ASME A17.1-2004 section 8.7.6.1.1 (reference to section 8.7.1.1) to the prohibition of intentionally varying the travel speed under section 6.1.4.1.

- 10. Cal/OHSA notes in its Review of Application (Exhibit PD-4) that the Applicant proposed "sleep mode" function meets the requirements of ASME A17.1-2010, section 6.1.4.1.2 regarding the varying the speed of an escalator after start-up. For this reason among others identified within the its Review of Application, Cal/OSHA advises that equivalent or superior safety will be provided by grant of permanent variance in this matter, as conditionally limited per the below Decision and Order.
- 11. ASME A17.1-2010, section 6.1.4.1.2, states:

Variation of the escalator speed after start-up shall be permitted provided the escalator installation conforms to all of the following:

- (a) The acceleration and deceleration rates shall not exceed 0.3 m/s^2 (1.0 ft/sec²).
- (b) The rated speed is not exceeded.
- (c) The minimum speed shall be not less than 0.05 m/s (10 ft/min).
- (d) The speed shall not automatically vary during inspection operation.
- (e) Passenger detection means shall be provided at both landings of the escalator such that
 - (1) detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to 6.1.4.1.2(a) through (d)
 - (2) detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the escalator to attain full operating speed before a passenger walking at normal speed [1.35 m/s (270 ft/min)] reaches the combplate
 - (3) passenger detection means shall remain active at the egress landing to detect any passenger approaching against the direction of escalator travel and shall cause the escalator to accelerate to full rated speed and sound the alarm (see 6.1.6.3.1) at the approaching landing before the passenger reaches the combplate
- (f) Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.

- (g) Means shall be provided to detect failure of the passenger detection means and shall cause the escalator to operate at full rated speed only."
- 12. Cal/OSHA states correctly in its Review of Application, that Applicant's proposed "sleep mode" function is materially similar to other installations for which a permanent variance has been granted (Permanent Variance No. 14-V-129). In these previous variance decisions it was concluded that a variance was required from ASME A17.1-2004, section 6.1.6.4 regarding handrail speed monitoring, and the concluding conditional grant of variance provided for the disabling of the handrail-speed monitoring device while the escalator is operating in slow speed "sleep mode."

13. ASME A17.1-2004, section 6.1.6.4, states:

Handrail Speed Monitoring Device. A handrail speed monitoring device shall be provided that will cause the activation of the alarm required by 6.1.6.3.1(b) without any intentional delay, whenever the speed of either handrail deviates from the step speed by 15% or more. The device shall also cause electric power to be removed from the driving-machine motor and brake when the speed deviation of 15% or more is continuous within a 2 s to 6 s range. The device shall be of the manual-reset type.

The intent of this regulation is to prevent the destabilization of passengers by maintaining the potential relationship of the moving elements with which passengers interaction while riding.

- 14. The Applicant intents to disable the handrail speed monitoring during sleep mode operation.
- 15. Cal/OSHA advises that the proposed "sleep mode" system incorporating the proposed hand rail speed control specifications, subject to all conditions and limitations of the below Decision and Order will provide for safety equivalence.
- 16. The proposed "sleep mode" system functions and devices are materially comparable to other installations for which permanent variance previously has been granted by the Board (e.g. Permanent Variance No. 13-V-153, 14-V-129, 15-V-236, 16-V-069), absent, to Cal/OSHA's reported knowledge, adverse effect upon passenger or workplace safety or health.
- 17. Cal/OSHA recommends that conditionally limited grant of permanent variance in this matter, per the below Decision and Order, will provide for passenger safety and occupational safety and health equivalent or superior to that would otherwise prevail per the subject Elevator Safety Order requirements.

D. Conclusive Findings:

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted, and (2) a preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. <u>Decision and Order:</u>

The application is conditionally GRANTED as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, the respective section A table specified quantity of Schindler escalators, at the specified location, shall have permanent variance from Applicant requires a permanent variance from the provisions of section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring, subject to each and all of the following requirements and limitations:

- 1. The Applicant may intentionally vary the escalator speed and install proximity sensors for traffic detection subject to the following:
 - (a) The rate of acceleration and deceleration shall not exceed 0.3 m/s² (1 ft/sec²) when transitioning between speeds.
 - (b) Failure of a single proximity sensor including its associated circuitry, shall cause the escalator to revert to its normal operating speed at an acceleration of not more than 0.3 m/s^2 (1 ft/sec²).
 - (c) Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.
 - (d) Detection of any passenger shall cause the escalator to reach full speed before a passenger, walking at 4.5ft/sec, reaches the comb plate.
 - (e) The passenger detection means shall detect a person within a sufficient distance along all possible paths to the escalator that do not require climbing over barriers or escalator handrails to assure that the escalator attains full operating speed before a person walking at 4.5 ft/sec reaches the escalator comb plate. The minimum detection distance shall be calculated according to the following formula or alternatively according to Appendix 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:

```
d = (V_f - V_s) \times (V_w / a) where d = detection\ distance\ (ft) V_f = normal\ speed\ (ft/min)\ [not\ to\ exceed\ 100\ ft/min] V_s = slow\ "sleep"\ speed\ (ft/min)\ [not\ less\ than\ 10\ ft/min] V_w = passenger\ walking\ speed\ (4.5\ ft/sec) a = acceleration/deceleration\ rate\ (ft/sec^2)[not\ to\ exceed\ 1\ ft/sec^2]
```

- (f) Detection of any passenger approaching against the direction of escalator travel shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate and shall cause the escalator alarm to sound. The sounding of the alarm may include a 3 to 5 second alarm or three 1 second alarm soundings.
- (g) The minimum speed of the escalator shall not be less than 0.05 m/s (10 ft/min). The "sleep mode" functionality shall not affect the escalator inspection operation. The speed of the escalator shall not vary during Inspection Mode.
- (h) There shall be two means of detecting passengers at each end of the escalator for redundancy and for detection of failure in the passenger detection means.
- (i) The passenger sensors (detectors) at each end of the escalator must be verified by the control system for proper operation in the following manner:
 - 1. If any of the passenger detection sensors remains tripped for at least 5 minutes but no more than 10 minutes, then the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.
 - 2. If one of the paired sensors at either end of the escalator does not trip while the other paired sensor trips at least five times but no more than ten times, the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.
- (j) The handrail speed monitoring device required by section 6.1.6.4 may be disabled while the escalator is operating in the slow speed (Sleep Mode) condition.
- 2. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.

- 3. An annual test shall be conducted by a Certified Competent Conveyance Mechanic (CCCM) employed by a Certified Qualified Conveyance Company (CQCC) which maintains and services the escalators, to demonstrate that the escalator is transitioning between "Normal Mode" and "Sleep Mode" and back in conformance with the terms of this variance. The instrumentation used shall be capable of allowing the CCCM to determine the acceleration and deceleration rates of the escalator.
- 4. The results of each annual test required by Condition No. 3 shall be submitted to the appropriate Elevator Unit District Office in tabular and graphic form (speed vs. time).
- 5. Whenever practicable, as determined by the Applicant and subject to the concurrence of Cal/OSHA, the variable speed system is to be installed without the installation of new bollards or other such new structures, if the bollards or other structures would impede passenger movement at the destination end of the escalator. If new bollards or other such structures of that sort are constructed in connection with the variable speed system, the Applicant will take all practicable steps to minimize the impact of same on the movement of passengers at the destination end of the escalator.
- 6. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the escalators shall be provided a copy of the variance decision.
- 7. Cal/OSHA shall be notified when the escalator is ready for inspection, and the escalator shall be inspected by Cal/OSHA and a "Permit to Operate" issued before the escalator may be placed in service.
- 8. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 9. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in procedural accordance with section 411, et. seq.

Pursuant to section 426 subdivision (b), the above, duly completed Proposed Decision, is hereby submitted to the Occupational Safety and Health Standards Board for consideration of adoption.

DATED: July 25, 2024

Michelle Lorio
Michelle Iorio, Hearing Officer

APPENDIX 1

Detection Distance Sleep Mode Operation

Acceleration Rate (ft./sec²) vs. Escalator Sleep Mode Speed (ft./min)

	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
1.00	6.76	6.39	6.01	5.64	5.26	4.88	4.51	4.13	3.76	3.38	3.01	2.63	2.25	1.88	1.50	1.13	0.75	0.38	0.00
0.95	7.12	6.72	6.33	5.93	5.54	5.14	4.75	4.35	3.96	3.56	3.16	2.77	2.37	1.98	1.58	1.19	0.79	0.40	0.00
0.90	7.52	7.10	6.68	6.26	5.85	5.43	5.01	4.59	4.18	3.76	3.34	2.92	2.51	2.09	1.67	1.25	0.84	0.42	0.00
0.85	7.96	7.52	7.07	6.63	6.19	5.75	5.30	4.86	4.42	3.98	3.54	3.09	2.65	2.21	1.77	1.33	0.88	0.44	0.00
0.80	8.45	7.98	7.52	7.05	6.58	6.11	5.64	5.17	4.70	4.23	3.76	3.29	2.82	2.35	1.88	1.41	0.94	0.47	0.00
0.75	9.02	8.52	8.02	7.52	7.01	6.51	6.01	5.51	5.01	4.51	4.01	3.51	3.01	2.51	2.00	1.50	1.00	0.50	0.00
0.70	9.66	9.13	8.59	8.05	7.52	6.98	6.44	5.90	5.37	4.83	4.29	3.76	3.22	2.68	2.15	1.61	1.07	0.54	0.00
0.65	10.41	9.83	9.25	8.67	8.09	7.52	6.94	6.36	5.78	5.20	4.62	4.05	3.47	2.89	2.31	1.73	1.16	0.58	0.00
0.60	11.27	10.65	10.02	9.39	8.77	8.14	7.52	6.89	6.26	5.64	5.01	4.38	3.76	3.13	2.51	1.88	1.25	0.63	0.00
0.55	12.30	11.61	10.93	10.25	9.56	8.88	8.20	7.52	6.83	6.15	5.47	4.78	4.10	3.42	2.73	2.05	1.37	0.68	0.00
0.50	13.53	12.78	12.02	11.27	10.52	9.77	9.02	8.27	7.52	6.76	6.01	5.26	4.51	3.76	3.01	2.25	1.50	0.75	0.00
0.45	15.03	14.20	13.36	12.53	11.69	10.86	10.02	9.19	8.35	7.52	6.68	5.85	5.01	4.18	3.34	2.51	1.67	0.84	0.00
0.40	16.91	15.97	15.03	14.09	13.15	12.21	11.27	10.33	9.39	8.45	7.52	6.58	5.64	4.70	3.76	2.82	1.88	0.94	0.00
0.35	19.32	18.25	17.18	16.10	15.03	13.96	12.88	11.81	10.74	9.66	8.59	7.52	6.44	5.37	4.29	3.22	2.15	1.07	0.00
0.30	22.55	21.29	20.04	18.79	17.54	16.28	15.03	13.78	12.53	11.27	10.02	8.77	7.52	6.26	5.01	3.76	2.51	1.25	0.00
0.25	27.05	25.55	24.05	22.55	21.04	19.54	18.04	16.53	15.03	13.53	12.02	10.52	9.02	7.52	6.01	4.51	3.01	1.50	0.00
0.20	33.82	31.94	30.06	28.18	26.30	24.42	22.55	20.67	18.79	16.91	15.03	13.15	11.27	9.39	7.52	5.64	3.76	1.88	0.00
0.15	45.09	42.59	40.08	37.58	35.07	32.57	30.06	27.56	25.05	22.55	20.04	17.54	15.03	12.53	10.02	7.52	5.01	2.51	0.00
0.10	67.64	63.88	60.12	56.36	52.61	48.85	45.09	41.33	37.58	33.82	30.06	26.30	22.55	18.79	15.03	11.27	7.52	3.76	0.00
0.05	135.27	127.76	120.24	112.73	105.21	97.70	90.18	82.67	75.15	67.64	60.12	52.61	45.09	37.58	30.06	22.55	15.03	7.52	0.00

$$d = (V_f - V_S) \times \frac{V_w}{a}$$

d Detection distance (ft.)

V_f Elevator Rated Speed Escalators with rated speeds of 100 ft./min.

V_s Slow Speed["Sleep mode" Speed] (ft./min.)

V_w Passenger Walking Speed of 4.5 ft./sec.

a Acceleration/Deceleration Rate (ft./sec.2)

Note: 1 ft./min. = 0.0167 ft./sec.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:

Schindler 3300 with SIL-Rated Drive to De-energize Drive Motor with Retractable Platform Guard (Group IV) Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: July 25, 2024

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD **DEPARTMENT OF INDUSTRIAL RELATIONS** STATE OF CALIFORNIA

In the Matter of Application for Permanent

Variance Regarding:

Permanent Variance No: See section A.1 table

below

Schindler 3300 with SIL-Rated Drive to De-energize Drive Motor with Retractable Platform Guard (Group IV)

PROPOSED DECISION

Hearing Date: July 24, 2024

Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-309	ZARA USA, Inc.	Zara - The Grove 6333 W. 3rd St. Los Angeles, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational and Safety Health Standard Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on July 24, 2024 via videoconference by the Board with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2 At the hearing, Jennifer Linares with Schindler Elevator Corporation appeared on behalf of each Applicant. Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

Exhibit Number	Description of Exhibit			
PD-1	Permanent variance applications per section A.1 table			
PD-2	OSHSB Notice of Hearing			
PD-3	Cal/OSHA Review of variance application			
PD-4	Review Draft-2 of Proposed Decision			

4. Official notice taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

Relevant Safety Order Provisions

Applicant seeks a permanent variance from section 3141 [ASME A17.1-2004, sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(B), 2.14.1.7.1, 2.26.9.6.1, 2.15.9.2(a), and 2.14.1.5]. The relevant language of those sections are below.

Suspension Means

Section 3141 [ASME A17.1-2004, section 2.20.1, Suspension Means] states in part:

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused. Only iron (low-carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process, or their equivalent.

Section 3141 [ASME A17.1-2004, section 2.20.2.1(b), On Crosshead Data Plate] states in part:

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(b) the diameter in millimeters (mm) or inches (in.)

Section 3141 [ASME A17.1-2004, section 2.20.2.2(a) and (f) On Rope Data Tag] states in part:

A metal data tag shall be securely attached-to-one of the wire-rope fastenings. This data tag shall bear the following wire-rope data:

(a) the diameter in millimeters (mm) or inches (in.)

[...]

(f) whether the ropes were non preformed or preformed

Section 3141 [ASME A17.1-2004, section 2.20.3, Factor of Safety] states:

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where:

N= number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S= manufacturer's rated breaking strength of one rope

W= maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Section 3141 [ASME A17.1-2004, section 2.20.4, Minimum Number and Diameter of Suspension Ropes] states:

The minimum number of hoisting ropes used shall be three for traction elevators and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term "diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

Section 3141 [ASME A17.1-2004, section 2.20.9.3.4] states:

Cast or forged steel rope sockets, shackle rods, and their connections shall be made of unwelded steel, having an elongation of not less than 20% in a gauge length of 50 mm (2 in.), when measured in accordance with ASTM E 8, and conforming to ASTM A 668, Class B for forged steel, and ASTM A 27, Grade 60/30 for cast steel, and shall be stress relieved. Steels of greater strength shall be permitted, provided they have an elongation of not less than 20% in a length of 50 mm (2 in.).

Section 3141 [ASME A17.1-2004, section 2.20.9.5.4] states:

When the rope has been seated in the wedge socket by the load on the rope, the wedge shall be visible, and at least two wire-rope retaining clips shall be provided to attach the termination side to the load-carrying side of the rope (see Fig. 2.20.9.5). The first clip shall be placed a maximum of 4 times the rope diameter above the socket, and the second clip shall be located within 8 times the rope diameter above the first clip. The purpose of the two clips is to retain the wedge and prevent the rope from slipping in the socket should the load on the rope be removed for any reason. The clips shall be designed and installed so that they do not distort or damage the rope in any manner.

Inspection Transfer Switch

Section 3141[ASME A17.1-2004, section 2.26.1.4.4(a), Machine Room Inspection Operation] states:

When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be

(a) located in the machine room[.]

Seismic Reset Switch

Section 3141[ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b), Earthquake Equipment] states:

- (a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:
- (1) seismic zone 3 or greater: a minimum of one seismic switch per building
- (2) seismic zone 2 or greater:
 - (a) a displacement switch for each elevator
 - (b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room

Car-top Railings

Section 3141[ASME A17.1-2004, section 2.14.1.7.1] states:

A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

SIL-Rated System to Inhibit Current Flow to AC Drive Motor

Section 3141[ASME A17.1-2004, section 2.26.9.6.1] states:

Two separate means shall be provided to independently inhibit the flow of alternating current through the solid state devices that connect the direct current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

Platform Guards

Section 3141 [ASME A17.1-2004, Section 2.15.9.2] states, in part:

The guard plate shall have a straight vertical face, extending below the floor surface of the platform, conforming to one of the following:

(a) where the elevator is required to conform to 2.19.2.2(b) the depth of the truck zone, where provided, plus 75 mm (3 in.), but in no case less than 1,220 mm (48 in.).

Section 3141 [ASME A17.1-2004, Section 2.4.1.5] states, in part:

When the car is resting on its fully compressed buffers or bumpers, no part of the car, or any equipment attached thereto or equipment traveling with the car, shall strike any part of the pit or any equipment mounted therein.

C. Findings of Fact

- Each Applicant intends to utilize Schindler model 3300 MRL elevator cars, in the quantity, at the locations, specified per the above Section A.1 table in Jurisdictional and Procedural Matters.
- 2. The installation contract for these elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
- 3. The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders (ESO). They utilize non-circular elastomeric-coated steel belts and specialized suspension means fastenings.
- 4. No machine room is provided, preventing the inspection transfer switch from being located in the elevator machine room. The lack of machine room also prevents the seismic reset switch from being located in the elevator machine room.

- 5. Applicant proposes to relocate the inspection transfer switch and seismic reset switch in an alternative enclosure.
- 6. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
- 7. Applicant proposes to insert the car-top railings at the perimeter of the car top.
- 8. Applicant intends to use an elevator control system, model CO NX100NA, with a standalone, solid-state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.
- 9. Applicant intends to include a retractable platform guard to an existing elevator. Retractable platform guards serve as a substitute for a single piece fixed elevator car apron when the elevator pit depth is too shallow.
- 10. Due to the existing pit not having adequate depth to accommodate a code compliant platform guard (apron), the Applicant intends to use a retractable platform guard (apron) that retracts when it comes in contact with the pit floor so that no part of the elevator or equipment attached strike any part of the pit floor.

C. Conclusive Findings

A preponderence of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

D. <u>Decision and Order</u>

Each permanent variance application being the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject to the following conditions:

Elevator Safety Orders:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric-coated Steel Belts proposed by the Applicant, in lieu of circular steel suspension ropes.);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room. room);

- Car-Top Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car-top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Means of Removing Power: 2.26.9.6.1 (Only to the extent necessary to permit the use of SIL-rated devices and circuits as a means to remove power from the AC driving motor, where the redundant monitoring of electrical protective devices is required by the Elevator Safety Orders).
- Platform Guard: 2.15.9.2 (Only to the extent necessary to permit the use of a two-section retractable platform guard (apron) where the depth of the pit is not sufficient enough to prevent the platform guard from contacting the floor when the car is resting on its fully compressed buffers or bumpers); and
- Bottom Car Clearances: 2.4.1.5 (Only to the extent necessary to permit the two-section retractable platform guard (apron) to contact the pit floor).

Conditions:

- 1. The elevator suspension system shall comply to the following:
 - a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
 - 2.20.4.3 Minimum Number of Suspension Members
 - 2.20.3 Factor of Safety
 - 2.20.9 Suspension Member Fastening
 - b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members and fastenings and related monitoring and detection systems and criteria for STM replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to Cal/OSHA upon request.

STM member mandatory replacement criteria shall include:

- i. Any exposed wire, strand or cord;
- ii. Any wire, strand or cord breaks through the elastomeric coating;
- iii. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric-coated steel suspension member;
- iv. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;
- c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.

- d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.
- e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).
- g. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 1b above.
- h. The elevator shall be provided with a device to monitor the remaining residual strength of each STM member. The device shall conform to the requirements of Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.
- i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
- j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
- k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 1b, shall be conducted and documented every six months by a CCCM.
- I. The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, "Suspension Means Replacement Reporting Condition," Incorporated herein by this reference.
- m. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2 and 8.6.1.4, respectively.

- 2. If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 3. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 4. If there is an inset car-top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car-top railing.
 - b. The distance that the railing can be inset shall be limited to not more than 6 inches.
 - c. All exposed areas of the car top outside the car-top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.
 - d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4-inch diagonal red and white stripes.
 - e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing. Each sign shall state:

CAUTION STAY INSIDE RAILING NO LEANING BEYOND RAILING NO STEPPING ON, OR BEYOND, RAILING

- f. The Group IV requirements for car-top clearances shall be maintained (car-top clearances outside the railing will be measured from the car top and not from the required bevel).
- 5. The SIL-rated devices and circuits used to inhibit electrical current flow in accordance with ASME A17.1-2004, section 2.26.9.6.1 shall comply with the following:
 - a. The SIL-rated devices and circuits shall consist of a Variodyn SIL-3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013 or VAF023, labeled or marked with the SIL rating (not less than SIL 3), the

- name or mark of the certifying organization, and the SIL certification number (968/FSP 1556.00), and followed by the applicable revision number (as in 968/FSP 1556.00/19).
- b. The devices and circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.
- c. The access door or cover of the enclosures containing the SIL-rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL-rated devices Refer to Maintenance Control Program and wiring diagrams prior to performing work

- d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL-rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL-rated component, with notations identifying parts and locations.
- e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.
- f. A successful test of the SIL-rated devices and circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL-rated devices, safety functions, and related circuits operate as intended.
- g. Any alterations to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL-rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.
- h. Any replacement of the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL-rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.
- i. Any repairs to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL-rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.
- j. Any space containing SIL-rated devices and circuits shall be maintained within the temperature and humidity range specified by Schindler Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL-rated devices and circuits.

- k. Field changes to the SIL-rated system are not permitted. Any changes to the SIL-rated system's devices and circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.
- 6. In lieu of a straight vertical face (one piece) platform guard (aprons) required by Section 3141 [ASME A17.1-2004, Section 2.15.9.2], a two-section retractable platform guard consisting of a stationary upper section guard plate and a moveable lower section guard plate shall be installed and conformed to the following:
 - a. The stationary upper section guard plate shall have a straight vertical face, extending below the floor surface of the platform; the height shall be not less than 920 mm (36.2 in.).
 - b. The moveable lower section guard plate shall:
 - i. Comply with ASME A17.1-2004, Section 2.15.9.3;
 - ii. Be provided with rubber bumper at the center of the bottom edge of the plate to absorb the impact when the toe guard strikes the concrete pit floor;
 - iii. Be provided with an electrical switch that indicates to the control system that the retractable platform guard is in its extended position (when car is away from the bottom landing) and be provided with a second electrical switch that indicates to the control system that the moveable lower section is in its retracted position (when the car is at the bottom landing), thereby overriding the first switch. Failure of either of these electrical switches or of the mechanical parts that activate these electrical switches shall cause the controller to remove power from the driving machine and brake.
 - c. The two-section retractable platform guard shall be provided with smooth metal guard plates of not less than 1.5 mm (0.059 in) thick steel, or material of equivalent strength and stiffness, adequately reinforced and braced to the car platform and conforming to ASME A17.1-2004, Sections 2.15.9.1 and 2.15.9.4.
 - d. The overall height of the two-section retractable platform guard shall be not less than 1220 mm (48 in.) when the moveable lower section is in the fully extended (deployed) position.
- 7. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
- 8. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per California Code of Regulations, sections 411.2 and 411.3.

9. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: July 25, 2024

Michelle Lorio

Michelle Iorio, Hearing Officer

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

EXHIBIT 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings. Further:

- 1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Pl., Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and PERMANENT VARIANCE NO. file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - h. All information provided on the crosshead data plate per ASME AI7.I-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS CCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:

Schindler 3300 with SIL-Rated Drive to De-energize Drive Motor (Group IV)

Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: July 25, 2024

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

JOSEPH M. ALIOTO JR., Chairman

The formal stands of the formal stands o

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: August 15, 2024

THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION. YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Applicati Variance Regarding:	on for Permanent	Permanent Variance No: See section A.1 table below
Schindler 3300 with SIL-R De-energize Drive Motor		PROPOSED DECISION Hearing Date: July 24, 2024 Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-310	Burbank Boyz II, LLC	4508 N. Mariota Ave. Toluca Lake, CA	1
24-V-312	AREC RR Woodlake JV, LLC	520 Media Pl. Sacramento, CA	2
24-V-338	1280 N Sweetzer LLC	8615 N. West Knoll Dr. West Hollywood, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational and Safety Health Standard Board's ("Board" or "OSHSB") procedural regulations.

B. <u>Procedural</u>

- 1. This hearing was held on July 24, 2024 via videoconference by the Board with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2 At the hearing, Jennifer Linares with Schindler Elevator Corporation appeared on behalf of each Applicant. Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of variance application
PD-4	Review Draft-2 of Proposed Decision

4. Official notice taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

Relevant Safety Order Provisions

Applicant seeks a permanent variance from section 3141 [ASME A17.1-2004, sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(B), 2.14.1.7.1, and 2.26.9.6.1]. The relevant language of those sections are below.

Suspension Means

Section 3141 [ASME A17.1-2004, section 2.20.1, Suspension Means] states in part:

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused. Only iron (low-carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process, or their equivalent.

Section 3141 [ASME A17.1-2004, section 2.20.2.1(b), On Crosshead Data Plate] states in part:

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(b) the diameter in millimeters (mm) or inches (in.)

Section 3141 [ASME A17.1-2004, section 2.20.2.2(a) and (f) On Rope Data Tag] states in part:

A metal data tag shall be securely attached-to-one of the wire-rope fastenings. This data tag shall bear the following wire-rope data:

(a) the diameter in millimeters (mm) or inches (in.)

[...]

(f) whether the ropes were non preformed or preformed

Section 3141 [ASME A17.1-2004, section 2.20.3, Factor of Safety] states:

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where:

N= number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S= manufacturer's rated breaking strength of one rope

W= maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Section 3141 [ASME A17.1-2004, section 2.20.4, Minimum Number and Diameter of Suspension Ropes] states:

The minimum number of hoisting ropes used shall be three for traction elevators and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term "diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

Section 3141 [ASME A17.1-2004, section 2.20.9.3.4] states:

Cast or forged steel rope sockets, shackle rods, and their connections shall be made of unwelded steel, having an elongation of not less than 20% in a gauge length of 50 mm (2 in.), when measured in accordance with ASTM E 8, and conforming to ASTM A 668, Class B for forged steel, and ASTM A 27, Grade 60/30 for cast steel, and shall be stress relieved. Steels of greater strength shall be permitted, provided they have an elongation of not less than 20% in a length of 50 mm (2 in.).

Section 3141 [ASME A17.1-2004, section 2.20.9.5.4] states:

When the rope has been seated in the wedge socket by the load on the rope, the wedge shall be visible, and at least two wire-rope retaining clips shall be provided to attach the termination side to the load-carrying side of the rope (see Fig. 2.20.9.5). The first clip shall be placed a maximum of 4 times the rope diameter above the socket, and the second clip shall be located within 8 times the rope diameter above the first clip. The purpose of the two clips is to retain the wedge and prevent the rope from slipping in the socket should the load on the rope be removed for any reason. The clips shall be designed and installed so that they do not distort or damage the rope in any manner.

Inspection Transfer Switch

Section 3141[ASME A17.1-2004, section 2.26.1.4.4(a), Machine Room Inspection Operation] states:

When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be

(a) located in the machine room[.]

Seismic Reset Switch

Section 3141[ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b), Earthquake Equipment] states:

- (a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:
- (1) seismic zone 3 or greater: a minimum of one seismic switch per building
- (2) seismic zone 2 or greater:
 - (a) a displacement switch for each elevator
 - (b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room

Car-top Railings

Section 3141[ASME A17.1-2004, section 2.14.1.7.1] states:

A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

SIL-Rated System to Inhibit Current Flow to AC Drive Motor

Section 3141[ASME A17.1-2004, section 2.26.9.6.1] states:

Two separate means shall be provided to independently inhibit the flow of alternating current through the solid state devices that connect the direct current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

C. Findings of Fact

- Each Applicant intends to utilize Schindler model 3300 MRL elevator cars, in the quantity, at the locations, specified per the above Section A.1 table in Jurisdictional and Procedural Matters.
- 2. The installation contract for these elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
- 3. The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders (ESO). They utilize non-circular elastomeric-coated steel belts and specialized suspension means fastenings.
- 4. No machine room is provided, preventing the inspection transfer switch from being located in the elevator machine room. The lack of machine room also prevents the seismic reset switch from being located in the elevator machine room.
- 5. Applicant proposes to relocate the inspection transfer switch and seismic reset switch in an alternative enclosure.
- 6. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
- 7. Applicant proposes to insert the car-top railings at the perimeter of the car top.
- 8. Applicant intends to use an elevator control system, model CO NX100NA, with a standalone, solid-state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.

C. Conclusive Findings

A preponderence of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

D. <u>Decision and Order</u>

Each permanent variance application being the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject to the following conditions:

Elevator Safety Orders:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric-coated Steel Belts proposed by the Applicant, in lieu of circular steel suspension ropes.);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room. room);
- Car-Top Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car-top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Means of Removing Power: 2.26.9.6.1 (Only to the extent necessary to permit the use of SIL-rated devices and circuits as a means to remove power from the AC driving motor, where the redundant monitoring of electrical protective devices is required by the Elevator Safety Orders).

Conditions:

- 1. The elevator suspension system shall comply to the following:
 - a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
 - 2.20.4.3 Minimum Number of Suspension Members
 - 2.20.3 Factor of Safety
 - 2.20.9 Suspension Member Fastening
 - b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM

members and fastenings and related monitoring and detection systems and criteria for STM replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to Cal/OSHA upon request.

STM member mandatory replacement criteria shall include:

- i. Any exposed wire, strand or cord;
- ii. Any wire, strand or cord breaks through the elastomeric coating;
- iii. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric-coated steel suspension member;
- iv. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;
- c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.
- d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.
- e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).
- g. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 1b above.
- h. The elevator shall be provided with a device to monitor the remaining residual strength of each STM member. The device shall conform to the requirements of Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.

- i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
- j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
- k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 1b, shall be conducted and documented every six months by a CCCM.
- The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, "Suspension Means Replacement Reporting Condition," Incorporated herein by this reference.
- m. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2 and 8.6.1.4, respectively.
- 2. If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 3. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 4. If there is an inset car-top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car-top railing.
 - b. The distance that the railing can be inset shall be limited to not more than 6 inches.
 - c. All exposed areas of the car top outside the car-top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.
 - d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4-inch diagonal red and white stripes.

e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing. Each sign shall state:

CAUTION STAY INSIDE RAILING NO LEANING BEYOND RAILING NO STEPPING ON, OR BEYOND, RAILING

- f. The Group IV requirements for car-top clearances shall be maintained (car-top clearances outside the railing will be measured from the car top and not from the required bevel).
- 5. The SIL-rated devices and circuits used to inhibit electrical current flow in accordance with ASME A17.1-2004, section 2.26.9.6.1 shall comply with the following:
 - a. The SIL-rated devices and circuits shall consist of a Variodyn SIL-3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013 or VAF023, labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1556.00), and followed by the applicable revision number (as in 968/FSP 1556.00/19).
 - b. The devices and circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.
 - c. The access door or cover of the enclosures containing the SIL-rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL-rated devices Refer to Maintenance Control Program and wiring diagrams prior to performing work

- d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL-rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL-rated component, with notations identifying parts and locations.
- e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.
- f. A successful test of the SIL-rated devices and circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL-rated devices, safety functions, and related circuits operate as intended.
- g. Any alterations to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific

- provisions for the alteration of SIL-rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.
- h. Any replacement of the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL-rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.
- i. Any repairs to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL-rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.
- j. Any space containing SIL-rated devices and circuits shall be maintained within the temperature and humidity range specified by Schindler Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL-rated devices and circuits.
- k. Field changes to the SIL-rated system are not permitted. Any changes to the SIL-rated system's devices and circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.
- 6. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
- 7. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per California Code of Regulations, sections 411.2 and 411.3.
- 8. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: July 25, 2024

Michelle Lorio
Michelle Iorio, Hearing Officer

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

EXHIBIT 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings. Further:

- 1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Pl., Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and PERMANENT VARIANCE NO. file number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - h. All information provided on the crosshead data plate per ASME AI7.I-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance by:	Permanent Variance No.: see section A.1 table of
·	Proposed Decision Dated: July 25, 2024
John Wayne Airport	DECISION
	DECISION
The Occupational Safety and Healt	:h Standards Board hereby adopts the attached
PROPOSED DECISION by Michelle Iorio, He	• • •
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
NOLA KENNEDY, Member	MAY BE FILED BY ANY PARTY WITH THE
NOLA KLINILDT, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST
· · · · · · · · · · · · · · · · · · ·	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
	read, and/or a copy thereof must be
	provided to the employees' Authorized

Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance by:	Permanent Variance Nos.: See section A.1 table below
John Wayne Airport	PROPOSED DECISION
	Hearing Date: July 24, 2024 Location: Zoom

A. <u>Subject Matter</u>

1. Each applicant ("Applicant") below has applied for permanent variance from certain provisions of the Elevator Safety Orders, found at title 8, of the California Code of Regulations¹, with respect to a conveyance, or conveyances, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Escalators
24-V-311	John Wayne Airport	18601 Airport Way Santa Ana, CA	6 As identified as: Terminal A&B-ES-01 Terminal A&B-ES-02 Terminal A&B-ES-03 Terminal A&B-ES-04 Terminal A&B-ES-05 Terminal A&B-ES-06

- 2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.
- 3. The safety orders at issue are section 3141.11, incorporated ASME A17.1-2004, sections 6.1.4.1., and 6.1.6.4, and section 3141.2 incorprated ASME A17.1-2004, sections 8.7.6.1.1 [8.7.1.1] and 8.7.6.1.6.

¹ Unless otherwise noted, all references are to California Code of Regulations, title 8.

B. <u>Procedural</u>

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2. At the hearing, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Reviews of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Based upon the record of this proceeding, the Board finds the following: Applicant proposes to perform alterations to six(6) existing escalators that include a "sleep mode" capability that will cause the escalator to run at a reduced speed when not in use to conserve energy. This arrangement does not comply with the Elevator Safety Orders that prohibit the intentional variation of an escalator's speed after start-up, and thus variance is requested from California Code of Regulations, For this reason, the Applicant requires a permanent variance from the provisions of California Code of Regulations, Title 8, Elevator Safety Orders, Group IV, Section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring.
- 2. ASME A17.1-2004, section 8.7.8.1.6 states:
 - 8.7.8.1.6 Handrails. Any alteration to the handrails or handrail system shall require conformance with 6.1.3.2.2, 6.1.3.4.1 through 6.1.3.4.4, 6.1.3.4.6, 6.1.6.3.12, and 6.1.6.4.
- 3. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (Permanent Variance No. 13-V-153). In

this previous variance decision it was concluded by the Board, that a variance also be granted from section 3141.11 [ASME A17.1-2004, section 6.1.6.4] regarding handrail speed monitoring. ASME A17.1-2004, section 6.1.4.1, states:

6.1.4.1 Limits of Speed. The rated speed shall be not more than 0.5 m/s (100 ft/min), measured along the centerline of the steps in the direction of travel. The speed attained by an escalator after start-up shall not be intentionally varied.

The purpose of this regulation is to ensure that the speed of the escalator during normal operation is kept constant to prevent passengers from losing their balance.

- 4. The Applicant contends that equivalent safety is achieved through the use of a controller that is capable of varying the escalator drive motor speed in conjunction with dual redundant sensors strategically placed at each end of the unit to detect passenger traffic. When the sensors indicate a lack of traffic approaching the escalator, for a specified amount of time not less than three times the amount of time to transfer a passenger between landings, the control system will initiate the "sleep mode" function, decelerating the escalator to a "crawling speed", no less than 0.05 m/s (10 ft./min). If passenger traffic is detected while the escalator is in "Sleep Mode," a signal will be sent to the controller to "wake up" resulting in the escalator accelerating to normal operating speed within 1.5 seconds at a rate no greater than 1 ft/sec².
- Per Applicant, the sensors used to detect passenger traffic would provide coverage able to detect passengers at a distance greater than a walking person could travel in 2 seconds, which will ensure the escalator is running at normal speed prior to passenger boarding.
- 6. Applicant proposes that if passenger traffic is detected approaching the escalator opposite the motion of the escalator steps while in "sleep mode", an alarm will sound and the escalator will exit "sleep mode" and accelerate until it reaches normal operating speed at a rate no greater than 1 ft/sec². This arrangement is intended to discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.
- 7. As proposed, the sensors used to detect passenger traffic are to be installed and arranged in a double redundant, fail-safe fashion with two sensors installed at each end of the escalator providing the same coverage field. This arrangement is intended to allow for passenger traffic detection in the case of any single sensor failure and provide for signal comparison by the controller to detect sensor failure. In the event of a detected failure of any one of the passenger traffic sensors, "sleep mode" would be disabled and the escalator would remain at normal operating speed until all sensors have resumed normal function. In addition, the passenger traffic sensors are to be wired to the escalator controller in a fail-safe manner that prevents "sleep mode" activation if the wiring is cut or disconnected.

- 8. ASME A17.1-2004, section 8.7.6.1.1 states:
 - 8.7.6.1.1. General Requirements. Any alteration to an escalator shall comply with 6.1.6.1, 6.1.6.1.1, 6.1.6.2.1, 6.1.6.3.1, 6.1.6.3.5, 6.1.6.7, 8.7.1.1, and 8.7.1.2.
- 9. Cal/OSHA has applied ASME A17.1-2004 section 8.7.6.1.1 (reference to section 8.7.1.1) to the prohibition of intentionally varying the travel speed under section 6.1.4.1.
- 10. Cal/OHSA notes in its Review of Application (Exhibit PD-4) that the Applicant proposed "sleep mode" function meets the requirements of ASME A17.1-2010, section 6.1.4.1.2 regarding the varying the speed of an escalator after start-up. For this reason among others identified within the its Review of Application, Cal/OSHA advises that equivalent or superior safety will be provided by grant of permanent variance in this matter, as conditionally limited per the below Decision and Order.
- 11. ASME A17.1-2010, section 6.1.4.1.2, states:

Variation of the escalator speed after start-up shall be permitted provided the escalator installation conforms to all of the following:

- (a) The acceleration and deceleration rates shall not exceed 0.3 m/s^2 (1.0 ft/sec²).
- (b) The rated speed is not exceeded.
- (c) The minimum speed shall be not less than 0.05 m/s (10 ft/min).
- (d) The speed shall not automatically vary during inspection operation.
- (e) Passenger detection means shall be provided at both landings of the escalator such that
 - (1) detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to 6.1.4.1.2(a) through (d)
 - (2) detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the escalator to attain full operating speed before a passenger walking at normal speed [1.35 m/s (270 ft/min)] reaches the combplate
 - (3) passenger detection means shall remain active at the egress landing to detect any passenger approaching against the direction of escalator travel and shall cause

the escalator to accelerate to full rated speed and sound the alarm (see 6.1.6.3.1) at the approaching landing before the passenger reaches the combplate

- (f) Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.
- (g) Means shall be provided to detect failure of the passenger detection means and shall cause the escalator to operate at full rated speed only."
- 12. Cal/OSHA states correctly in its Review of Application, that Applicant's proposed "sleep mode" function is materially similar to other installations for which a permanent variance has been granted (Permanent Variance No. 14-V-129). In these previous variance decisions it was concluded that a variance was required from ASME A17.1-2004, section 6.1.6.4 regarding handrail speed monitoring, and the concluding conditional grant of variance provided for the disabling of the handrail-speed monitoring device while the escalator is operating in slow speed "sleep mode."

13. ASME A17.1-2004, section 6.1.6.4, states:

Handrail Speed Monitoring Device. A handrail speed monitoring device shall be provided that will cause the activation of the alarm required by 6.1.6.3.1(b) without any intentional delay, whenever the speed of either handrail deviates from the step speed by 15% or more. The device shall also cause electric power to be removed from the driving-machine motor and brake when the speed deviation of 15% or more is continuous within a 2 s to 6 s range. The device shall be of the manual-reset type.

The intent of this regulation is to prevent the destabilization of passengers by maintaining the potential relationship of the moving elements with which passengers interaction while riding.

- 14. The Applicant intents to disable the handrail speed monitoring during sleep mode operation.
- 15. Cal/OSHA advises that the proposed "sleep mode" system incorporating the proposed hand rail speed control specifications, subject to all conditions and limitations of the below Decision and Order will provide for safety equivalence.
- 16. The proposed "sleep mode" system functions and devices are materially comparable to other installations for which permanent variance previously has been granted by the Board (e.g. Permanent Variance No. 13-V-153, 14-V-129, 15-V-236, 16-V-069), absent,

to Cal/OSHA's reported knowledge, adverse effect upon passenger or workplace safety or health.

17. Cal/OSHA recommends that conditionally limited grant of permanent variance in this matter, per the below Decision and Order, will provide for passenger safety and occupational safety and health equivalent or superior to that would otherwise prevail per the subject Elevator Safety Order requirements.

D. Conclusive Findings:

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that: (1) Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted, and (2) a preponderance of the evidence establishes that Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. <u>Decision and Order:</u>

The application is conditionally GRANTED as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, the respective section A table specified quantity of Schindler escalators, at the specified location, shall have permanent variance from Applicant requires a permanent variance from the provisions of section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring, subject to each and all of the following requirements and limitations:

- 1. The Applicant may intentionally vary the escalator speed and install proximity sensors for traffic detection subject to the following:
 - (a) The rate of acceleration and deceleration shall not exceed 0.3 m/s² (1 ft/sec²) when transitioning between speeds.
 - (b) Failure of a single proximity sensor including its associated circuitry, shall cause the escalator to revert to its normal operating speed at an acceleration of not more than 0.3 m/s^2 (1 ft/sec²).
 - (c) Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.
 - (d) Detection of any passenger shall cause the escalator to reach full speed before a passenger, walking at 4.5ft/sec, reaches the comb plate.

(e) The passenger detection means shall detect a person within a sufficient distance along all possible paths to the escalator that do not require climbing over barriers or escalator handrails to assure that the escalator attains full operating speed before a person walking at 4.5 ft/sec reaches the escalator comb plate. The minimum detection distance shall be calculated according to the following formula or alternatively according to Appendix 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:

```
d = (V_f - V_s) \times (V_w / a) where d = detection\ distance\ (ft) V_f = normal\ speed\ (ft/min)\ [not\ to\ exceed\ 100\ ft/min] V_s = slow\ "sleep"\ speed\ (ft/min)\ [not\ less\ than\ 10\ ft/min] V_w = passenger\ walking\ speed\ (4.5\ ft/sec) a = acceleration/deceleration\ rate\ (ft/sec^2)\ [not\ to\ exceed\ 1\ ft/sec^2]
```

- (f) Detection of any passenger approaching against the direction of escalator travel shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate and shall cause the escalator alarm to sound. The sounding of the alarm may include a 3 to 5 second alarm or three 1 second alarm soundings.
- (g) The minimum speed of the escalator shall not be less than 0.05 m/s (10 ft/min). The "sleep mode" functionality shall not affect the escalator inspection operation. The speed of the escalator shall not vary during Inspection Mode.
- (h) There shall be two means of detecting passengers at each end of the escalator for redundancy and for detection of failure in the passenger detection means.
- (i) The passenger sensors (detectors) at each end of the escalator must be verified by the control system for proper operation in the following manner:
 - If any of the passenger detection sensors remains tripped for at least 5
 minutes but no more than 10 minutes, then the control system shall
 generate a fault to indicate which sensor is faulted while causing the
 escalator to exit the Sleep Mode and remain at the normal run speed
 until the faulted sensor begins to function properly.
 - 2. If one of the paired sensors at either end of the escalator does not trip while the other paired sensor trips at least five times but no more than ten times, the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and

- remain at the normal run speed until the faulted sensor begins to function properly.
- (j) The handrail speed monitoring device required by section 6.1.6.4 may be disabled while the escalator is operating in the slow speed (Sleep Mode) condition.
- 2. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.
- 3. An annual test shall be conducted by a Certified Competent Conveyance Mechanic (CCCM) employed by a Certified Qualified Conveyance Company (CQCC) which maintains and services the escalators, to demonstrate that the escalator is transitioning between "Normal Mode" and "Sleep Mode" and back in conformance with the terms of this variance. The instrumentation used shall be capable of allowing the CCCM to determine the acceleration and deceleration rates of the escalator.
- 4. The results of each annual test required by Condition No. 3 shall be submitted to the appropriate Elevator Unit District Office in tabular and graphic form (speed vs. time).
- 5. Whenever practicable, as determined by the Applicant and subject to the concurrence of Cal/OSHA, the variable speed system is to be installed without the installation of new bollards or other such new structures, if the bollards or other structures would impede passenger movement at the destination end of the escalator. If new bollards or other such structures of that sort are constructed in connection with the variable speed system, the Applicant will take all practicable steps to minimize the impact of same on the movement of passengers at the destination end of the escalator.
- 6. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the escalators shall be provided a copy of the variance decision.
- 7. Cal/OSHA shall be notified when the escalator is ready for inspection, and the escalator shall be inspected by Cal/OSHA and a "Permit to Operate" issued before the escalator may be placed in service.
- 8. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 9. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in procedural accordance with section 411, et. seq.

Pursuant to section 426 subdivision (b), the above, duly completed Proposed Decision, is hereby submitted to the Occupational Safety and Health Standards Board for consideration of adoption.

DATED: July 25, 2024

Michelle Lorio

Michelle Iorio, Hearing Officer

APPENDIX 1

Detection Distance Sleep Mode Operation

Acceleration Rate (ft./sec²) vs. Escalator Sleep Mode Speed (ft./min)

	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
1.00	6.76	6.39	6.01	5.64	5.26	4.88	4.51	4.13	3.76	3.38	3.01	2.63	2.25	1.88	1.50	1.13	0.75	0.38	0.00
0.95	7.12	6.72	6.33	5.93	5.54	5.14	4.75	4.35	3.96	3.56	3.16	2.77	2.37	1.98	1.58	1.19	0.79	0.40	0.00
0.90	7.52	7.10	6.68	6.26	5.85	5.43	5.01	4.59	4.18	3.76	3.34	2.92	2.51	2.09	1.67	1.25	0.84	0.42	0.00
0.85	7.96	7.52	7.07	6.63	6.19	5.75	5.30	4.86	4.42	3.98	3.54	3.09	2.65	2.21	1.77	1.33	0.88	0.44	0.00
0.80	8.45	7.98	7.52	7.05	6.58	6.11	5.64	5.17	4.70	4.23	3.76	3.29	2.82	2.35	1.88	1.41	0.94	0.47	0.00
0.75	9.02	8.52	8.02	7.52	7.01	6.51	6.01	5.51	5.01	4.51	4.01	3.51	3.01	2.51	2.00	1.50	1.00	0.50	0.00
0.70	9.66	9.13	8.59	8.05	7.52	6.98	6.44	5.90	5.37	4.83	4.29	3.76	3.22	2.68	2.15	1.61	1.07	0.54	0.00
0.65	10.41	9.83	9.25	8.67	8.09	7.52	6.94	6.36	5.78	5.20	4.62	4.05	3.47	2.89	2.31	1.73	1.16	0.58	0.00
0.60	11.27	10.65	10.02	9.39	8.77	8.14	7.52	6.89	6.26	5.64	5.01	4.38	3.76	3.13	2.51	1.88	1.25	0.63	0.00
0.55	12.30	11.61	10.93	10.25	9.56	8.88	8.20	7.52	6.83	6.15	5.47	4.78	4.10	3.42	2.73	2.05	1.37	0.68	0.00
0.50	13.53	12.78	12.02	11.27	10.52	9.77	9.02	8.27	7.52	6.76	6.01	5.26	4.51	3.76	3.01	2.25	1.50	0.75	0.00
0.45	15.03	14.20	13.36	12.53	11.69	10.86	10.02	9.19	8.35	7.52	6.68	5.85	5.01	4.18	3.34	2.51	1.67	0.84	0.00
0.40	16.91	15.97	15.03	14.09	13.15	12.21	11.27	10.33	9.39	8.45	7.52	6.58	5.64	4.70	3.76	2.82	1.88	0.94	0.00
0.35	19.32	18.25	17.18	16.10	15.03	13.96	12.88	11.81	10.74	9.66	8.59	7.52	6.44	5.37	4.29	3.22	2.15	1.07	0.00
0.30	22.55	21.29	20.04	18.79	17.54	16.28	15.03	13.78	12.53	11.27	10.02	8.77	7.52	6.26	5.01	3.76	2.51	1.25	0.00
0.25	27.05	25.55	24.05	22.55	21.04	19.54	18.04	16.53	15.03	13.53	12.02	10.52	9.02	7.52	6.01	4.51	3.01	1.50	0.00
0.20	33.82	31.94	30.06	28.18	26.30	24.42	22.55	20.67	18.79	16.91	15.03	13.15	11.27	9.39	7.52	5.64	3.76	1.88	0.00
0.15	45.09	42.59	40.08	37.58	35.07	32.57	30.06	27.56	25.05	22.55	20.04	17.54	15.03	12.53	10.02	7.52	5.01	2.51	0.00
0.10	67.64	63.88	60.12	56.36	52.61	48.85	45.09	41.33	37.58	33.82	30.06	26.30	22.55	18.79	15.03	11.27	7.52	3.76	0.00
0.05	135.27	127.76	120.24	112.73	105.21	97.70	90.18	82.67	75.15	67.64	60.12	52.61	45.09	37.58	30.06	22.55	15.03	7.52	0.00

$$d = (V_f - V_S) \times \frac{V_w}{a}$$

d Detection distance (ft.)

V_f Elevator Rated Speed Escalators with rated speeds of 100 ft./min.

V_s Slow Speed["Sleep mode" Speed] (ft./min.)

V_w Passenger Walking Speed of 4.5 ft./sec.

a Acceleration/Deceleration Rate (ft./sec.2)

Note: 1 ft./min. = 0.0167 ft./sec.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance No.: see section A.1 table of
TV Florester Fredricks (Grove IV)	Proposed Decision Dated: July 25, 2024
TK Elevator Evolution (Group IV)	DECISION
The Occupational Safety and Healtl	h Standards Board hereby adopts the attached
PROPOSED DECISION by Michelle Iorio, He	earing Officer.
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	, ,
	THE FOREGOING VARIANCE DECISION WAS
DAVID HARRICON Member	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
CURIC LACTOT DAVIG AA	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to

read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance No: See section A.1 table below
TK Elevator Evolution (Group IV)	PROPOSED DECISION
	Hearing Date: July 24, 2024 Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-313	Cal Poly Humbolt	2905 St. Louis Rd. Arcata, CA	2
24-V-314	Cal Poly Humbolt	2903 St. Louis Rd. Arcata, CA	2

2. These proceedings are conducted in accordance with Labor Code section 143, and section 401, et seq. of the Occupation Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on July 24, 2024 via videoconference by the Board with Hearing Officer, Michelle Iorio, presiding and hearing the matter on its merit in accordance with section 426.
- 2. At the hearing, James Day with TK Elevator appeared on behalf of the Applicant. Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1
	table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Relevant Safety Orders

Variance Request No. 1 (ASME A17.1-2004, section 2.14.1.7.1)

2.14.1.7.1 A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

Variance Request No. 2A (ASME A17.1-2004, section 2.20.1)

2.20.1 Suspension Means

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused.

Only iron (low-carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process or their equivalent.

<u>Variance Request No. 2B (ASME A17.1-2004, section 2.20.2[.1])</u>

2.20.2.1 On Crosshead Data Plate.

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(a) the number of ropes

- (b) the diameter in millimeters (mm) or inches (in.)
- (c) the manufacturer's rated breaking strength per rope in kilo Newton (kN) or pounds (lb)

Variance Request No. 2C (ASME A17.1-2004, section 2.20.2.2)

2.20.2.2 On Rope Data Tag.

A metal data tag shall be securely attached to one of the wire-rope fastenings. This data tag shall bear the following wire-rope data:

(a) the diameter in millimeters (mm) or inches (in.)

[...]

(f) whether the ropes were nonpreformed or preformed

[...]

Variance Request No. 2D. (ASME A17.1-2004, section 2.20.3)

2.20.3 Factor of Safety

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where

N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Variance Request No. 2E (ASME A17.1-2004, section 2.20.4)

2.20.4 Minimum Number and Diameter of Suspension Ropes

The minimum number of hoisting ropes used shall be three for traction elevators

and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term" diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

<u>Variance Request No. 2F (ASME A17.1-2004, section 2.20.9[.1])</u>

2.20.9 Suspension-Rope Fastening

2.20.9.1 Type of Rope Fastenings. The car and counterweight ends of suspension wire ropes, or the stationary hitch-ends where multiple roping is used, shall be fastened in such a manner that all portions of the rope, except the portion inside the rope sockets, shall be readily visible.

Fastening shall be

- (a) by individual tapered rope sockets (see 2.20.9.4) or other types of rope fastenings that have undergone adequate tensile engineering tests, provided that
- (1) such fastenings conform to 2.20.9.2 and 2.20.9.3;
- (2) the rope socketing is such as to develop at least 80% of the ultimate breaking strength of the strongest rope to be used in such fastenings; or
- (b) by individual wedge rope sockets (see 2.20.9.5); and
- (c) U-bolt-type rope clamps or similar devices shall not be used for suspension rope fastenings.

Variance Request No. 3 (ASME A17.1-2004, section 2.26.9.4)

2.26.9.4 Redundant devices used to satisfy 2.26.9.3 in the determination of the occurrence of a single ground, or the failure of any single magnetically operated switch, contactor or relay, or of any single solid state device, or any single device that limits the leveling or truck zone, or a software system failure, shall be checked prior to each start of the elevator from a landing, when on automatic operation. When a single ground or failure, as specified in 2.26.9.3, occurs, the car shall not be permitted to restart. Implementation of redundancy by a software system is permitted, provided that the removal of power from the

driving-machine motor and brake shall not be solely dependent on software-controlled means.

Variance Request No. 4 (ASME A17.1-2004, section 2.26.9.6.1)

2.26.9.6.1 Two separate means shall be provided to independently inhibit the flow of alternating-current through the solid state devices that connect the direct-current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

Variance Request No. 5 (ASME A17.1-2004, section 2.26.1.4[.1](a))

2.26.1.4.1 General Requirements

(a) Operating devices for inspection operation shall be provided on the top of the car and shall also be permitted in the car and in the machine room.

Variance Request No. 6 (ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b))

- 8.4.10.1.1 Earthquake Equipment (See Also Fig. 8.4.10.1.1)
- (a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:
- (1) seismic zone 3 or greater: a minimum of one seismic switch per building
- (2) seismic zone 2 or greater:
- (a) a displacement switch for each elevator
- (b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room [see 8.4.10.1.3(i)]

D. Findings of Fact

- Applicant proposes to utilize inset car top railings and guards in compliance with ASME 17.1-2013, section 2.14.1.7.1 and the *Vivante Westside*, *LLC* File No. 18-V-364 (Nov. 20, 2020) decision (*Vivante*). Applicant further claims that the request is consistent with the *Vivante*, the *Mack Urban*, *LLC*, Permanent Variance No. 15-V-349 (Nov. 17, 2016), and the *Patton Equities*, *LLC* Permanent Variance No. 20-V-128 (Nov. 12, 2020) decisions (*Patton Equities*).
- 2. Applicant proposes to utilize noncircular elastomeric-coated steel belts ("ECSBs") rather than steel ropes in a machine room-less ("MRL") elevator installation, with updated data plates, data tags, and wedge sockets designed for use with

ECSBs, as well as the appropriate factor of safety criteria conforming to ASME 17.1-2013, with a continuous residual strength detection device ("RSDD") compliant with the San Francisco Public Works (Permanent Variance No. 21-V-061, et al.) decisions.

- 3. The installation shall utilize the TK Elevator Model 104DP001 RSDD, accepted by Cal/OSHA on May 4, 2021.
- 4. Applicant proposes to comply with ASME A17.1-2013 sections 2.26.9.3, "Protection Against Failures", rather than the requirements of 2.26.9.3 and 2.26.9.4 in the ASME 2004 code.
- Applicant proposes to use TKE's control systems, using the TKE TAC32T Controller with SIL3 rated elements, to provide equivalent safety to ASME A17.1-2004, section 2.26.9.4 as a means to inhibit flow of Alternating Current to the Driving Motor in compliance with ASME A17.1-2013, section 2.26.9.6.
- 6. Applicant proposes to locate the Inspection Transfer Switch within the machinery/control room/space in the MRL installation, in compliance with ASME 17.1-2013, section 2.26.1.4.
- 7. Applicant proposes to locate the Seismic-Operation Reset Switch in the machinery/control room/space in the MRL installation.

E. Decision and Order

Applicant is hereby conditionally GRANTED Permanent Variance as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, with respect to the section A specified number of TKE EVO 200 elevator(s), at the specified location, each shall conditionally hold permanent variance from the following subparts of ASME A17.1-2004, currently incorporated by reference into section 3141 of the Elevator Safety Orders:

- Car-Top Railing: 2.14.1.7.1 (Limited to the extent necessary to permit the use of an inset car-top railing)
- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, and 2.20.9.1 (Limited to the extent necessary to permit the use of the elastomeric-coated steel belts in lieu of circular steel suspension ropes)
- Inspection transfer switch: 2.26.1.4.4(a) (Limited to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room)
- Software Reliant Means to Remove Power: 2.26.9.4 (Limited to the extent necessary to permit the exclusive use of SIL-rated software systems as a means to remove power from the driving machine motor and brake)

- SIL-Rated Circuitry to Inhibit Current Flow: 2.26.9.6.1 (Limited to the extent necessary to permit the use of SIL-rated circuitry in place of an electromechanical relay to inhibit current flow to the drive motor)
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Limited to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room)

Inset Car Top Railing (Variance Request No. 1):

- 1.0 Any and all inset car top railings shall comply with the following:
- 1.1 Serviceable equipment shall be positioned so that mechanics and inspectors do not have to stand on or climb over the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit trained elevator mechanics or elevator service personnel to stand or climb over the car top railing.
- 1.2 The distance that the railing can be inset shall be limited to not more than six inches (6").
- 1.3 All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds two inches (2"), shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.
- 1.4 The top surface of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4" diagonal red and white stripes.
- 1.5 The Applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing; each sign shall state:

CAUTION STAY INSIDE RAILING NO LEANING BEYOND RAILING NO STEPPING ON, OR BEYOND, RAILING

1.6 The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).

Suspension Means (Variance Request No. 2):

- 2.0 The elevator suspension system shall comply with the following:
- 2.1 The elastomeric coated steel belts (ECSBs) and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:

- 2.20.4.3 Minimum Number of Suspension Members
- 2.20.3 Factor of Safety
- 2.20.9 Suspension Member Fastening
- 2.2 Additionally, ECSBs shall meet or exceed all requirements of ASME A17.6 2010, Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3 Noncircular Elastomeric Coated Steel Suspension Members for Elevators.
- 2.3 The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the ECSBs and fastenings and related monitoring and detection systems and criteria for ECSB replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to Cal/OSHA upon request.
- 2.4 ECSB mandatory replacement criteria shall include:
 - 2.4.1. Any exposed wire, strand or cord;
 - 2.4.2. Any wire, strand or cord breaks through the elastomeric coating;
 - 2.4.3. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;
 - 2.4.4. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.
- 2.5 Traction drive sheaves must have a minimum diameter of 112 mm. The maximum speed of ECSBs running on 112 mm drive sheaves shall be no greater than 6.1 m/s.
- 2.6 If any one (1) ECSB needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed ECSB having been placed into service, it is permissible to replace the individual damaged suspension member. ECSBs that have been installed on another installation shall not be re used.
- 2.7 A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- 2.8 A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).
- 2.9 An elevator controller integrated bend cycle monitoring system shall monitor actual ECSB bend cycles, by means of continuously counting, and storing in nonvolatile

memory, the number of trips that the ECSB makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single ECSB member drops below (60%) sixty percent of full rated strength. The monitoring means shall prevent the car from restarting. Notwithstanding any less frequent periodic testing requirement per Addendum 2 (Cal/OSHA Circular Letter), the bend cycle monitoring system shall be tested semiannually in accordance with the procedures required per above Conditions 2.3 and 2.4.

- 2.10 The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
- 2.11 A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
- 2.12 Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 2.3 and 2.4 specified criteria, shall be conducted and documented every six (6) months by a CCCM.
- 2.13 The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 1, "Suspension Means Replacement Reporting Condition."
- 2.14 Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2, and 8.6.1.4, respectively.
- 2.15 The subject elevators(s) shall be equipped with a TK Elevator Model 104DP001 Residual Strength Detection Device accepted by Cal/OSHA on May 4, 2021 or Cal/OSHA accepted equivalent device.

Control and Operating Circuits

Combined Software Redundant Devices with Software Removal of Power from Driving

Motor and Brake (Variance Request No. 3)

Removal of Power from Driving Motor Without Electro-mechanical Switches (Variance Request No. 4)

- 3.0 The SIL rated circuitry used to provide device/circuit redundancy and to inhibit electrical current flow in accordance with ASME A17.1-2004, sections 2.26.9.4 and 2.26.9.6.1 shall comply with the following:
- 3.1 The SIL rated systems and related circuits shall consist of:
 - 3.1.1. ELGO LIMAX33 RED, (aka LIMAX3R-03-050-0500-CNXTG-RJU), Safe Magnetic Absolute Shaft Information System, labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL

- certification number (968/A 163), followed by the applicable revision number (as in 968/A 163.07/19).
- 3.1.2 Printed circuit board assembly SSOA (6300 AHE001), labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1347), followed by the applicable revision number (as in 968/FSP 1347.00/16).
- 3.1.3 Two circuit board components (Serializer S3I and S3O), each labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization and the SIL certification number (968/A 162), followed by the applicable revision number (as in 968/A 162.04/18)
- 3.2 The software system and related circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.
- 3.3 The access door or cover of the enclosures containing the SIL rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL rated devices. Refer to maintenance Control Program and wiring diagrams prior to performing work.

- 3.4 Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL rated component, with notations identifying parts and locations.
- 3.5 Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.
- 3.6 A successful test of the SIL rated circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL rated devices, safety functions, and related circuits operate as intended.
- 3.7 Any alterations to the SIL rated circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.
- 3.8 Any replacement of the SIL rated circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.
- 3.9 Any repairs to the SIL rated circuits shall be made in compliance with the Elevator

- Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.
- 3.10 Any space containing SIL rated circuits shall be maintained within the temperature and humidity range specified by TKE. The temperature and humidity range shall be posted on each enclosure containing SIL rated software or circuits.
- 3.11 Field software changes to the SIL rated system are not permitted. Any changes to the SIL rated system's circuitry will require recertification and all necessary updates to the documentation and diagrams required by Conditions 3.4 and 3.5 above.

<u>Inspection Transfer Switch and Seismic Reset Switch (Variance Request Nos. 5 and 6):</u>

- 4.0 Inspection Transfer switch and Seismic Reset switch placement and enclosure shall comply with the following:
- 4.1 If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4, does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 4.2 If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 5.0 The elevator shall be serviced, maintained, adjusted, tested, and inspected only by CCCM having been trained, and competent, to perform those tasks on the TKE EVO 200 elevator system in accordance with written procedures and criteria, including as required per above Conditions 2.3, and 2.4.
- 6.0 Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in full service prior to the Permit to Operate being issued by Cal/OSHA.
- 7.0 The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, sections 411.2, and 411.3.

Pursuant to sect of adoption.	ion 426(b), the Proposed D	ecision is submitted to the Board for consideration
Date:J <u>uly</u>	25, 2024	Michelle Lorio Michelle Iorio, Hearing Officer

own motion, in the procedural manner prescribed.

This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its

8.0

ADDENDUM 1

SUSPENSION MEANS REPLACEMENT REPORTING REQUIREMENTS

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

- (1) A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, Attn: Engineering section, 2 MacArthur Place Suite 700, Santa Ana, CA 92707.
- (2) Each such report shall contain, but not necessarily be limited to, the following information:
 - (a) The State-issued conveyance number, complete address, and Permanent Variance file number that identifies the permanent variance.
 - (b) The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - (c) The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - (d) The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, and certification expiration date of each CCCM performing the replacement work.
 - (e) The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - (f) A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - (g) A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - (h) All information provided on the crosshead data plate per ASME A17.1-2004, section

- 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- (i) For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- (j) For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- (k) Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2(a) above.

ADDENDUM 2

CIRCULAR LETTER E-10-04, October 6, 2010

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer Cal/OSHA-Elevator Unit HQ

ADDENDUM 3

(A) A Residual Strength Detection Device (RSDD) shall continuously monitor all Elastomeric Coated Steel Belt suspension members (ECSB), automatically stopping the car if the residual strength of any belt drops below 60%. The RSDD shall prevent the elevator from restarting after a normal stop at a landing. The RSDD shall device shall apply a form of electrical current and/or signal through the entire length of the steel tension elements of the ECSB and measure the current and/or signal on its return. The values measured shall be continuously compared to values that have been correlated to the remaining residual strength of the ECSB through testing. The required RSDD shall not rely upon giant magnetoresistance technology, or other magnetic measurement means, for residual strength detection or monitoring.

The RSDD must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room or controller location. The removed RSDD must be replaced or returned to proper service within 30 days. If upon routine inspection, the RSDD device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room or controller location.

If upon inspection by Cal/OSHA, the RSDD is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service. If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

- (B) On or before November 21 2021, and thereafter, the above specified and documented RSDD shall be installed and operational on the subject elevator.
- (C) A successful functionality test of each RSDD shall be conducted once a year, and a copy of completed testing documentation conspicuously located in the machine room or within proximity of the controller.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2O and/or Gen3Peak with Variant Governor Rope and Sheaves with MES (Group IV) Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: July 25, 2024

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
NOLA KENNEDY, Member	DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDT, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance regarding:	Permanent Variance No: See section A.1 table below
Otis Gen2O and/or Gen3Peak with Variant Governor Rope and Sheaves with MES	PROPOSED DECISION
(Group IV)	Hearing Date: July 24, 2024 Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-315	Cedars-Sinai	4650 Lincoln Blvd. Marina Del Rey, CA	5

2. These proceedings are conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

- 1. This hearing was held on July 24, 2024 via videoconference, by the Board with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA")
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

¹ Unless otherwise noted, all references are to title 8, California Code of Regulations.

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1
	table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Applicable Regulation

- 1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:
 - a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
 - b. Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
 - c. Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
 - d. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);
 - e. Governor Rope Diameter: 2.18.5.1 (Only to the extent necessary to permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); Note: A variance from the section above is not required. However, the Board has included a variance from this code requirement in similar previous variances.
 - f. Pitch Diameter: 2.18.7.4 (Only to the extent necessary to permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).

g. Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (Only to the extent necessary to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

D. Findings of Fact

- 1. The Board incorporates by reference the findings stated in:
 - Items 3 through 5.c, 5.e, and 5.f of the "Findings of Fact" section of the Proposed Decision adopted by the Board on February 19, 2009, in Permanent Variance No. 08-V-247;
 - b. Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, in Permanent Variance No. 09-V-042;
 - c. Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, in Permanent Variance No. 10 V 029;
 - d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in Permanent Variance No. 12-V-146; and
 - e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in Permanent Variance No. 14-V-170.
 - f. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for OSHSB File No. 22-V-302 regarding medical emergency car dimensions.
- 2. Regarding requested variance in governor sheave diameter, and governor rope diameter, in variance from section 3141, incorporated ASME A17.1-2004, sections 2.18.7.4 and 2.18.5.1, respectively, the Board incorporates by reference the following previous findings of record: Items 8 through 12 of the Proposed Decision adopted by the Board on December 13, 2018, in Permanent Variance No. 18-V-425, and further substantiating bases per therein cited Permanent Variance Decisions of the Board.
- 3. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders ("ESO").
- 4. Cal/OSHA safety engineers, by way of written submissions to the record (Exhibit PD-3), and positions stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

E. Conclusive Findings

The above stated procedural prerequisites, legal authority, and factual findings, as further supported by the documentary record and hearing testimony in this matter, provide a substantive and reasonable basis of conclusion that:

- 1. Applicant has complied with the statutory and regulatory requirements that must be met before an application for permanent variance may be conditionally granted, and
- A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

F. <u>Decision and Order</u>

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, Applicant shall have permanent variances from section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (To permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Cartop Railing: 2.14.1.7.1 (To permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Inspection transfer switch: 2.26.1.4.4(a) (To permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (To permit the seismic reset switch to reside at a location other than the machine room);
- Governor Rope Diameter: 2.18.5.1 (To permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); Note: A variance from the section above is not required. However, the Board has included a variance from this code requirement in similar previous variances.

- Pitch Diameter: 2.18.7.4 (To permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).
- Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

The variance shall be subject to, and limited by, the following additional conditions:

- 1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
- 2. The suspension system shall comply with the following:
 - a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
 - b. Steel-coated belts that have been installed and used on another installation shall not be reused.
 - c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
 - d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
 - e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - f. The coated steel belts used shall be accepted by Cal/OSHA.
 - g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to Cal/OSHA.
- 3. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.

- 4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to Cal/OSHA upon request.
- 5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person who, or organization that, installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts;
 - g. Lubrication information.
- 6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts,
 - b. The belt width and thickness in millimeters or inches, and
 - c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
- 7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.

10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

11. If there is an inset car top railing:

- a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand on or climb over the car top railing.
- b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.
- c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
- d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.
- e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).
- 12. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a 8 mm (0.315 in.) diameter steel governor rope with 8-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 240 mm (9.45 in.).
- 13. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.

- 14. All medical emergency service elevators shall comply with the following:
 - a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21- inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5 inch (127 mm) radius corners] in the horizontal, open position."

- b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
- c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
- 15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 16. Cal/OSHA shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before each elevator is placed in service.
- 17. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
- 18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per sections 411.2 and 411.3.
- 19. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: 7/25/2024

Michelle Lorio
Michelle Iorio, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

<u>Suspension Means – Replacement Reporting Condition</u>

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

- 1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future):Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and

- (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
- g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
- h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for	Permanent Variance No.: see section A.1
Permanent Variance Regarding:	table of
KONE Managaga 200 Flaviatore (Crava IV)	Proposed Decision Dated: July 25, 2024
KONE Monospace 300 Elevators (Group IV)	DECISION
	DECISION
· · · · · · · · · · · · · · · · · · ·	ndards Board hereby adopts the attached
PROPOSED DECISION by Michelle Iorio, Hearing	g Officer.
	OCCUPATIONAL SAFETY AND HEALTH
IOSERIA MALIOTO IR Chairman	STANDARDS BOARD
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: August 15, 2024
KATHLEEN CRAWFORD, Member	- acc c
,	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS Manushau	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DAVID THOMAS, Member	•
	Note: A copy of this Decision must be
	posted for the Applicant's employees to

read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:	Permaent Variance Nos.: See section A.1 table below
KONE Monospace 300 Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: July 24, 2024 Location: Zoom

A. Subject Matter

1. The Applicants ("Applicant") below have applied for a permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-323	IDB, LLC	2800 Broad St. San Luis Obispo, CA	1
24-V-325	United Playaz	1044 Howard St. San Francisco, CA	1
24-V-327	Tulip, LP	801 Town Center Dr. Oxnard, CA	1
24-V-340	MirKa South River Village, LP	4933 North River Rd. Oceanside, CA	1

2. The safety order requirements are set out within section 3141 incorporated ASME A17.1-2004, sections 2.18.5.1 and 2.20.4.

B. Procedural

1. This hearing was held on July 24, 2024, via videoconference, by the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit, in accordance with section 426.

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

- 2. At the hearing, Fuei Saetern, with KONE, Inc., appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1
	table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Each respective Applicant intends to utilize the KONE Inc. Monospace 300 type elevator, in the quantity, at the location, specified per the above section A.1 table.
- 2. The installation contract for this elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
- 3. Each Applicant proposes to use hoisting ropes that are 8 mm in diameter which also consist of 0.51 mm diameter outer wires, in variance from the express requirements of ASME A17.1-2004, section 2.20.4.
- 4. In relevant part, ASME A17.1-2004, section 2.20.4 states:
 - 2.20.4 Minimum Number and Diameter of Suspension Ropes
 - ...The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.
- 5. An intent of ASME A17.1-2004, section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes' foreseen service life.

- 6. KONE has represented to Cal/OSHA, having established an engineering practice for purposes of Monospace 300 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in ASME A17.1-2010, section 2.20.3—under which, given that factor of safety, supplemental broken suspension member protection is not required.
- 7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject Cal/OSHA approval).
- 8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from Title 8, section 3141, incorporated ASME A17.1-2004, section 2.18.5.1.
- 9. ASME A17.1-2004, section 2.18.5.1, specifies, in relevant part:
 - 2.18.5.1 Material and Factor of Safety.
 - ... [Governor ropes] not less than 9.5 mm (0.375 in.) in diameter. The factor of safety of governor ropes shall be not less than 5...
- 10. The Board takes notice of section 3141.7, subpart (a)(10):

A reduced diameter governor rope of equivalent construction and material to that required by ASME A17.1-2004, is permissible if the factor of safety as related to the strength necessary to activate the safety is 5 or greater;

- 11. Applicants propose use of 6mm governor rope having a safety factor of 5 or greater, in conformity with section 3141.7(a)(10), the specific parameters of which, being expressly set out within the Elevator Safety Orders (ESO), take precedence over more generally referenced governor rope diameter requirements per ASME A17.1-2004, section 2.18.5.1. Accordingly, the governor rope specifications being presently proposed, inclusive of a factor of safety of 5 or greater, would comply with current requirements, and therefore not be subject to issuance of permanent variance.
- 12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm diameter suspension rope materially similar to that presently proposed (e.g. Permanent Variance Nos. 06-V-203, 08-V-245, and 13-V-303).
- 13. As noted by the Board in permanent Variance Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of projected service life. With increasing usage cycles, a reduction in the cross-

sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.

- 14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Cal/OSHA's safety engineer has scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and concluded it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).
- 15. The applicant supplies tabulated data regarding the "Maximum Static Load on All Suspension Ropes." To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1 2004, section 2.20.3:

 $W = (S \times N)/f$

where
 W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway
 N = number of runs of rope under load. For 2:1 roping,
 N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope f = the factor of safety from Table 2.20.3

- 16. ASME A17.1-2010 sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher. This is a higher minimum factor of safety than that proposed by Applicant, but a minimum recommended by Cal/OSHA as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.
- 17. Cal/OSHA is in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators*. Adherence to this condition will provide an additional assurance of safety equivalence,

regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.

18. Cal/OSHA, by way of written submission to the record (Exhibit PD-3), and stated positions at hearing, is of the well informed opinion that grant of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. <u>Decision and Order</u>

Each Application being the subject of this proceeding, per above section A.1 table, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from section 3141 incorporated ASME A17.1-2004, section 2.20.4, in as much as it precludes use of suspension rope of between 8 mm and 9.5 mm, or outer wire of between 0.51 mm and 0.56 mm in diameter, at such locations and numbers of Group IV KONE Monospace 300 elevators identified in each respective Application, subject to the following conditions:

- 1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).
- 2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.
- 3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.
- 4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with "KONE Inc. Inspector's Guide to 6 mm diameter and 8 mm diameter steel ropes for KONE Elevators" (per Application Exhibit B, or as thereafter amended by KONE subject to Cal/OSHA approval).
- 5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.

- 6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
- 7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
- 8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
- 9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 section 2.20.3.
- 10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
- 11. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA and a "Permit to Operate" issued before the elevator is placed in service.
- 12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
- 13. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 14. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024

Michelle Iorio, Hearing Officer

Michelle Lorio

Appendix 1

Monospace 300 Suspension Ropes Appendix 1 Table

Variance Number	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
24-V-323	1	7	150	12247
24-V-325	1	6	150	10497
24-V-327	1	7	150	12247
24-V-340	Elevator 1	7	150	12247

Appendix 2

Suspension Means Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings. Further:

- 1. A separate report for each elevator shall be submitted, in a manner acceptable Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that

- pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in above Appendix 2, section 2, Subsection (a), above.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 500 Elevators (Group IV)	Permanent Variance No.: see section A.1 table of Proposed Decision Dated: July 25, 2024 DECISION
The Occupational Safety and Health S PROPOSED DECISION by Michelle Iorio, Hear	Standards Board hereby adopts the attached ring Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	Date of Adoption: August 15, 2024 THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON, Member	ADOPTED ON THE DATE INDICATED ABOVE IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING
NOLA KENNEDY, Member	MAY BE FILED BY ANY PARTY WITH THE STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2. Note: A copy of this Decision must be

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance Nos.: See Section A.1 Table Below
KONE Monospace 500 Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: July 24, 2024 Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-324	Applied Materials, Inc.	242 Commercial St. Sunnyvale, CA	4
24-V-326	Tulip, LP	801 Town Center Dr. Oxnard, CA	1
24-V-328	2535 Alsace Ave (LA) OZ Owner, LLC	2535 S. Alsace Ave. Los Angeles, CA	1
24-V-329	URSA 1037 Dewey Ave LLC	1037 Dewey Ave. Los Angeles, CA	1
24-V-339	City of Ontario	381 N. Sultana Ave. Ontario, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

B. Procedural

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2. At the hearing, Fuei Saetern, with KONE, Inc., appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1
	table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Each respective Applicant intends to utilize the KONE Inc. Monospace 500 type elevator, in the quantity, at the location, specified per the above section A.1 table.
- 2. The installation contract for this elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
- 3. Each Applicant proposes to use hoisting ropes that are 8 mm in diameter which also consist of 0.51 mm diameter outer wires, in variance from the express requirements of ASME A17.1-2004, section 2.20.4.
- 4. In relevant part, ASME A17.1-2004, section 2.20.4 states:
 - 2.20.4 Minimum Number and Diameter of Suspension Ropes

...The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

- 5. An intent of the afore cited requirement of ASME A17.1-2004, section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes' foreseen service life.
- 6. KONE has represented to Cal/OSHA, having established an engineering practice for purposes of Monospace 500 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in ASME A17.1-2010, section 2.20.3—under which, given that factor of safety, supplemental broken suspension member protection is not required.
- 7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject to Cal/OSHA approval).
- 8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from section 3141, incorporated ASME A17.1-2004, section 2.18.5.1.
- 9. ASME A17.1-2004, section 2.18.5.1, specifies, in relevant part:
 - 2.18.5.1 Material and Factor of Safety.
 - ... [Governor ropes] not less than 9.5 mm (0.375 in.) in diameter. The factor of safety of governor ropes shall be not less than 5...
- 10. The Board takes notice of Elevator Safety Order section 3141.7, subpart (a)(10):

A reduced diameter governor rope of equivalent construction and material to that required by ASME A17.1-2004, is permissible if the factor of safety as related to the strength necessary to activate the safety is 5 or greater;

- 11. Applicants propose use of 6mm governor rope having a safety factor of 5 or greater, in conformity with section 3141.7(a)(10), the specific parameters of which, being expressly set out within Elevator Safety Orders, take precedence over more generally referenced governor rope diameter requirements per ASME A17.1-2004, section 2.18.5.1. Accordingly, the governor rope specifications being presently proposed, inclusive of a factor of safety of 5 or greater, would comply with current Elevator Safety Orders requirements, and therefore not be subject to issuance of permanent variance.
- 12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm

- diameter suspension rope materially similar to that presently proposed (e.g. Permanent Variance Nos. 06-V-203, 08-V-245, and 13-V-303).
- 13. As noted by the Board in Permanent Variance Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of projected service life. With increasing usage cycles, a reduction in the cross-sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.
- 14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Cal/OSHA safety engineers have scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and conclude it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).
- 15. The applicant supplies tabulated data regarding the "Maximum Static Load on All Suspension Ropes." To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1 2004, section 2.20.3:

 $W = (S \times N)/f$

where
 W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway
 N = number of runs of rope under load. For 2:1 roping,

N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope f = the factor of safety from Table 2.20.3

16. ASME A17.1-2010 sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher. This is a higher minimum factor of safety than that proposed by Applicant, but a minimum recommended by Cal/OSHA as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope.

- 17. Cal/OSHA is in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators.*Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.
- 18. Cal/OSHA, by way of written submissions to the record (Exhibits PD-3 and PD-4 respectively), and stated positions at hearing, is of the well informed opinion that grant of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

 A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. <u>Decision and Order</u>

Each permaent variance application the subject of this proceeding, per above section A.1 table, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from section 3141 incorporated ASME A17.1-2004, section 2.20.4, in as much as it precludes use of suspension rope of between 8 mm and 9.5 mm, or outer wire of between 0.51 mm and 0.56 mm in diameter, at such locations and numbers of Group IV KONE Monospace 500 elevators identified in each respective Application, subject to the following conditions:

- 1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).
- 2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.
- 3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.
- 4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with "KONE Inc. Inspector's Guide to 6 mm diameter and 8 mm diameter

- steel ropes for KONE Elevators" (per Application Exhibit B, or as thereafter amended by KONE subject to Cal/OSHA approval).
- 5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.
- 6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
- 7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
- 8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
- 9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 section 2.20.3.
- 10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
- 11. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA and a "Permit to Operate" issued before the elevator is placed in service.
- 12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
- 13. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 14. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024

Michelle Iorio, Hearing Officer

Michelle clorio

Monospace 500 Suspension Appendix 1 Table.

Appendix 1

Variance Number	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
24-V-324	А	8	350	11706
24-V-324	В	8	350	11706
24-V-324	С	8	350	11706
24-V-324	D	8	350	11706
24-V-326	2	7	150	12247
24-V-328	Elevator 1	7	200	11556
24-V-329	Elevator 1	7	200	11556
24-V-339	Elevator 1	5	200	8254

Appendix 2

Suspension Means Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/Osha within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings. Further:

- 1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
 - h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that

- pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in above Appendix 2, section 2, Subsection (a), above.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for
Permanent Variance Regarding:
Otis Gen 2S/Gen3Edge Elevator (Group IV)

Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: July 25, 2024

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

JOSEPH M. ALIOTO JR., Chairman	-
KATHLEEN CRAWFORD, Member	-
DAVID HARRISON, Member	-
NOLA KENNEDY, Member	-
CHRIS LASZCZ-DAVIS, Member	-
DAVID THOMAS, Member	-

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: August 15, 2024

THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION. YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance Nos.: See section A.1 table below
Otis Gen 2S/Gen3Edge Elevator (Group IV)	PROPOSED DECISION
	Hearing Date: July 24, 2024 Location: Zoom

A. <u>Subject Matter</u>

1. Each applicant ("Applicant") below has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-330	Eastvale Palace LLC	12509 Schleisman Rd. Eastvale, CA	3

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Borad's ("Board" or "OSHSB") procedural Regulations.

B. Procedural

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board, with Hearing Officer Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

¹ Unless otherwise noted, all references are to title 8, California Code of Regulations.

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per Section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's rulemaking records, and variance files and decisions, concerning the Elevator Safety Order standards at issue. At close of hearing on July 24, 2024, the record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S elevators at the locations and in the numbers stated in the above section A.1 table.
- 2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
- 3. The Board incorporates by reference Items (i.e. sections) D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 regarding Permanent Variance No. 12-V-093 and Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 Permanent Variance No. 14-V-206.
- 4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and positions stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from section 3141

and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- <u>Car top railing</u>: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- <u>Speed governor over-speed switch</u>: 2.18.4.2.5(a) (only insofar as is necessary to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- Governor rope diameter: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- <u>Pitch diameter</u>: 2.18.7.4 (to permit the use of the speed governor system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- <u>Suspension means</u>: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions are only to the extent necessary to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- <u>Inspection transfer switch</u>: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- <u>Seismic reset switch</u>: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group IV devices that are designed, equipped, and installed in accordance with, and are otherwise consistent with, the representations made in the Otis Master File [referred to in previous proposed decisions as the "Gen2 Master File") maintained by the Board, as that file was constituted at the time of this hearing) and are subject to the following conditions:

- 1. The suspension system shall comply with the following:
 - a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
 - b. Steel coated belts that have been installed and used on another installation shall not be reused.

- c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
- d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
- e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
- f. The coated steel belts used shall be accepted by Cal/OSHA.
- 2. With respect to each elevator subject to this variance, the applicant shall comply Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.
- 3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.
- 4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
 - a. The width and thickness in millimeters or inches;
 - b. The manufacturer's rated breaking strength in (kN) or (lbf);
 - c. The name of the person or organization that installed the flat coated steel belts;
 - d. The month and year the flat coated steel belts were installed;
 - e. The month and year the flat coated steel belts were first shortened;
 - f. The name or trademark of the manufacturer of the flat coated steel belts; and
 - g. Lubrication information.
- 5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
 - a. The number of belts;

- b. The belt width and thickness in millimeters or inches; and
- c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).
- 6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

- a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.
- b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.
- c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.
- d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.
- e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION DO NOT STAND ON OR CLIMB OVER RAILING

- f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).
- 8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
- 9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

- 10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
- 11. The governor speed-reducing switch function shall comply with the following:
 - a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
 - b. The velocity encoder shall be coupled to the driving machine motor shaft. The "C" channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from "C" channel of the encoder shall be verified with the "A" and "B" channels for failure. If a failure is detected then an emergency stop shall be initiated.
 - c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
 - d. It shall be used in conjunction with approved car-mounted speed governors only.
 - e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
 - f. A successful test of the speed-reducing switch system's functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - g. A successful test of the traction monitoring system's functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
 - h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.
- 12. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

- 13. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
- 14. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 15. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
- 16. The Applicant shall be subject to the Suspension Means Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
- 17. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
- 18. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: July 25, 2024

Michelle Iorio, Hearing Officer

Michelle Lorio

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

<u>Suspension Means – Replacement Reporting Condition</u>

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

- A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
 - b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.

- g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
- h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:

Schindler Model 3300 Elevators, W/Variant Governor Ropes and Sheaves (Group IV)

Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: July 25, 2024

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

JOSEPH M. ALIOTO JR., Chairman

KATHLEEN CRAWFORD, Member

DAVID HARRISON, Member

NOLA KENNEDY, Member

CHRIS LASZCZ-DAVIS, Member

DAVID THOMAS, Member

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Date of Adoption: August 15, 2024

THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION. YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTIONS 427, 427.1 AND 427.2.

Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

BEFORE THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance regarding:

below

Schindler Model 3300 Elevators, W/ Variant Governor Ropes and Sheaves (Group IV)

PROPOSED DECISION

Hearing Date: July 24, 2024

Permanent Variance No.: See section A.1 table

Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-337	Tuolumne Economic Development Authority, Inc.	19400 Tuolumne Rd. N. Tuolumne, CA	3

2. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. <u>Procedural</u>

- 1. This hearing was held on July 24, 2024, via videoconference, by the Board with Hearing Officer, Michelle Iorio, both presiding and hearing the matter on its merit in accordance with section 426.
- 3. At the hearing, Jennifer Linares, with the Schindler Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, all references are to California Code of Regulations, title 8.

4. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit	
PD-1	Permanent variance applications per table	
	in Jurisdictional and Procedural Matters	
PD-2	OSHSB Notice of Hearing	
PD-3	Cal/OSHA Review of variance application	
PD-4	Review Draft-1 Proposed Decision	

5. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On July 24, 2024, the hearing and record was closed, and the matter taken under submission by the Hearing Officer.

C. Relevant Safety Order Provisions

Applicant seeks a permanent variance from section 3141 [ASME A17.1-2004, sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(b), 2.14.1.7.1, 2.18.7.4, and 2.26.9.6.1] of the Elevator Safety Orders, with respect to the suspension ropes and connections, inspection transfer switch relocation, seismic reset switch relocation, the location and construction of car-top railings, governor-sheave diameter, and means of removing power from the driving machine motor for one (1) Schindler model 3300 MRL elevator.

The relevant language of those sections are below.

1. Suspension Means

Section 3141 [ASME A17.1-2004, section 2.20.1, Suspension Means] states in part:

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused. Only iron (low-carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process, or their equivalent.

Section 3141 [ASME A17.1-2004, section 2.20.2.1(b), On Crosshead Data Plate] states in part:

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(b) the diameter in millimeters (mm) or inches (in.)

Section 3141 [ASME A17.1-2004, section 2.20.2.2(a) and (f) On Rope Data Tag] states in part:

A metal data tag shall be securely attached-to-one of the wire-rope fastenings. This data tag shall bear the following wire-rope data:

(a) the diameter in millimeters (mm) or inches (in.)

[...]

(f) whether the ropes were non preformed or preformed

Section 3141 [ASME A17.1-2004, section 2.20.3, Factor of Safety] states:

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where:

N= number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S= manufacturer's rated breaking strength of one rope

W= maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Section 3141 [ASME A17.1-2004, section 2.20.4, Minimum Number and Diameter of Suspension Ropes] states:

The minimum number of hoisting ropes used shall be three for traction elevators and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term "diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

Section 3141 [ASME A17.1-2004, section 2.20.9.3.4] states:

Cast or forged steel rope sockets, shackle rods, and their connections shall be made of unwelded steel, having an elongation of not less than 20% in a gauge length of 50 mm (2 in.), when measured in accordance with ASTM E 8, and conforming to ASTM A 668, Class B for forged steel, and ASTM A 27, Grade 60/30 for cast steel, and shall be stress relieved. Steels of greater strength shall be permitted, provided they have an elongation of not less than 20% in a length of 50 mm (2 in.).

Section 3141 [ASME A17.1-2004, section 2.20.9.5.4] states:

When the rope has been seated in the wedge socket by the load on the rope, the wedge shall be visible, and at least two wire-rope retaining clips shall be provided to attach the termination side to the load-carrying side of the rope (see Fig. 2.20.9.5). The first clip shall be placed a maximum of 4 times the rope diameter above the socket, and the second clip shall be located within 8 times the rope diameter above the first clip. The purpose of the two clips is to retain the wedge and prevent the rope from slipping in the socket should the load on the rope be removed for any reason. The clips shall be designed and installed so that they do not distort or damage the rope in any manner.

2. Requested Transfer Switch Placement Variance

As it pertains to installation of the requisite transfer switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code A17.1-2004, subsection:

Subsection 2.26.1.4.4(a)--Transfer Switch Placement in Machine Room

Section 3141[ASME A17.1-2004, section 2.26.1.4.4(a), Machine Room Inspection Operation] states:

When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be

- (a) located in the machine room[.]
- 3. Requested Seismic Reset Switch Placement Variance

As it pertains to installation of the requisite seismic reset switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code subsection:

Subsection 8.4.10.1.1(a)(2)(b)--Seismic Reset Switch Placement in Machine Room

Section 3141[ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b), Earthquake Equipment] states:

- (a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:
- (1) seismic zone 3 or greater: a minimum of one seismic switch per building
- (2) seismic zone 2 or greater:
 - (a) a displacement switch for each elevator
 - (b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room
- 4. Requested Car Top Railing Inset Variance

As it pertains to top of car railing placement requiring space occupied by upper hoistway mounted elevator machinery characteristic of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code A17.1-2004, section:

Section 2.14.1.7.1—Top of Car Perimeter Railing Placement

Section 3141[ASME A17.1-2004, section 2.14.1.7.1] states:

A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

5. Pitch Diameter of Governor Sheaves

Section 3141 [ASME A17.1-2004, Section 2.18.7.4] states:

"The pitch diameter of governor sheaves and governor tension sheaves shall be not less than the product of the diameter of the rope and the applicable multiplier listed in Table 2.18.7.4, based on the rated speed and the number of strands in the rope."

Table 2.18.7.4 Multiplier for Determining Governor Sheave Pitch Diameter [from ASME A17.1-2004]

Rated Speed m/s (ft./min)	Number of Strands	Multiplier
1.00 or less (200 or less)	6	42
1.00 or less (200 or less)	8	30
Over 1.0 (over 200)	6	46
Over 1.0 (over 200)	8	32

6. SIL-Rated System to Inhibit Current Flow to AC Drive Motor

Section 3141[ASME A17.1-2004, section 2.26.9.6.1] states:

Two separate means shall be provided to independently inhibit the flow of alternating current through the solid state devices that connect the direct current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

D. Findings of Fact

- Each respective Applicant intends to utilize Schindler model 3300 MRL elevator cars, in the quantity, at the locations specified in Jurisdictional and Procedural Matters, section 1.
- 2. The installation contract for these elevators was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
- 3. The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders. They utilize non-circular elastomeric-coated steel belts and specialized suspension means fastenings.
- 4. No machine room is provided, preventing the inspection transfer switch from being located in the elevator machine room. The lack of machine room also prevents the seismic reset switch from being located in the elevator machine room.

- 5. Applicant proposes to relocate the inspection transfer switch and seismic reset switch in an alternative enclosure.
- 6. Due to the use of a 6 mm (0.25 in.) governor rope with 6-strand construction, the provided governor sheave pitch diameter is less than that required by the Elevator Safety Orders.
- 7. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
- 8. Applicant proposes to insert the car-top railings at the perimeter of the car top.
- Applicant intends to use an elevator control system, model CO NX100NA or CO NX300NA, with a standalone, solid-state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Order from which variance is being sought.

F. Decision and Order:

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above table in Jurisdictional and Procedural Matters shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

Elevator Safety Orders:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric-coated Steel Belts proposed by the Applicant, in lieu of circular steel suspension ropes.);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room. room);

- Car-Top Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car-top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Governor Rope and Sheave: The Applicant shall conditionally hold permanent variance from certain requirements of section 3141, incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to allow for the below specified governor rope and governor sheave parameters: section 2.18.7.4.
- Means of Removing Power: 2.26.9.6.1 (Only to the extent necessary to permit the use of SIL-rated devices and circuits as a means to remove power from the AC driving motor, where the redundant monitoring of electrical protective devices is required by the Elevator Safety Orders).

Conditions:

- 1. The elevator suspension system shall comply to the following:
 - a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
 - 2.20.4.3 Minimum Number of Suspension Members
 - 2.20.3 Factor of Safety
 - 2.20.9 Suspension Member Fastening
 - b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members, fastenings, related monitoring and detection systems, and criteria for STM replacement. The Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Cal/OSHA upon request.

STM member mandatory replacement criteria shall include:

- i. Any exposed wire, strand or cord;
- ii. Any wire, strand or cord breaks through the elastomeric coating;
- iii. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric-coated steel suspension member;
- iv. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;
- c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.

- d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.
- e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.
- f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).
- g. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 1b above.
- h. The elevator shall be provided with a device to monitor the remaining residual strength of each STM member. The device shall conform to the requirements of Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.
- i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.
- j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.
- k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 1b, shall be conducted and documented every six months by a CCCM.
- The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, "Suspension Means Replacement Reporting Condition," Incorporated herein by this reference.

- m. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2 and 8.6.1.4, respectively.
- 2. If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 3. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.
- 4. If there is an inset car-top railing:
 - a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car-top railing.
 - b. The distance that the railing can be inset shall be limited to not more than 6 inches.
 - c. All exposed areas of the car top outside the car-top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.
 - d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4-inch diagonal red and white stripes.
 - e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing. Each sign shall state:

CAUTION STAY INSIDE RAILING NO LEANING BEYOND RAILING NO STEPPING ON, OR BEYOND, RAILING

f. The Group IV requirements for car-top clearances shall be maintained (car-top clearances outside the railing will be measured from the car top and not from the required bevel).

- 5. The speed governor rope and sheaves shall comply with the following:
 - a. The governor shall be used in conjunction with a steel 6 mm (0.25 in.) diameter governor rope with 6 strand, regular lay construction.
 - b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
 - c. The governor sheaves shall have a pitch diameter of not less than 200 mm (7.87 in.).
- 6. The SIL-rated devices and circuits used to inhibit electrical current flow in accordance with ASME A17.1-2004, section 2.26.9.6.1 shall comply with the following:
 - a. The SIL-rated devices and circuits shall consist of a Variodyn SIL3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013, VAF023, or VAF043 labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1556.00), and followed by the applicable revision number (as in 968/FSP 1556.00/19).
 - b. The devices and circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.
 - c. The access door or cover of the enclosures containing the SIL-rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL-rated devices. Refer to Maintenance Control Program and wiring diagrams prior to performing work.

- d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL-rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL-rated component, with notations identifying parts and locations.
- e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.
- f. A successful test of the SIL-rated devices and circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL-rated devices, safety functions, and related circuits operate as intended.

- g. Any alterations to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL-rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.
- h. Any replacement of the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL-rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.
- i. Any repairs to the SIL-rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL-rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.
- j. Any space containing SIL-rated devices and circuits shall be maintained within the temperature and humidity range specified by Schindler Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL-rated devices and circuits.
- k. Field changes to the SIL-rated system are not permitted. Any changes to the SIL-rated system's devices and circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.
- 7. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
- 8. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per sections 411.2 and 411.3.

• •	ion by Applicant, affected en in the procedural manner pi	nployee(s), Cal/OSHA, or by the Board on its own rescribed.
Pursuant to of adoption.	` ''	d Decision is submitted to the Board for consideration
DATED:	July 25, 2024	Michelle Lorio Michelle Iorio, Hearing Officer

9. This Decision and Order shall remain in effect unless duly modified or revoked upon

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor Principal Engineer CAL/OSHA-Elevator Unit HQS

EXHIBIT 2

Suspension Means – Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings. Further:

- 1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): CAL/OSHA Elevator Unit, 2 MacArthur Pl., Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
- 2. Each such report shall contain, but not necessarily be limited to, the following information:
 - a. The State-issued conveyance number, complete address, and Permanent Variance file number that identifies the permanent variance.
 - The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
 - c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
 - d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
 - e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
 - f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
 - g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.

- h. All information provided on the crosshead data plate per ASME AI7.I-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
- k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.
- 3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

Occupational Safety and Health Standards Board

Business Meeting Legislative Update

AB-1 Oil refineries: maintenance.(2023-2024) - NO UPDATE

AB-1 Oil	refineries:	maintenance.	(2023-2024)
----------	-------------	--------------	-------------

(Ting)

Date	Action
12/06/22	From printer.
12/05/22	Read first time. To print.

Summary:

AB-1

AB 1, as introduced, Ting. Oil refineries: maintenance.

The California Refinery and Chemical Plant Worker Safety Act of 1990 requires, among other things, every petroleum refinery employer to submit to the Division of Occupational Safety and Health a full schedule of planned turnarounds, meaning a planned, periodic shutdown of a refinery process unit or plant to perform maintenance, overhaul, and repair operations and to inspect, test, and replace process materials and equipment, as provided.

This bill would express the intent of the Legislature to enact subsequent legislation to ensure that only one oil refinery in the state is undergoing scheduled maintenance at a time.

Board staff is monitoring for potential impacts on Board operations.

AB-1976 Occupational safety and health standards: first aid kits: naloxone hydrochloride. (2023-2024) - UPDATE

AB-1976 Occupational safety and health standards: first aid materials: opioid antagonists. **(2023-2024)**

AB-1976

Date	Action
6/24/24	In committee: Referred to suspense file.

06/13/2024	Read second time and amended. Re-referred to Com. on A
06/12/2024	From committee: Amend, and do pass as amended and reto Com. on APPR. (Ayes 5. Noes 0.) (June 12).
06/05/24	Referred to Com. on L., P.E. & R.
05/23/24	In Senate. Read first time. To Com. on RLS. for assignment.
05/22/24	Read third time. Passed. Ordered to the Senate. (Ayes 69. No.)
05/21/24	Read second time. Ordered to third reading.
05/20/24	Read second time and amended. Ordered returned to seco reading.
05/20/24	From committee: Amend, and do pass as amended. (Ayes 1 Noes 0.) (May 16).
4/17/24	In committee: Set, first hearing. Referred to suspense file.
4/4/24	From committee: Do pass and re-refer to Com. on APPR. (A 6. Noes 0.) (April 3). Re-referred to Com. on APPR.
03/13/24	In committee: Set, first hearing. Hearing canceled at the reconstruction of author.
02/12/24	Referred to Com. On L. and E.
01/31/24	From printer. May be heard in committee March 1.
01/30/24	Read first time. To print.

Summary:

AB 1976, as amended, Haney. Occupational safety and health standards: first aid materials: opioid antagonists.

Existing law grants the Division of Occupational Safety and Health, which is within the Department of Industrial Relations, jurisdiction over all employment and places of employment, and the power necessary to enforce and administer all occupational health and safety laws and standards. The Occupational Safety and Health Standards Board, an independent entity within the department, has the exclusive authority to adopt occupational safety and health standards within the state. Existing law, the California Occupational Safety and Health Act of 1973 (OSHA), requires employers to comply with certain safety and health standards, as specified, and charges the division with enforcement of the act.

Existing law requires the division, before December 1, 2025, to submit to the standards board a rulemaking proposal to consider revising certain standards relating to the prevention of heat illness, protection from wildfire smoke, and toilet facilities on construction jobsites. Existing law also requires the standards board to review the proposed changes and consider adopting revised standards on or before December 31, 2025.

This bill would require the standards board, before December 1, 2026, to draft a rulemaking proposal to revise a regulation on first aid materials to require first aid materials in a workplace to include naloxone hydrochloride or another opioid antagonist approved by the United States Food and Drug Administration to reverse opioid overdose and instructions for using the opioid antagonist. The bill would aslo require the standards board, in drafting the rulemaking proposal, to consider, and provide guidance to employers on, proper storage of the opioid antagonist. The bill would require the standards board to adopt revised standards for the standards described above on or before July 1, 2027.

Board staff is monitoring for potential impacts on Board operations.

AB-2408 Firefighter personal protective equipment: perfluoroalkyl and polyfluoroalkyl substances. (2023-2024) - UPDATE

	AB-2408 Firefighter pers substances. (2023-2024	sonal protective equipment: perfluoroalkyl and polyfluoroalkyl
AB-2408	(Haney)	
	Date	Action
	6/26/24	From committee: Do pass and re-refer to Com. on APPR with recommendation: To Consent Calendar. (Ayes 5. Noes 0.) (June 26). Re-referred to Com. on APPR.

6/19/24	From committee: Do pass and re-refer to Com. on L., P.E. & R with recommendation: To Consent Calendar. (Ayes 7. Noes 0. (June 19). Re-referred to Com. on L., P.E. & R.
05/29/24	Referred to Coms. on E.Q. and L., P.E. & R.
05/22/24	In Senate. Read first time. To Com. on RLS. for assignment.
05/21/24	Read third time. Passed. Ordered to the Senate.
05/20/24	Read second time. Ordered to third reading.
05/16/24	Read second time and amended. Ordered returned to second reading.
05/16/24	From committee: Amend, and do pass as amended. (Ayes 11. Noes 0.) (May 16
05/16/24	Assembly Rule 63 suspended.
05/08/24	In committee: Set, first hearing. Referred to suspense file.
04/18/24	From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (Ap 17). Re-referred to Com. on APPR.
04/10/24	From committee: Do pass and re-refer to Com. on L. and E. (Ayes 7. Noes 0.) (April 9). Re-referred to Com. on L. and E.
04/01/24	Re-referred to Com. on E.S. & T.M.
03/21/24	From committee chair, with author's amendments: Amend, a re-refer to Com. on E.S. & T.M. Read second time and amend
03/21/24	Referred to Coms. on E.S. & T.M. and L. & E.
02/13/24	From printer. May be heard in committee March 14.
02/12/24	Read first time. To print.

Summary:

AB 2408, as amended, Haney. Firefighter personal protective equipment: perfluoroalkyl and polyfluoroalkyl substances.

Existing law requires any person that sells firefighter personal protective equipment to provide written notice to the purchaser if the equipment contains intentionally added perfluoroalkyl and polyfluoroalkyl substances (PFAS). Existing law requires the seller to retain a copy of the written notice and provide the notice to specified law enforcement entities, including the Attorney General, upon request. Existing law makes a violation of those provisions subject to a penalty of up to \$5,000 for a first violation and up to \$10,000 for a subsequent violation.

This bill, commencing July 1, 2026, would prohibit a person from manufacturing, knowingly selling, offering for sale, distributing for sale, distributing for use, or purchasing or accepting for future use in this state firefighter personal protective equipment containing intentionally added PFAS chemicals. The bill would make a violation of this provision subject to the civil penalty provisions described above. The bill would specify that an individual firefighter shall not be personally liable for payment of the civil penalty.

Existing law requires the Occupational Safety and Health Standards Board, in consultation with the Department of Industrial Relations, every 5 years, as specified, to review all revisions to National Fire Protection Association (NFPA) standards pertaining to personal protective equipment covered by specified safety orders. If the review finds the revisions provide a greater degree of personal protection than the safety orders, existing law requires the board to consider modifying existing safety orders and to render a decision regarding changing safety orders or other standards and regulations to maintain alignment of the safety orders with the NFPA standards no later than July 1 of the subsequent year.

This bill would require the board, in consultation with the department, within one year of the NFPA updating a specified standard on protective ensemble for structural firefighting and proximity firefighting to include PFAS-free turnout gear, to update the applicable safety orders, or other standards or regulations, to maintain alignment with the NFPA standard.

The bill would state related findings and declarations of the Legislature.

Board staff is monitoring for potential impacts on Board operations.

AB-2975 Occupational safety and health standards: workplace violence prevention plan. (2023-2024) - UPDATE

AB-2975 Occupational safety and health standards: workplace violence prevention plan. (2023-2024)
AB-2975

(Gipson)

Date	Action
07/03/24	Read second time and amended. Re-referred to Com. on APPI
07/03/24	From committee: Amend, and do pass as amended and re-refeto Com. on APPR. (Ayes 9. Noes 0.) (July 3).
6/27/24	Read second time and amended. Re-referred to Com. on HEALTH.
6/26/24	From committee: Amend, and do pass as amended and re-ref to Com. on HEALTH. (Ayes 5. Noes 0.) (June 26).
6/17/24	In committee: Hearing postponed by committee.
06/05/24	Referred to Coms. on L., P.E. and R. and HEALTH.
05/23/24	In Senate. Read first time. To Com. on RLS. for assignment.
05/22/24	Read third time. Passed. Ordered to the Senate. (Ayes 55. Noe 0.)
05/20/24	Read second time. Ordered to third reading.
05/16/24	From committee: Do pass. (Ayes 11. Noes 1.) (May 16).
05/08/24	In committee: Set, first hearing. Referred to suspense file.
04/18/24	From committee: Do pass and re-refer to Com. on APPR. (Ayes 6. Noes 0.) (April 17). Re-referred to Com. on APPR.
04/03/24	Re-referred to Com. on L. & E.
04/02/24	From committee chair, with author's amendments: Amend, ar re-refer to Com. on L. & E. Read second time and amended.
04/01/24	Re-referred to Com. on L. & E.

03/21/24	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
03/21/24	Referred to Com. On L. and E.
02/17/24	From printer. May be heard in committee March 18.
02/16/24	Read first time. To print.

Summary:

AB 2975, as amended, Gipson. Occupational safety and health standards: workplace violence prevention plan: hospitals.

Existing law, the California Occupational Safety and Health Act of 1973, imposes safety responsibilities on employers and employees, including the requirement that an employer establish, implement, and maintain an effective injury prevention program, and makes specified violations of these provisions a crime. Existing law also requires the Occupational Safety and Health Standards Board to adopt standards developed by the Division of Occupational Safety and Health that require specified types of hospitals to adopt a workplace violence prevention plan as part of the hospital's injury and illness prevention plan to protect health care workers and other facility personnel from aggressive and violent behavior.

This bill would require the standards board, by March 1, 2025, to amend the standards to include a requirement that a hospital implement a weapons detection screening policy that requires the use of weapons detection devices at specific entrances of the hospital, a requirement that a hospital assign appropriate personnel who meet specified training standards, a requirement that a hospital have reasonable protocols for alternative search and screening for patients, family, or visitors who refuse to undergo weapons detection device screening, and a requirement that a hospital adopt reasonable protocols for storage or confiscation, and return, of patient, family, or visitor property that might be used as a weapon.

Among other provisions, the bill would require that the standards include a requirement that a hospital post, in a conspicuous location, within reasonable proximity of any public entrances where weapons detection devices are utilized, a notice adopted by the standards board, notifying the public that the hospital conducts screenings for weapons upon entry but that no person shall be refused medical care, pursuant to specified federal law.

By expanding the scope of an existing crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Board staff is monitoring for potential impacts on Board operations.

AB-3043 Occupational safety: fabrication activities. (2023-2024) - UPDATE

	AB-3043 Occupational safety: fabrication activities (2023-2024)		
	(Rivas)		
	Date	Action	
	07/03/24	In committee: Set, first hearing. Hearing canceled at the request of author.	
	06/05/24	Referred to Com. on L., P.E. and R.	
	05/23/24	In Senate. Read first time. To Com. on RLS. for assignment.	
AB-3043	05/22/24	Read third time. Passed. Ordered to the Senate. (Ayes 62. Noes 0.)	
	05/21/24	Read second time. Ordered to third reading.	
	05/20/24	Read second time and amended. Ordered returned to second reading.	
	05/20/24	From committee: Amend, and do pass as amended. (Ayes 11. Noes 4.) (May 16).	
	05/08/24	In committee: Set, first hearing. Referred to suspense file.	

04/23/24	From committee: Do pass and re-refer to Com. on APPR. (Ayes 9. Noes 0.) (April 23). Re-referred to Com. on APPR
04/18/24	From committee: Do pass and re-refer to Com. on JUD. (Ayes 6. Noes 1.) (April 17). Re-referred to Com. on JUD.
04/09/24	Re-referred to Com. on L. & E.
04/08/24	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. and E. Read second time and amended.
03/21/24	In committee: Set, first hearing. Hearing canceled at the request of author.
03/11/24	Referred to Coms. on L. & E. and JUD.
02/17/24	From printer. May be heard in committee March 18.
02/16/24	Read first time. To print.

Summary:

AB 3043, as amended, Luz Rivas. Occupational safety: fabrication activities.

Existing law establishes the Occupational Safety and Health Standards Board within the Department of Industrial Relations to promulgate and enforce occupational safety and health standards for the state, including standards dealing with exposure to harmful airborne contaminants. Existing law requires the Division of Occupational Safety and Health within the department to enforce all occupational safety and health standards, as specified. A violation of these standards and regulations under specific circumstances is a crime.

This bill would prohibit a person engaged in fabrication activities or fabrication shops from using dry methods, and require the use of effective wet methods in any fabrication activities. The bill would make a violation of these provisions grounds for, among other disciplinary action, an immediate order prohibiting continued fabrication activities.

The bill would require, on or before July 1, 2025, the department to consult with representatives of approved apprenticeship programs to adopt a training curriculum regarding the safe performance of fabrication activities that meets specified requirements, including classroom instruction, and to certify an individual who has completed that

curriculum immediately upon completion. The bill would prohibit, beginning July 1, 2026, an owner or operator of a slab product fabrication shop from permitting any individual from performing fabrication activities or employing an individual to perform work on the shop floor where those activities are conducted, unless the individual is certified by the department as having completed the training curriculum, except as specified.

The bill would require, on or before January 1, 2026, the department to develop an application and licensing process for fabrication shops to lawfully engage in fabrication activities known as a "slab product fabrication activity" license. The bill would authorize fabrication shops to engage in fabrication activities during the pendency of the application development and licensing process.

The bill would require, beginning January 1, 2026, the department to grant a 3-year license to a fabrication shop that demonstrates satisfaction of specified criteria involving workplace safety conditions and precautions, and would authorize license renewal, as specified. Among other conditions, the bill would establish certain regulatory fees in specified amounts for the license and renewal thereof. The bill would authorize the department to suspend or revoke a licensee in certain cases, including for gross negligence, as specified. The bill would prohibit a person or entity, or an employee thereof, from engaging in fabrication activities unless the person or entity has a license.

The bill would prohibit, beginning January 1, 2026, a person from supplying a slab product directly to a person or entity engaged in fabrication activities if the person or entity does not have a valid license. The bill would require a person that, among other things, supplies a slab product to a person or entity engaged in fabrication services to verify the person or entity has a license, as specified. The bill would require a person that supplies a slab product to a person or entity that is not engaged in fabrication activities to rely on written certification issued under penalty of perjury that, among other things, they will not directly engage in fabrication activities with the product without a license. By expanding the scope of the crime of perjury, the bill would impose a state-mandated local program.

The bill would specify that a violation of any of the above-described provisions may be grounds for disciplinary action, as specified, but is not a crime. The bill would establish the Slab Fabrication Activity Account in the Occupational Safety and Health Fund in the State Treasury, and require all fees, penalties, or other moneys collected by the department under the above-described provisions to be deposited into the account. The bill would authorize moneys in the account to be expended by the department for the purposes of administering the above-described provisions, and would make that authorization contingent on an appropriation of funds for that express purpose.

The bill would require, beginning January 1, 2026, the Director of Industrial Relations to maintain a publicly accessible database on the department's internet website that includes, among other things, information on any active orders issued by the department in the prior 12 months prohibiting an activity at a fabrication shop, as specified.

On or before July 1, 2025, the bill would require the department, in consultation with specified agencies, to submit a report to the Legislature pursuant to prescribed requirements, including specifying the number of violations issued for failure to comply with any temporary or future standards relating to respirable crystalline silica adopted by the board, and the geographic areas in the state with the highest numbers of those violations. On or before January 1, 2027, and January 1, 2029, the bill would require the department, in consultation with other specified entities, to submit a report to the Legislature pursuant to prescribed requirements, including, in addition to the information contained in the initial report, the number of licenses issued by the department pursuant to the above-described provisions. The bill would require the department to collect and include in those reports the disaggregation of applicable data by stone industry, as specified. The bill would also require the department and the division to consider the findings of the reports to prioritize enforcement of the requirements of the bill's provisions in geographic areas with the highest numbers of violations or other penalties issued by the department relating to respirable crystalline silica.

The bill would define various terms for these purposes. The bill would make findings and declarations related to these provisions.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Board staff is monitoring for potential impacts on Board operations.

AB-3106 School employees: COVID-19 cases: protections. (2023-2024) - NO UPDATE

	AB-3106 School employees: COVID-19 cases: protections (2023-2024)		
	(Schiavo)		
AB-3106	Date	Action	
	05/16/24	In committee: Held under submission.	
	05/08/24	In committee: Set, first hearing. Referred to suspense file.	

04/18/24	From committee: Do pass and re-refer to Com. on APPR. (Ayes 6. Noes 0.) (April 17). Re-referred to Com. on APPR.
04/02/24	Re-referred to Com. on L. & E.
04/01/24	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
03/11/24	Referred to Com. on L. & E.
02/17/24	From printer. May be heard in committee March 18.
02/16/24	Read first time. To print.

Summary:

AB 3106, as amended, Schiavo. School employees: COVID-19 cases: protections.

Existing law grants the Division of Occupational Safety and Health, which is within the Department of Industrial Relations, jurisdiction over all employment and places of employment, with the power necessary to enforce and administer all occupational health and safety laws and standards. The Occupational Safety and Health Standards Board, an independent entity within the department, has the exclusive authority to adopt occupational safety and health standards within the state. Existing law, the California Occupational Safety and Health Act of 1973, requires employers to comply with certain standards ensuring healthy and safe working conditions, as specified, and charges the division with enforcement of the act. Other existing law relating to occupational safety imposes special provisions on certain industries and charges the division with enforcement of these provisions.

This bill would require employer, defined to be a school district, county office of education, or charter school, to ensure that COVID-19 cases, defined as specified school employees, who have a positive COVID-19 test, are excluded from the workplace until prescribed return-to-work requirements are met. To the extent administering these provisions imposes additional duties on local educational agencies, the bill would impose a state-mandated local program. The bill, with specified exceptions, would require an employer to continue and maintain an excluded school employee's earnings, wages, seniority, and all other employee rights and benefits, including the employee's right to their former job status, as if the employee had not been excluded from the workplace, as prescribed. The bill would require the standards board, by February 3, 2025, to adopt a standard that extends these protections to any occupational

infectious disease covered by any permanent infectious disease standard adopted to succeed an existing standard for COVID-19 prevention for those school employees. The bill would require the division to enforce the bill by the issuance of a citation alleging a violation and a notice of civil penalty, as specified. The bill would authorize any person who receives a citation and penalty to appeal the citation and penalty to the Occupational Safety and Health Appeals Board.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

Board staff is monitoring for potential impacts on Board operations.

AB-3258 Refineries and chemical plants. (2023-2024) - UPDATE

AB-3258	AB-3258 Refineries and chemical plants. (2023-2024) (Bryan)		
	Date	Action	
	6/27/24	In Assembly. Concurrance in Senate amendments pending. May be considered on or after June 29 pursuant to Assembly Rule 77.	
	6/27/24	Read third time. Passed. Ordered to the Assembly. (Ayes 40. Noes 0.).	
	6/25/24	From committee: Be ordered to second reading file pursuant to Senate Rule 28.8 and ordered to Consent Calendar.	

06/12/2024	From committee: Do pass and re-refer to Com. on APPR wit recommendation: To Consent Calendar. (Ayes 5. Noes 0.) (July 12). Re-referred to Com. on APPR.
06/03/24	From committee chair, with author's amendments: Amend, re-refer to committee. Read second time, amended, and re referred to Com. on L., P.E. & R.
05/29/24	Referred to Com. on L., P.E. & R.
05/16/24	In Senate. Read first time. To Com. on RLS. for assignment.
05/16/24	In Senate. Read first time. To Com. on RLS. for assignment.
05/16/24	Read third time. Passed. Ordered to the Senate. (Ayes 71. N 0.)
05/09/24	Read second time. Ordered to Consent Calendar.
05/08/24	From committee: Do pass. To Consent Calendar. (Ayes 15. No.) (May 8).
04/18/24	From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (A 17). Re-referred to Com. on APPR.
04/01/24	Re-referred to Com. on L. & E.
03/21/24	From committee chair, with author's amendments: Amend, re-refer to Com. on L. & E. Read second time and amended.
03/21/24	Referred to Com. on L. & E.
02/17/24	From printer. May be heard in committee March 18.

02/16/24	Read first time. To print.

Summary:

AB 3258, as amended, Bryan. Refinery and chemical plants.

Existing law, the California Refinery and Chemical Plant Worker Safety Act of 1990, requires the Occupational Safety and Health Standards Board to adopt process safety management standards for refineries, chemical plants, and other manufacturing facilities, as prescribed. Existing law requires a petroleum refinery employer to submit an annual schedule of planned turnarounds, as defined, for all affected units for the following calendar year and to provide prescribed access onsite and to related documentation. Existing law also establishes requirements for Division of Occupational Safety and Health access to, and disclosure of, trade secrets, as defined, including information relating to planned turnarounds of petroleum refinery employers.

This bill would remove references in existing law to petroleum refineries and petroleum refinery employers and, instead, refer to refineries and refinery employers. The bill would define "refinery" to mean an establishment that produces gasoline, diesel fuel, aviation fuel, or biofuel, as defined, through the processing of crude oil or alternative feedstock.

Board staff is monitoring for potential impacts on Board operations.

Occupational Safety and Health Standards Board

Business Meeting Acting Executive Officer's Report