Occupational Safety and Health Standards Board

Public Meeting and Business Meeting

October 17, 2024

City of Watsonville City Council Chambers 275 Main Street, Top Floor Watsonville, 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.

OCTOBER 17, 2024 10:00 a.m.

In-person:

City of Watsonville – City Council Chambers 275 Main Street, Top Floor Watsonville, CA 95076

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):

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

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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. PRESENTATION

- A. Miguel Acosta, Chief Autonomous Vehicles Branch, Department of Motor Vehicles and Nathan Gargiulo Staff Services Manager I, Autonomous Vehicles Branch, California Department of Motor Vehicles on DMV's Approach to Autonomous Technology
 - Public Comment
 - Board Discussion

IV. 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 item A below, public comment will be limited to two minutes per speaker or four minutes for speakers requiring concurrent English translation.

A. PROPOSED VARIANCE DECISIONS FOR ADOPTION

- Consent Calendar
- Vote on consent calendar

B. **REPORTS**

- Executive Officer's Report
- Legislative Report

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- Cal/OSHA Report
- Subcommittee Report

C. 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.

D. 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).).

E. 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

F. RETURN TO OPEN SESSION

Report from closed session

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G. ADJOURNMENT OF THE MEETING

Next Meeting: November 21, 2024

Ronald Reagan State Building

Auditorium

300 South Spring Street Los Angeles, CA 90013

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

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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 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
Tol: (916) 274 5721

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 October 17, 2024, at 10:00 a.m.

in the City Council Chambers of the City of Watsonville 275 Main Street, Top Floor, Watsonville, 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 **October 17, 2024,** at 10:00 a.m. in the City Council Chambers of the City of Watsonville 275 Main Street, Top Floor, Watsonville, California

as well as via the following:

- Videoconference at <u>www.webex.com</u> (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

JOSEPH M. ALIOOO JR., Chairman

Occupational Safety and Health Standards Board

Business Meeting

Occupational Safety and Health Standards Board

Business Meeting Proposed Variance Decisions

CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS OCTOBER 17, 2024, MONTHLY BUSINESS MEETING OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED DECISIONS FOR BOARD CONSIDERATION, HEARD ON September 25, 2024

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
1. 21-V-279M1	The Regents of the University of California	Elevator	GRANT
2. 21-V-550M1	C3 DLG 414 Main Street LLC	Elevator	GRANT
3. 22-V-079M1	SHP VI MS San Jose, LLC	Elevator	GRANT
4. 22-V-249M2	USA Construction Management	Elevator	GRANT
5. 23-V-562M1	Lund Construction Co	Elevator	GRANT
6. 24-V-141M1	Mercy Housing California 96, LP	Elevator	GRANT
7. 24-V-358	Murphy's Bowl LLC	Elevator	GRANT
8. 24-V-414	1915 Park Ave (LA), L.P.	Elevator	GRANT
9. 24-V-415	Rocco LLC	Elevator	GRANT
10. 24-V-416	East Cooley LLC	Elevator	GRANT
11. 24-V-418	Mulberry Gardens Senior, L.P.	Elevator	GRANT
12. 24-V-419	Virgil Village Group, LLC	Elevator	GRANT
13. 24-V-420	Dad Mission Valley Development LLC.	Elevator	GRANT
14. 24-V-421	Sunnyside, L.P.	Elevator	GRANT
15. 24-V-422	Adair Winery, Inc.	Elevator	GRANT
16. 24-V-423	Orion Cityscape LLC	Elevator	GRANT
17. 24-V-424	Vose, LP	Elevator	GRANT
18. 24-V-425	Stanford University LBRE/DPM	Elevator	GRANT
19. 24-V-426	Stanford University LBRE/DPM	Elevator	GRANT
20. 24-V-427	Stanford University LBRE/DPM	Elevator	GRANT
21. 24-V-428	HSRE - MPCCA Oakland Mob, LLC	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
22. 24-V-429	Irvine Unified School District	Elevator	GRANT
23. 24-V-430	Sweetzer Management Group, LLC	Elevator	GRANT
24. 24-V-431	Stack USA II	Elevator	GRANT
25. 24-V-432	Stack USA II	Elevator	GRANT
26. 24-V-433	Stack USA II	Elevator	GRANT
27. 24-V-434	2019 Ozone Affordable Housing 820 MacArthur LP	Elevator	GRANT
28. 24-V-435	Elda Developments	Elevator	GRANT
29. 24-V-436	Eden Housing	Elevator	GRANT
30. 24-V-437	NBC Universal	Elevator	GRANT
31. 24-V-438	Sharp Rees-Stealy Medical Group, Inc.	Elevator	GRANT
32. 24-V-439	Sharp Rees-Stealy Medical Group, Inc.	Elevator	GRANT
33. 24-V-440	The Quad at Whittier, LLC	Elevator	GRANT
34. 24-V-441	CRCD Normandie Apartments, L.P.	Elevator	GRANT
35. 24-V-442	Trilogy Gardens, LLC	Elevator	GRANT
36. 24-V-443	Chinatown Community Development Center	Elevator	GRANT
37. 24-V-444	Avalonbay Communities, Inc	Elevator	GRANT
38. 24-V-445	127 Monrovia P1 LLC	Elevator	GRANT
39. 24-V-446	127 Monrovia P1 LLC	Elevator	GRANT
40. 24-V-447	CPIF 812 Main, LLC	Elevator	GRANT
41. 24-V-448	Lockheed Martin	Elevator	GRANT
42. 24-V-449	San Diego Regional Airport Authority	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.: 21-V-279M1 Proposed Decision Dated: September 25, 2024
·	
The Regents of the University of California	DECISION
The Occupational Safety and Health	Standards Board hereby adopts the attached
PROPOSED DECISION by Michelle Iorio, Hea	·
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: October 17, 2024
KATHLEEN CRAWFORD, Member	TUE 5005000000000000000000000000000000000
	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
Brivia Firmingory, Member	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.
CLIDIC LACTOT DAVIS Mambar	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,

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.

TITLE 8, SECTIONS 427, 427.1 AND 427.2.

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

In the Matter of Application to Modify

Permanent Variance No.: 21-V-279M1

Permanent Variance by:

The Regents of the University of

PROPOSED DECISION

Hearing Date: September 25, 2024

Location: Zoom

A. Subject Matter

California

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
		UCSF Mission Bay Building 23B
24 1/ 270	The Regents of the University of	Parking Structure
21-V-279	California	1630 - 3rd Street
		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 September 25, 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 David Morris 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 September 25, 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 21-V-279.
- 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 21-V-279 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. 21V-279.
- 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 21-V-279 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. 21-V-279, to be:

Parking Structure 1650 3rd St. San Francisco, CA

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

1. Permanent Variance Application No. 21-V-279M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 21-V-279, and 21-V-279M1, shall have the following address designation:

Parking Structure 1650 3rd St. San Francisco, CA

2. Permanent Variance No. 21-V-279, 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. 21-V-279M1.

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

Dated: September 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 to Modify Permanent Variance by:	Permanent Variance No.: 21-V-550M1 Proposed Decision Dated: September 25, 2024
C3 DLG 414 Main Street LLC	DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Michelle Iorio, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
OSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: October 17, 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.
DAVID HIGINIAS, INTERNIBEL	

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:

C3 DLG 414 Main Street LLC

PROPOSED DECISION

Hearing Date: September 25, 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
		Shorehouse
21-V-550	C3 DLG 414 Main Street LLC	424 Main Street
		Huntington Beach, 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 September 25, 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 David Morris 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 September 25, 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 21-V-550.
- 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 21-V-550 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. 21V-550.
- 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 21-V-550 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. 21-V-550, to be:

Shorehouse 414 Main St. Huntington Beach, CA

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

1. Permanent Variance Application No. 21-V-550M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 21-V-550, and 21-V-550M1, shall have the following address designation:

Shorehouse 414 Main St. Huntington Beach, CA

2. Permanent Variance No. 21-V-550, 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. 21-V-550M1.

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

Dated: September 25, 2024

Michelle Lorio

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.: 22-V-079M1 Proposed Decision Dated: September 25, 2024
SHP VI MS San Jose, 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: October 17, 2024
KATHLEEN CRAWFORD, Member	THE FORECOING MARIANCE DECICION MAS
	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
ommo z iozoz z z wio, member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DAVID THOMAS, Member	111LL 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:	Permanent Variance No.: 22-V-079M1
SHP VI MS San Jose, LLC	PROPOSED DECISION
	Hearing Date: September 25, 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-079	SHP VI MS San Jose, LLC	1366 S De Anza Blvd.
22-4-079	SHE VI WS Sall Jose, LLC	San Jose, 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. <u>Procedural Matters</u>

- 1. This hearing was held on September 25, 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 David Morris 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 September 25, 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-079.
- 2. The Application 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-079 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.1.
- 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-079.
- 4. The Board finds the above subpart C.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-079 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-079, to be:

1380 S. De Anza Blvd. San Jose, CA

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

1. Permanent Variance Application No. 22-V-079M1 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-079, and 22-V-079M1, shall have the following address designation:

1380 S. De Anza Blvd. San Jose, CA

2. Permanent Variance No. 22-V-079, 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-079M1.

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

Michelle Lorio

Michelle Iorio, Hearing Officer

Dated: September 25, 2024

Page 3 of 3

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.: 22-V-249M2 Proposed Decision Dated: September 25, 2024
USA Construction Management	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: October 17, 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 to Modify Permanent Variance by: USA Construction Management	Permanent Variance No.: 22-V-249M2 PROPOSED DECISION
	Hearing Date: September 25, 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-249M1	USA Construction Management	7710 N. Ventura Canyon Ave. Panorama City, CA
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 September 25, 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 David Morris 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 September 25, 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-249M1.
- 2. The Application 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-249M1 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.1.
- 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-249M1.
- 4. The Board finds the above subpart C.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-249M1 and 22-V-249 are, 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-249M2, to be:

7711 N. Ventura Canyon Ave. Panorama City, CA

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

1. Permanent Variance Application No. 22-V-249M2 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator

being the subject of Permanent Variance No. 22-V-249M2, 22-V-249M1, and 22-V-249, shall have the following address designation:

7711 N. Ventura Canyon Ave. Panorama City, CA

2. Permanent Variance No. 22-V-249M2, 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-249.

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

Michelle Lorio

Michelle Iorio, Hearing Officer

Dated: September 25, 2024

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.: 23-V-562M1 Proposed Decision Dated: September 25, 2024
Lund Construction Co	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: October 17, 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 to Modify Permanent Variance by:	Permanent Variance No.: 23-V-562M1
Lund Construction Co	PROPOSED DECISION
	Hearing Date: September 25, 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
23-V-562 Lund Construction Co		5302 Roseville Rd.
		North Highlands, 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 September 25, 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 KONE Inc., appeared on behalf of the Applicant, Jose Ceja and David Morris 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 fo 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 September 25, 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-562.
- 2. The application 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-562 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.1.
- 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. 23-V-562.
- 4. The Board finds the above subpart C.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-562 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-562, to be:

5411 Stationers Way Sacramento, CA

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

1. Permanent Variance Application No. 23-V-562M1 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-562, and 23-V-562M1, shall have the following address designation:

5411 Stationers Way Sacramento, CA

2. Permanent Variance No. 23-V-562, 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-562M1.

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

Michelle Lorio

Michelle Iorio, Hearing Officer

Dated: September 25, 2024

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.: 24-V-141M1 Proposed Decision Dated: September 25, 2024
Mercy Housing California 96, LP	DECISION
The Occupational Safety and Health S	Standards Board hereby adopts the attached

PROPOSED DECISION by Michelle Iorio, Hearing Officer.

DAVID THOMAS, Member

OCCUPATIONAL SAFETY AND HEALTH JOSEPH M. ALIOTO JR., Chairman STANDARDS BOARD Date of Adoption: October 17, 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,

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.

TITLE 8, SECTIONS 427, 427.1 AND 427.2.

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:	Permanent Variance No.: 24-V-141M1
Mercy Housing California 96, LP	PROPOSED DECISION
	Hearing Date: September 25, 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
24-V-141	Morey Housing California OF L.D.	2700 Middlefield Rd.
24-V-141	Mercy Housing California 96, L.P.	Redwood City, 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 September 25, 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 David Morris 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 September 25, 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 24-V-141.
- 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 24-V-141 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. 24-V-141.
- 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 24-V-141 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. 24-V-141, to be:

2700 Middlefield Rd. (2 Elevators) 2704 Middlefield Rd. (2 Elevators) Redwood City, CA

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

1. Permanent Variance Application No. 24-V-141M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 24-V-141, and 24-V-141M1, shall have the following address designation:

2700 Middlefield Rd. (2 Elevators) 2704 Middlefield Rd. (2 Elevators) Redwood City, CA

2. Permanent Variance No. 24-V-141, 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. 24-V-141M1.

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

Dated: September 25, 2024

Michelle Iorio, Hearing Officer

Michelle Lorio

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.: 24-V-358 Proposed Decision Dated: September 25, 2024
Murphy's Bowl LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Michelle Iorio, Hea	Standards Board hereby adopts the attached ring 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 for Permanent Variance by:

Permanent Variance No.: 24-V-358

variance by:

Proposed Decision

Murphy's Bowl LLC

Hearing Date: September 25, 2024

Location: Zoom

A. Subject Matter

1. Murphy's Bowl LLC ("Applicant") has applied for a permanent variance from provisions of title 8 of the California Code of Regulations¹, Section 3142.1 [ASME A18.1-2003, sections 2.1.1.1, 2.1.1.7, 2.5.1.1, and 2.8] of the Elevator Safety Orders (ESO), with respect to solid runway enclosures, suspension and support means, and platform safeties and platform enclosure walls, for four (4) vertical platform lifts (VPLs) proposed to be located at:

Intuit Dome – West Cabana Suites 3930 W. Century Boulevard Inglewood, CA

- B. The safety orders at issue are stated in the prefatory part of the Decision and Order. This proceeding is conducted in accordance with Labor Code section 143 and 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.
 - 1. This hearing was held on September 25, 2024 via videoconference by the Board with Hearing Officer Michelle Iorio, presiding and hearing the matter on its merit in accordance with section 426.
 - At the hearing, Steven Lyons, of Sesame Access Systems Ltd, appeared on behalf of Applicant, Jose Ceja and David Morris 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(s) for 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 September 25, 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 proposes to install four (4) vertical platform lifts at a location having the address of:

Intuit Dome – West Cabana Suites 3930 W. Century Boulevard Inglewood, CA

- 2. Applicant requests variance from section 3142.1 section 3142.1 [ASME A18.1-2003, sections 2.1.1.1, 2.1.1.7, 2.5.1.1, and 2.8] of the ESO, with respect to the retractable runway enclosure panels, openings in the runway enclosure, omission of platform enclosure walls, lever suspension and support means, and alternative platform safety system respectively.
- 3. Section 3142.1 ASME A18.1-2003, section 2.1.1.1 states:

"2.1.1.1 The runway shall be guarded by a solid enclosure extending from the lowest landing to a height of at least 42 in. (1067 mm) above the uppermost landing. The enclosure shall withstand, without permanent deformation, a force of 125 lbf (556 N) applied on any 4 in. (102 mm) by 4 in. (102 mm) area. The interior of the runway enclosure shall present a smooth surface".

ASME A18.1-2003, section 2.1.1.1 requires the runway be guarded by a solid enclosure. This enclosure guards against unintentional contact with the moving equipment within the runway, prevents a person from falling down the open runway, and inhibits debris from inadvertently falling into the runway.

4. The Applicant intends to provide two (2) runway enclosure panels that automatically retract into the floor when the VPL² platform is locked into

² Cal/OSHA considers the single consistent phrase to use that best describes the Applicant's unique elements of

position at the UVE.³ These 42-inch-high retractable enclosure panels provide a solid guard to the runway when in the fully raised position, except where they come together in one corner to form a gap of 98 mm (3.86 inch) between the two adjacent panels. When the proposed 12 mm (1/2 inch) thick acrylic panel is in place the gap is reduced to 19 mm (3/4 inch) up to a height of 24 inches.

- 5. The Applicant asserts that the provision of the acrylic panel to close the gap, and the request to omit two walls on the VPL's platform (see section 2.1.1.7 below) so no moving equipment passes the corner gap, provides equivalent safety.
- Cal/OSHA believes the Applicant's proposal prevents inadvertent contact with moving equipment, provides adequate fall protection, and prevents debris from entering the runway.
- 7. Additionally, regarding ASME A18.1-2003 section 2.1.1.1, the Applicant's VPL design includes platform guiding and locking members that protrude through the runway enclosure. This requires three 11.5 mm vertical slots in the runway enclosure walls.
- 8. The provision of solid and smooth interior runway enclosure materials is intended to prevent the exposure of VPL users to irregular surfaces as the platform travels through the runway.
- 9. The Applicant asserts that the 11.5 mm vertical slots are as safe as the openings allowed for in the lower landing runway entrance area, per ASME A18.1-2003, section 2.1.1.3, where 1/2 inch (13 mm) openings are allowed around the runway entrance doors.
- 10. CCR, Title 8, §3142.1 ASME A18.1-2003, section 2.1.1.3 states:
 - "2.1.1.3 The runway entrances at all but the uppermost landing shall be guarded by unperforated selfclosing doors not wider than the platform plus 1 in. (25.4 mm). The openings created in the runway by these doors shall provide a minimum vertical clearance of 6 ft 8 in. (2 032 mm). The doors shall quard the entire area of the openings except for space necessary for operation. Space necessary for operation shall reject a ball 1/2 in. (13 mm) in diameter. The lift side of the landing doors and sill shall present a smooth surface located not

the VPL's runway construction is "retractable runway enclosure panels".

³ Cal/OSHA contends that the use of the singular term, "upper viewing elevation" (UVE), is more discernable and appropriately descriptive in this context than "landing," the term used by the Applicant.

- closer than 3/8 in. (9.5 mm) nor more than 3/4 in. (19 mm) from the platform floor".
- 11. Cal/OSHA believes that the Applicant's proposed vertical slots do not present irregular surface conditions different than those permitted in the lower landing door areas of the runway enclosure.
- 12. CCR, Title 8, §3142.1 ASME A18.1-2003, section 2.1.1.7 states:
 - "2.1.1.7 The platform enclosure walls on the sides not used for entrance or exit shall be of smooth construction to a height of at least 42 in. (1 067 mm) above the platform floor with no openings other than those necessary for operation. Openings necessary for operation shall reject a ball 1/2 in. (13 mm) in diameter. A grab rail extending the full length of either side wall shall be provided at a height of 34 in. (865 mm) to 38 in. (965 mm). The running clearance between the platform enclosure walls and the runway enclosure shall be not less than 2 in. (51 mm) nor more than 3 in. (76 mm)".
- 13. ASME A18.1-2003, section 2.1.1.7 requires VPL platforms be equipped with enclosure walls on the sides not used for entrances or exits. These walls protect the passenger from exposure to divergent surfaces and unprotected running clearances between the runway and platform. These enclosure walls are not required on the platform sides used as entrances and exits to facilitate egress. Platform entrances and exits are required to have additional protection to guard against these hazards. (see ASME A18.1-2003, section 2.1.1.6 below).
 - ASME A18.1-2003, section 2.1.1.6 The running clearance between the entrance and exit sides of the platform floor and the interior of the runway enclosures shall be not less than 3/8 in. (9.5 mm) nor more than 3/4 in.(19 mm).
- 14. The platform enclosure walls on the sides adjacent to the two retractable runway enclosure panels are omitted to provide an unobstructed view of the event. The Applicant asserts, ESO protections required of platform entrance(s) and exit(s) will be provided where the platform enclosure walls are omitted to guard against these hazards.
- 15. Cal/OSHA believes the Applicant's proposal provides the same protections from divergent surfaces and unprotected running clearances provided to platform entrances and exits.
- 16. CCR, Title 8, §3142.1 ASME A18.1-2003, section 2.5.1.1 states: "2.5.1.1 Suspension and support means shall be one of the following: (a) steel or iron wire rope

- (b) steel aircraft cable
- (c) chain
- (d) direct-plunger hydraulic
- (e) roped-hydraulic
- (f) rack and pinion
- (g) screw
- (h) friction machine guides and rollers

Suspension and support means utilizing a combination of two or more means shall conform to all applicable requirements of the respective means unless stated otherwise".

- 17. ASME A18.1-2003, section 2.5.1.1 provides for the use of platform suspension and support means that have been determined to be safe and reliable for use on VPLs.
- 18. The proposed VPL utilizes a "lever" type support means. The current ESO do not permit the use of lever-type support for VPL platforms. More recent editions of ASME A18.1 have adopted code requirements to permit the use of such equipment.
- 19. ASME A18.1-2020 2.5.1.1 states:
 - "2.5.1.1 Suspension and support means shall be one or more of the following:
 - (a) steel or iron wire rope
 - (b) steel aircraft cable
 - (c) chain
 - (d) hydraulic
 - (e) rack and pinion
 - (f) screw
 - (g) friction machine guides and rollers
 - (h) lever

Suspension and support means utilizing a combination of two or more means shall conform to all applicable requirements of the respective means unless stated otherwise".

- 20. The Applicant assert that the proposed VPLs will conform to these more recent editions of the ASME A18.1 code, as such equivalent safety will be provided.
- 21. Cal/OSHA believes the proposed VPLs lever suspension and support means conforms to ASME A18.1-2020 as it relates to platform suspension and support.

- 22. CCR, Title 8, §3142.1 ASME A18.1-2003, section 2.8 states in part:
 - "All platforms shall be provided with a safety, except platforms of direct plunger hydraulic lifts...".
- 23. ASME A18.1-2003, section 2.8 requires a VPL be provided with a safety device to stop and hold the platform should a failure occur in its suspension or support. VPLs having direct plunger hydraulic driving machines are exempt.
- 24. More recent editions of ASME A18.1 have developed code to permit the omission of platform safety devices when VPL platforms are equipped with lever type suspension and support means.
- 25. ASME A18.1-2020, section 2.8 states in part:
 - "All platforms shall be provided with a safety, except as permitted in 2.8.8..."
- 26. ASME A18.1-2020, section 2.8.8 states:
 - "2.8.8 Platform Safety Exceptions. <u>Platform safeties are not required for lifts</u> with the following driving means:
 - (a) direct-plunger hydraulic
 - (b) other drives that do not use a flexible suspension means, provided that the failure of a single drive component cannot result in the platform overspeeding or the floor going out of level more than 30 mm/m (0.375 in./ft) in any direction, and said failure, would cause the platform to stop by application of a safety switch or equivalent means".
- 27. The Applicant asserts that the VPLs are equipped with a lever type suspension and support means that is not considered a "flexible suspension support means". The VPL lever support system uses four hydraulic rams to drive the platform. Each hydraulic ram is fitted with "burst hose valves". Failure of any one of the four hydraulic rams will cause the platform to stop. The remaining 3 hydraulic rams and the 3 platform guides will not allow the platform to move out of level more than 30 mm.
- 28. The Applicant contends their VPL's design provides equivalent safety through its conformance with ASME A18.1-2020, section 2.8, including section 2.8.8.
- 29. Cal/OSHA believes the proposed VPLs platform driving means conforms to ASME A18.1- 2020, section 2.8.
- 30. Cal/OSHA believes that VPL design proposed by the Applicant, which includes

retractable runway enclosure panels, openings (vertical slots) in the runway enclosure walls, omission of platform enclosure walls, use of a lever suspension and support system, and omission of platform safeties, along with the recommended conditions, provides equivalent safety.

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>

The Application for Permanent Variance of Murphy's Bowl LLC, Permanent Variance No. 24-V-358, is conditionally GRANTED to the limited extent, upon the Board's adoption of this Proposed Decision, Murphy's Bowl LLC, shall have permanent variance from sections 3142(a) and 3142.1 incorporated ASME A18.1-2003, section 2.1.1.1 (to the extent necessary to accommodate the use of retractable runway enclosure panels at the upper viewing elevation (UVE)); section 2.1.1.1 (to the extent necessary to allow for openings (vertical slots) in the runway enclosure); section 2.1.1.7 (to the extent necessary to permit the omission of platform enclosure walls on the sides not used for entering or exiting the platform); section 2.5.1.1 (to the extent necessary to allow the use of a lever suspension and support means); and section 2.8 (to the extent necessary to omit platform safeties), with respect to four (4) vertical platform lifts, to be located at:

Intuit Dome – West Cabana Suites 3930 W. Century Boulevard Inglewood, CA

The above referenced vertical platform lift shall be subject to the following further conditions and limitations:

- The Applicant shall train all stadium staff members assigned to supervise the
 operation of the vertical platform lift (VPL) on its function and use, in accordance
 with the manufacturer's operating procedures. A copy of the manufacturer's
 operating procedures shall be readily available to the assigned staff members.
- 2. The trained stadium supervision staff shall ensure the VPL user remains on the platform when it is positioned at the upper viewing elevation (UVE).

- 3. The VPL platform shall be provided with a means to lock it in place when it is positioned at the UVE.
- 4. Retractable runway enclosure panels shall conform to the following:
 - a. The top of the panels shall be provided with a safety device that will detect an obstruction of the panel's movement causing the panel to reverse direction.
 - b. Panels shall be provided with a means to automatically lock them in place when in the fully raised position.
 - c. The VPL control system shall not be permitted to unlock or move the platform unless the retractable panels are in the fully raised and locked position.
 - d. The VPL control system shall not unlock or retract the panels unless the VPL platform is positioned and locked at the UVE.
 - e. The acrylic panel required by condition #6 shall reduce the opening between the adjacent retractable panels to no more than 3/4 inch (19 mm) to a height of 24 inches (610 mm) above the floor surface.
- 5. Slotted openings in the runway enclosure shall conform to the following:
 - Openings shall be limited to those necessary to accommodate platform guide and locking members.
 - b. Openings shall reject 1/2 inch (13 mm) ball.
 - c. Openings shall be maintained free of sharp edges and surface projections.
- 6. The platform shall comply with the following:
 - a. Enclosure walls are permitted to be omitted on all sides, except for the side supporting the grab rail and control station.
 - b. Clearances between the runway enclosure and platform shall not be less than 3/8 inch (9.5 mm) nor more than 3/4 inch (19 mm).
 - c. An acrylic panel to prevent exiting the platform shall be installed at the UVE, between the forward-facing retractable runway enclosure panel and the platform.

- d. The acrylic panel dimensions shall not be less than 24 inches (610 mm) in height, 1/2 inch (13 mm) in thickness, and the width of the runway.
- e. The VPL control system shall not be permitted to unlock or move the platform unless the acrylic panel is installed in place.
- 7. The suspension and support means shall comply with the applicable requirements of ASME A18.1-2020, section 2.5.
- 8. Platform safety devices are permitted to be omitted provided that the VPL complies with the applicable requirements of ASME A18.1-2020, section 2.8.
- 9. Cal/OSHA shall be notified when the VPL is ready for inspection. The VPL shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the VPL being issued. The VPL shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
- 10. 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.
- 11. This Decision and Order shall remain in effect unless modified or revoked upon application by 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: September 25, 2024

Michelle Iorio, Hearing Officer

Michelle clorio

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 table
Permanent Variance regarding:	of
KONE Monospace 500 Elevators (Group IV)	Proposed Decision Dated: September 25, 2024
	DECISION
The Occupational Safety and Health Sta	ndards Board hereby adopts the attached

PROPOSED DECISION by Michelle Iorio, Hearing Officer.

DAVID THOMAS, Member

OCCUPATIONAL SAFETY AND HEALTH JOSEPH M. ALIOTO JR., Chairman STANDARDS BOARD Date of Adoption: October 17, 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.

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: September 25, 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-414	1915 Park Ave (LA), L.P.	1915 Park Ave. Los Angeles, CA	1
24-V-415	Rocco LLC	1 Thorndale Dr. San Rafael, CA	1
24-V-416	East Cooley LLC	1250 E. Cooley Dr. Colton, CA	1
24-V-426	Stanford University LBRE/DPM	GSE South Building (Building 03- 320) 507 Lasuen Mall Stanford, CA	1
24-V-427	Stanford University LBRE/DPM	GSE North Building (Building 03- 300) 485 Lasuen Mall Stanford, CA	1
24-V-429	Irvine Unified School District	Portola High School Building-T 1001 Cadence Irvine, CA	1

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

24-V-430	Sweetzer Management Group, LLC	1257 N. Sweetzer Ave. West Hollywood, CA	1
24-V-431	Stack USA II	Stack Data Center 2400 Ringwood Ave. San Jose, CA	1
24-V-432	Stack USA II	Stack Parking Garage 2400 Ringwood Ave. San Jose, CA	2
24-V-433	Stack USA II	Stack Data Center 2000 Trade Zone Blvd. San Jose, 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 September 25, 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 David Morris 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 September 25, 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.

Michelle clorio

Michelle Iorio, Hearing Officer

Dated: September 25, 2024

Page 7 of 10

Monospace 500 Suspension Appendix 1 Table.

Appendix 1

Variance Number	Elevator ID	Minimum Quantity of Ropes	Maximum Speed in Feet per Minute	Maximum Suspended Load
		(per Condition 3)	(per Condition 6)	(per Condition 7)
24-V-414	Elevator 1	7	200	11556
24-V-415	1	8	200	13207
24-V-416	Elevator 1	7	150	12247
24-V-426	S1	8	350	11706
24-V-427	N2	8	350	11706
24-V-429	1	7	150	12247
24-V-430	Elevator 1	7	150	12247
24-V-431	P1	7	150	12247
24-V-432	P3	7	150	12247
24-V-432	P2	7	150	12247
24-V-433	P1	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 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 Gen2S/Gen3Edge/Gen3Core Elevator & Medical Emergency Elevator Car Dimensions (Group IV)

Permanent Variance No.: see section A.1 table

of

Proposed Decision Dated: September 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: October 17, 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.
DAVID ITTOTVIAS, IVICITIBET	

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: September 25, 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-418	Mulberry Gardens Senior, L.P.	2520 Mulberry St. Riverside, CA	2
24-V-419	Virgil Village Group, LLC	611 N. Virgil Ave. Los Angeles, CA	1
24-V-434	2019 Ozone Affordable Housing 820 MacArthur LP	820 W. MacArthur Blvd. Oakland, CA	2
24-V-435	Elda Developments	3450 El Cajon Blvd. San Diego, CA	1
24-V-436	Eden Housing	37660 Timber St. Newark, CA	2
24-V-437	NBC Universal	Universal Project 409 100 Universal City Plaza, #3213 Universal City, CA	2
24-V-438	Sharp Rees-Stealy Medical Group, Inc.	MOB 480 H St. Chula Vista, CA	3
24-V-439	Sharp Rees-Stealy Medical Group, Inc.	Parking Structure 460 H St. Chula Vista, CA	2

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

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24-V-441	CRCD Normandie Apartments, L.P.	1351 W. 95th St. Los Angeles, CA	1
24-V-442	Trilogy Gardens, LLC	Volar Building C 3100 Memphis Belle Irvine, CA	4
24-V-443	Chinatown Community Development Center	288 Folsom St. San Francisco, CA	2

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 September 25, 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; Jose Ceja and David Morris, 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 September 25, 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. <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.

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 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.

Michelle Lorio Dated: September 25, 2024 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.

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 fo	r
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: September 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
OSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: October 17, 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	= 2, 3=22, .= =

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 Model 3300 Elevators, W/Variant Governor Ropes and Sheaves (Group IV)	PROPOSED DECISION
	Hearing Date: September 25, 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-420	Dad Mission Valley Development LLC.	2151 Qualcomm Way San Diego, CA	2
24-V-422	Adair Winery, Inc.	2765 Mankas Corner Rd. Fairfield, CA	1
24-V-446	127 Monrovia P1 LLC	127 West Pomona Ave. Monrovia, CA	1
24-V-447	CPIF 812 Main, LLC	881 Abbot Kinney Blvd. Venice, CA	1

 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 September 25, 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.

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

- 3. At the hearing, Jennifer Linares, with the Schindler Elevator Company, appeared on behalf of each Applicant; Jose Ceja and David Morris appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 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 September 25, 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.
- 9. 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 the procedural manner prescribed.

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

DATED: September 25, 2024

Michelle Jorio
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 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.

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 (Group IV)

Permanent Variance No.: see section A.1 table

of

Proposed Decision Dated: September 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: October 17, 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 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 (Group IV)	PROPOSED DECISION Hearing Date: September 25, 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-421	Sunnyside, L.P.	1408 W. 62nd St. Los Angeles, CA	1
24-V-423	Orion Cityscape LLC	7301 S. Broadway Los Angeles, CA	1
24-V-424	Vose, LP	7050 N. Van Nuys Blvd. Van Nuys, CA	4
24-V-445	127 Monrovia P1 LLC	127 West Pomona Ave. Monrovia, 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. <u>Procedural</u>

1. This hearing was held on September 25, 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.

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

- 2 At the hearing, Jennifer Linares with Schindler Elevator Corporation appeared on behalf of each Applicant. Jose Ceja and David Morris 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 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 September 25, 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

- 1. 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.
- 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: September 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 Al7.l-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: KONE Monospace 300 Elevators (Group IV)	Permanent Variance No.: see section A.1 table of Proposed Decision Dated: September 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: October 17, 2024
MATTILLE TO CITATION OND, INICITION	

DAVID HARRISON, Member

NOLA KENNEDY, Member

DAVID THOMAS, Member

CHRIS LASZCZ-DAVIS, Member

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:	Permaent Variance Nos.: See section A.1 table below
KONE Monospace 300 Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: September 25, 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-425	Stanford University LBRE/DPM	GSE North Building (Building 03-300) 485 Lasuen Mall Stanford, 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. <u>Procedural</u>

- 1. This hearing was held on September 25, 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.
- 2. At the hearing, Fuei Saetern, with KONE, Inc., appeared on behalf of each Applicant; Jose Ceja and David Morris 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 September 25, 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 position 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. Decision and Order

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: September 25, 2024

Michelle Lorio

Michelle Iorio, Hearing Officer

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)
		(per condition 3)	(per condition o)	(per condition /)
24-V-425	N1	5	150	8748

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:	Permanent Variance No.: see section A.1 table of Proposed Decision Dated: September 25, 2024
KONE Retractable Platform Guard	1 Toposed Decision Duted. September 23, 2021
	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: October 17, 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 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.: 24-V-428
KONE Retractable Platform Guard	PROPOSED DECISION
	Hearing Date: September 25, 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 Regulations.¹

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-428	HSRE - MPCCA Oakland Mob, LLC	3900 Manilla Ave. Oakland, 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 September 25, 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 David Morris 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(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 September 25, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Applicant requests a permanent variance from provisions of section 3141 [ASME A17.1-2004, Section 2.15.9.2(a) and 2.4.1.5] concerning the platform guard (Apron) and car mounted equipment striking the pit, respectively, for one (1), 3,500 lb. capacity MRL passenger elevator(s) located at 3900 Manilla Avenue, Oakland, CA.
- 2. Applicant proposes to install a two-section retractable platform guard (apron) consisting of a stationary upper section guard plate and a moveable lower section guard plate. To monitor the retractable mechanism, an electrical switching system will be provided to monitor for malfunction.
- 3. Section 3141 [ASME A17.1-2004, Section 2.15.9.2] states, in part:
 - 2.15.9.2 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.).

An intent of this code section is to guard a hazardous opening to the hoistway if the elevator car is intentionally or unintentionally positioned above the landing zone, by providing a guard that extends below the car platform to obstruct the opening.

- 4. Section 3141 [ASME A17.1-2004, Section 2.4.1.5] states, in part:
 - 2.4.1.5 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.

An intent of this code section is to prevent any equipment attached to the elevator car from striking any part of the pit. This could damage the elevator equipment, which may result in unsafe operation or injury.

- 5. Per Cal/OSHA's Review of Application (Exhibit PD-3) Applicant's proposed platform guard is similar in all material respects to installations for which a permanent variance previously has been granted. (e.g., 18-V-010M1).
- 6. Cal/OSHA safety engineers, and Cal/OSHA, 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.

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>

The application for permanent variance, in the matter of OSHSB File No. 24-V-428, is conditionally GRANTED, issuing the Applicant permanent variance from section 3141 [ASME A17.1-2004, Section 2.4.1.5 (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 2.15.9.2 (only to the extent necessary to permit the two-section retractable platform guard (apron) to contact the pit floor), for the specific conveyances, at the specific variance location, subject to the following conditions:

- 1. In lieu of the straight vertical face (one-piece) platform guards (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 movable, lower-section guard plate shall:
 - (i) Comply with ASME A17.1-2004, Section 2.15.9.3;
 - (ii) Be provided with a 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.
- e. The elevator rated speed shall be equal to or less than 200 feet per minute.
- f. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- The Division shall be notified when the elevator is ready for inspection to confirm conformity with above specified conditions and limitations. No elevator shall be placed in service prior to it being inspected and issued a Permit to Operate by the Division.
- 3. Each 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.
- 4. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in accordance with the Board's procedural regulations.

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

Dated: September 25, 2024

Michelle Iorio, Hearing Officer

Michelle Lorio

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 Medical Emergency Elevator Car Dimensions (Group IV) Permanent Variance No.: see section A.1 table

of

Proposed Decision Dated: September 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 S STANDARDS BOA
	Date of Adoption:
KATHLEEN CRAWFORD, Member	
	THE FOREGOING
	ADOPTED ON THE
DAVID HARRISON, Member	IF YOU ARE DISSA
	DECISION, A PETIT
	MAY BE FILED BY
NOLA KENNEDY, Member	STANDARDS BOA
	DAYS AFTER SERV
	YOUR PETITION F
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY W
	OF CALIFORNIA C
	TITLE 8, SECTIONS
DAVID THOMAS, Member	-,

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Date of Adoption: October 17, 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 No.: See section A.1 table below
Otis Medical Emergency Elevator Car Dimensions (Group IV)	PROPOSED DECISION
	Hearing Date: September 25, 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-440	The Quad at Whittier, LLC	13502 Whittier Blvd. Whittier, 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. This hearing was held on September 25, 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 Dave Morris 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	

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

Exhibit Number	Description of Exhibit	
PD-3	Cal/OSHA Review of Variance Application	
PD-4	Review Draft-1 Proposed Decision	

6. 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 September 25, 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: September 25, 2024

Michelle Iorio, Hearing Officer

Michelle Lorio

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 table
Permanent Variance regarding:	of
	Proposed Decision Dated: September 25, 2024
Otis Gen2O and/or Gen3Peak Alteration	
(Group IV)	
	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: October 17, 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 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.

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 Alteration (Group IV)	PROPOSED DECISION
	Hearing Date: September 25, 2024 Location: Zoom

A. Subject Matter

 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	Applicant Name	Variance Location	No. of Conveyances
Variance No.		Address	
24-V-444	Avalonbay Communities, Inc	255 King St.	r
24-V-444	Avaioribay Communities, inc	San Francisco, CA	2

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 September 25, 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 Company, appeared on behalf of each Applicant; Jose Ceja and David Morris 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	Application(s) for Permanent Variance per section A.1	
	table	
PD-2	OSHSB Notice of Hearing	

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

Exhibit Number	Description of Exhibit	
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 September 25, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Applicable Regulations

- 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. Applicability of Alteration Requirements; 8.7.1.1(b) (to permit variance from the code sections below)
 - b. 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.);
 - c. 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);
 - d. 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); and
 - e. 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).

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, 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.
- 2. The alterations will be performed after May 1, 2008, and the contracts for the alterations were or will be signed on or after May 1, 2008, making those alterations subject to the Group IV Elevator Safety Orders.
- 3. Cal/OSHA safety engineers, 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.

E. 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.

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, Applicant shall have permanent variances from sections 3141 and 3141.2(a), only to the extent necessary to allow variances from the following provisions of ASME A17.1-2004 made applicable by those provisions:

- 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); and
- 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).

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.
- 9. 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. 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.
- 13. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
- 14. 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 the elevator is placed in service.
- 15. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
- 16. 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.
- 17. 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: September 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 regarding: Arrow Lift Symmetry Vertical Platform Lift	Permanent Variance No.: see section A.1 table of Proposed Decision Dated: September 25, 2024
	DECISION
The Occupational Safety and Health S PROPOSED DECISION by Michelle Iorio, Hear	Standards Board hereby adopts the attached ing Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	Date of Adoption: October 17, 2024
MATTILLEN CRAWLORD, MICHIDEI	THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE.
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE

NOLA KENNEDY, Member

DAVID THOMAS, Member

CHRIS LASZCZ-DAVIS, 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 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

Permanent Variance No.: see section A.1

Variance Regarding:

table below

Arrow Lift Symmetry Vertical Platform Lift

PROPOSED DECISION

Hearing Date: September 25, 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-448	Lockheed Martin	1011 Lockheed Way, B606 Palmdale, 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 Standard Board's ("Board" or "OSHSB") procedural regulations.

B. <u>Procedural</u>

- 1. This hearing was held on September 25, 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.
- 2. At the hearing, Patrick Austin with Arrow Lift of California, appeared on behalf of each Applicant; Jose Ceja and David Morris 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, rerferences 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-1 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 September 25, 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 vertical platform (wheelchair) lift(s) in the quantity, at the location, specified per the above section A.1 table.

1011 Lockheed Way, B606 Palmdale, CA

- 2. The subject vertical lift is proposed to be a Symmetry Model VPL EL-168, with a vertical travel range of approximately 168 inches. That range of travel exceeds the 12 foot maximum vertical rise allowed by ASME A18.1-2003, section 2.7.1—the State of California standard in force at the time of this Decision.
- 3. The Cal/OSHA evaluation in this Matter, states that the more recent consensus code ASME A18.1-2005 allows for vertical platform lifts to have a travel not exceeding 14 feet (168 in.).
- 4. Permanent variances regarding the extended travel of vertical platform lifts, of similar configuration to that of the subject proposed model, have been previously granted, absent subsequent harm attributable to such variance being reported by Cal/OSHA. (E.g. Permanent Variance Nos. 13-V-260, 15-V-097, 17-V-270, 18-V-278, 19-V-256).
- 5. With respect to the equivalence or superior of safety, conditions and limitations of the Decision and Order are in material conformity with findings and conditions of prior Board permanent variance decisions, including the above cited.
- 6. Per its written Review of Application for Permanent Variance, Exhibit PD-3, it is the informed opinion of Cal/OSHA that equivalent safety (at minimum) will be achieved upon grant of presently requested permanent variance, subject to conditions and limitations incorporated into the below Decision and Order.

D. 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 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 sections 3041, subdivision (e)(1)(c) and 3141.7, subdivision (b) subject of the following conditions:

- a. This lift may travel up to 168 inches, unless the manufacturer's instructions provide for a lesser vertical travel limit, or lesser total elevation change, in which case, travel shall be limited to the lesser limit or elevation change.
- b. The wheelchair lift shall be installed and operated in accordance with the manufacturer's instructions, unless the provisions of this variance or applicable provisions of the law provide otherwise.
- c. Durable signs with lettering not less than 5/16 inch on a contrasting background shall be permanently and conspicuously posted inside the car and at all landings indicating that the lift is for the exclusive use of persons with physical impairments and that the lift is not to be used to transport material or equipment. The use of the lift shall be limited in accordance with these signs.
- d. A maintenance contract shall be executed between the owner/operator and a Certified Qualified Conveyance Company (CQCC). The contract shall stipulate that the routine preventive maintenance required by section 3094.5(a)(1) shall be performed at least quarterly and shall include but not be limited to:
 - i. Platform driving means examination;
 - ii. Platform examination;
 - iii. Suspension means examination;
 - iv. Platform alignment;
 - v. Vibration examination;
 - vi. Door/gate electrical; and
 - vii. Mechanical lock examination.
- e. The lift shall be tested annually for proper operation under rated load conditions. The Cal/OSHA Elevator Unit District Office shall be provided written notification in advance of the test, and the test shall include a check of car or platform safety device.

- f. The lift shall be shut down immediately if the lift experiences unusual noise and vibration, and the Applicant shall notify the CQCC immediately. The lift shall only be restarted by the CQCC.
- g. The Applicant shall notify the CQCC if the lift shuts down for any reason. The lift shall only be restarted by the CQCC.
- h. Service logs including, but not limited to, the device shutdown(s) shall be kept in the maintenance office and shall be available to Cal/OSHA. The shutdown information shall contain the date of the shutdown, cause of the shutdown, and the action taken to correct the shutdown.
- i. The Applicant shall provide training on the safe operation of the lift in accordance with section 3203. Such training shall be conducted annually for all employees using or who will be assisting others in using the lift. The Applicant shall notify Cal/OSHA in writing that training has been conducted. A copy of the training manual (used for the subject training), and documentation identifying the trainer and attendees shall be maintained for at least 1 year and provided to Cal/OSHA upon request.
- j. Any CQCC performing inspections, maintenance, servicing or testing of the elevators shall be provided a copy of this variance decision.
- k. Cal/OSHA shall be notified when the lift is ready for inspection, and the lift shall be inspected by Cal/OSHA and a Permit to Operate shall be issued before the lift is put into service.
- I. 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.
- m. 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 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: September 25, 2024

Michelle Jorio

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: KONE Sleepmode Escalator	Permanent Variance No.: see section A.1 table of Proposed Decision Dated: September 25, 2024
	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: October 17, 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:	OSHSB File Nos. See Section A.1 Table below
KONE Sleepmode Escalator	PROPOSED DECISION
	Hearing Date: September 25, 2024
	Location: Zoom

A. Procedural Matters

 Each of the following entities applied for a 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 Escalators
24-V-449	San Diego Regional Airport Authority	3301 N. Harbor Dr. San Diego, CA	10 As identified as: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

- 2. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et seq.
- 3. This hearing was held on September 25, 2024 via videoconference, by the Board with Hearing Officer, Michelle Iorio, presiding and hearing the matter on its merit in accordance with section 426.
- 4. At the hearing, Fuei Saetern appeared on behalf of the Applicants' representative, KONE, Inc.; Jose Ceja and David Morris appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").
- 5. Documentary and 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	

7. 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 September 25, 2024, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

B. Findings

- Applicant seeks variance from certain California Code of Regulations, title 8,
 Elevator Safety Orders, toward the stated purpose of installing new escalators
 that include a "sleep mode" capability that will cause the escalator to run at a
 reduced speed when not in use, thus resulting in conservation of electrical
 energy.
- 2. The Applicant's proposed sleep mode feature is not compliant with existing Elevator Safety Orders, which prohibits the intentional variation of an escalator's speed after start-up.
- 3. In order to install escalators that include a sleep mode capability, Applicant requires a permanent variance from the provisions of section 3141.11 [ASME A17.1-2004, section 6.1.4.1] regarding the variation of escalator speed.
- 4. Concerning variance in escalator speed, section 3141.11 [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 startup shall not be intentionally varied."

- 5. An intent of section 3141.11 is to ensure that the speed of the escalator during normal operation is kept constant to prevent passengers from losing their balance.
- 6. 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 period, the control system will initiate the "sleep mode"

function, decelerating the escalator to not less than 10 feet per minute at a rate no greater than 1ft/sec². 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 1ft/sec².

- 7. Applicant proposes using passenger traffic sensors capable of detecting passengers at a distance greater than a walking person could travel in 2 seconds, thereby causing the escalator to be running at normal speed prior to passenger boarding.
- 8. Applicant proposes design features such that if a passenger detected approaching the escalator opposite the motion of the escalator steps on it while it is 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. Applicant contends this arrangement will safely discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.
- 9. The Applicant proposes sensors used to detect passenger traffic being installed and arranged in a double redundant, fail-safe fashion with 2 sensors installed at each end of the escalator providing the same coverage field.
- 10. Applicant's proposed sensor arrangement and redundancy can be reasonably expected to provide for passenger traffic detection in the event of any single sensor failure and provide for signal comparison by the controller to detect sensor failure.
- 11. Applicant proposes a design in which detected failure of any one of the passenger traffic sensors, result in a disabling of "sleep mode" such that the escalator would remain at normal operating speed until all sensors have resumed normal function. In addition the proposed design would have passenger traffic sensors wired to the escalator controller in a fail-safe manner that prevents "sleep mode" activation if the sensor wiring is cut or disconnected.
- 12. As evidenced by written Review of Application (Exhibit PD-4), as well as statements at hearing, it is the well informed opinion of Cal/OSHA 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.
- 13. 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/sec 2).
- (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."
- 14. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (Permanent Variance No. 17-V-369). 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. Conditions set forth in the previous variance decisions allow for the disabling of the handrail speed monitoring device while the escalator is operating in slow speed "sleep mode."

15. Concerning handrail speed monitoring, section 3141.11 [ASME A17.1-2004, section 6.1.6.4] states:

"6.1.6.4 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."

16. It is the well informed professional opinion of Cal/OSHA(see Exhibit PD-3) that that the escalator "sleep mode" function design, as proposed by the Applicant, subject to certain conditions and limitations, will provide occupational safety and health equivalent or superior to the requirements from which variance is being sought, and recommends that the applied for permanent variance issue subject to conditions and limitations in material conformity with those incorporated into the Decision and Order below.

C. Conlcusive 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.

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

Each above section A.1 table specified Applicant is conditionally GRANTED permanent variance, at the respectively specified location, as to respectively specified number of conveyances, subject to all below enumerated conditions and limitations:

Elevator Safety Orders:

 <u>Variation of Escalator Speed</u>: 6.1.4.1 (Only to the extent necessary to permit the variation of the escalator speed where the speed is reduced absent any passengers); and • <u>Handrail speed monitoring</u>: 6.1.6.4 (Only to the extent necessary to permit the disabling of the handrail speed monitoring device, where monitoring of the handrail speed is not necessary during slow speed [Seep Mode] operation).

Recommended Conditions:

- 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 Exhibit 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:

```
d = (Vf - Vs) x

(Vw / a)

where d =

detection

distance (ft)
Vf = normal speed (ft/min) [not to exceed 100 ft/min]
Vs = slow "sleep" speed (ft/min) [not less
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than 10 ft/min] V_W = passenger walking speed (4.5 ft/sec) a = acceleration/deceleration rate (ft/sec²)[not to exceed 1 ft/sec²]

- 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.
- 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.
- 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 the 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 that the Applicant was required to notify them of the docketed application for permanent variance per 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 the manner prescribed.

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

Dated: September 25, 2024

Michelle Lorio

Michelle Iorio, Hearing Officer

Exhibit 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 Escalator 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.

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)
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(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

AB-1976 Occupational safety and health standards: first aid materials: opioid antagonists. **(2023-2024)**

(Haney)

Date	Action
09/27/24	Chaptered by Secretary of State - Chapter 689, Statutes of 2024.
09/27/24	Approved by the Governor.
09/10/24	Enrolled and presented to the Governor at 4:30 p.m.
08/28/24	Senate amendments concurred in. To Engrossing and Enrolling. (Ayes 76. Noes 0.).
08/28/24	Assembly Rule 77 suspended.
08/28/24	In Assembly. Concurrence in Senate amendments pending. May be considered on or after August 30 pursuant to Assembly Rule 77.
08/27/24	Read third time. Passed. Ordered to the Assemly. (Ayes 40. Noes 0.).
08/26/24	Read second time. Ordered to third reading.
08/23/24	Read third time and amended. Ordered to third reading.
08/19/24	Read second time. Ordered to third reading.
08/15/24	Read second time and amended. Ordered returned to second reading.
08/15/24	From committee: Amend, and do pass as amended. (Ayes 7. Noes 0.) (August 15).
6/24/24	In committee: Referred to suspense file.

06/13/2024	Read second time and amended. Re-referred to Com. APPR.
06/12/2024	From committee: Amend, and do pass as amended as re-refer to 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. (Aye 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. (A. 11. Noes 0.) (May 16).
4/17/24	In committee: Set, first hearing. Referred to suspense
4/4/24	From committee: Do pass and re-refer to Com. on AP (Ayes 6. Noes 0.) (April 3). Re-referred to Com. on AP
03/13/24	In committee: Set, first hearing. Hearing canceled at the request 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 division, before December 1, 2027, to submit a rulemaking proposal to revise specified regulations on first aid materials and emergency medical services 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 division, in drafting the rulemaking proposal, to consider, and provide guidance to employers on, proper storage of the opioid antagonist in accordance with the manufacturer's instructions. The bill would require the standards board to consider for adoption revised standards for the standards described above on or before December 1, 2028.

Under existing law, a person who, in good faith and not for compensation, renders emergency treatment at the scene of an opioid overdose or suspected opioid overdose by administering an opioid antagonist is not liable for civil damages resulting from an act or omission related to the rendering of the emergency treatment, except if the act or omission constitutes gross negligence or willful or wanton misconduct.

This bill would expressly provide that an individual who administers naloxone hydrochloride or another opioid antagonist approved by the United States Food and Drug Administration to reverse opioid overdose in a suspected opioid overdose emergency shall not be liable for civil damages, as provided by, and subject to, the above-described provisions. The bill would also provide that an individual who is licensed as part of a local emergency medical services agency shall not be held responsible for administering nasal naloxone hydrochloride or another opioid antagonist approved by the United States Food and Drug Administration to reverse opioid overdose, regardless of whether the individual was certified for that activity, unless the individual was acting as a paid first responder at the time of the action.

Board staff is monitoring for potential impacts on Board operations.

AB-2408 Firefighter personal protective equipment: perfluoroalkyl and polyfluoroalkyl substances. (2023-2024) - No Update

AB-2408 Firefighter personal protective equipment: perfluoroalkyl and polyfluoroalkyl substances. (2023-2024)

(Haney)

Date	Action
08/15/24	In committee: Held under submission.
08/05/24	In committee: Referred to APPR suspense file.
06/26/24	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.
06/19/24	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.

2408

AB-

04/18/24	From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (April 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, and re-refer to Com. on E.S. & T.M. Read second time and amended.
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: hospitals. (2023-2024) - UPDATE

AB-2975 Occupational safety and health standards: workplace violence prevention plan: hospitals. **(2023-2024)**

(Gipson)

AB-
2975

Date	Action
09/27/24	Chaptered by Secretary of State - Chapter 749, Statutes of 2024.
09/27/24	Approved by the Governor.
09/11/24	Enrolled and presented to the Governor at 4 p.m
08/29/24	Senate amendments concurred in. To Engrossing and Enrolling. (Ayes 72. Noes 0.).
08/29/24	Assembly Rule 77 suspended.

08/28/24	In Assembly. Concurrence in Senate amendments pending. May be considered on or after August 30 pursuant to Assembly Rule 77.
08/28/24	Read third time. Passed. Ordered to the Assembly. (Ag 38. Noes 0.).
8/22/24	Read third time and amended. Ordered to second read
08/19/24	Read second time. Ordered to third reading.
08/15/24	Read second time and amended. Ordered returned to second reading.
08/15/24	From committee: Amend, and do pass as amended. (A 5. Noes 0.) (August 15).
08/05/24	In committee: Referred to APPR suspense file.
07/03/24	Read second time and amended. Re-referred to Com. APPR.
07/03/24	From committee: Amend, and do pass as amended an re-refer to Com. on APPR. (Ayes 9. Noes 0.) (July 3).
6/27/24	Read second time and amended. Re-referred to Com. HEALTH.
6/26/24	From committee: Amend, and do pass as amended an re-refer to Com. on HEALTH. (Ayes 5. Noes 0.) (June 2)
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. Noes 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, and 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 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) - No Update

AB-3043 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.
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. 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)

	(Schlavo)	
	Date	Action
AB- 3106	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 Refineries a	nd chemical plants. (2023-2024)
	(Bryan)	
	Date	Action
	09/29/24	Chaptered by Secretary of State - Chapter 978, Statutes of 2024.
	09/29/24	Approved by the Governor.
	09/05/24	Enrolled and presented to the Governor at 4 p.m.
AB- 3258	08/27/24	Senate amendments concurred in. To Engrossing and Enrolling. (Ayes 77. Noes 0.).
	08/27/24	Assembly Rule 77 suspended.
	08/26/24	In Assembly. Concurrence in Senate amendments pending. May be considered on or after August 28 pursuant to Assembly Rule 77.
	08/26/24	Read third time. Passed. Ordered to the Assembly. (Ayes 38. Noes 0.).
	08/21/24	Read second time. Ordered to third reading.
	08/20/24	Read third time and amended. Ordered to second reading.

08/20/24	Ordered to third reading.
08/20/24	Action rescinded whereby the bill was read third time, passed, and to Assembly.
08/05/24	In Senate. Held at Desk.
08/05/24	Ordered to the Senate.
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 with recommendation: To Consent Calendar. (Ayes 5. Noes 0.) (June 12). Re-referred to Com. on APPR.
06/03/24	From committee chair, with author's amendments: Amend, and 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. Noes 0.)

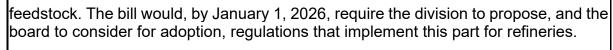
05/09/24	Read second time. Ordered to Consent Calendar.
05/08/24	From committee: Do pass. To Consent Calendar. (Ayes 15. Noes 0.) (May 8).
04/18/24	From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (April 17). Re-referred to Com. on APPR.
04/01/24	Re-referred to Com. on L. & E.
03/21/24	From committee chair, with author's amendments: Amend and 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.
	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



Board staff is monitoring for potential impacts on Board operations.

Occupational Safety and Health Standards Board

Business Meeting
Executive Officer's Report

State of California

Department of Industrial Relations

Division of Occupational Safety and Health

Memorandum

Date: August 30, 2024

To: Joseph Alioto, Board Chair

Millicent Barajas, Executive Officer Autumn Gonzalez, Chief Counsel

Amalia Neidhardt, Principal Safety Engineer
Occupational Safety and Health Standards Board

From: Debra Lee, Chief

Eric Berg, Deputy Chief of Health

Division of Occupational Safety and Health (Cal/OSHA)

Subject: Request for an advisory committee to discuss possible regulation of autonomous

vehicles in agriculture

1.0 INTRODUCTION

Petitions <u>571</u> (November 26, 2018) and <u>596</u> (Dec. 20, 2021) requested title 8 be amended to permit the use of autonomous agricultural vehicles. Cal/OSHA recommended denial of the petitions because the technology was not yet proven safe around workers.

Since the denial of the of the petitions, Cal/OSHA through review of manufacturers' literature, discussions with manufacturers, experts and academia, and observing the vehicles operate during site visits and tests, has learned much about the autonomous vehicle technology.

Based on the new knowledge, Cal/OSHA rescinds its opposition to the use of autonomous vehicles in agriculture. Cal/OSHA supports the use of certain autonomous vehicles that are unlikely to cause injury or harm. Cal/OSHA recommends that a balanced advisory committee be convened to further discuss possible regulations for certain autonomous vehicles in agriculture.

2.0 BACKGROUND

2.1 Title 8 does not currently allow the use of autonomous tractors

Title 8 section 3441 Operation of Agricultural Equipment contains the requirements for agricultural vehicles.



Subsection 3441(b) requires that all self-propelled equipment have an operator stationed at the vehicular controls. An exception to this requirement is in subsection 3441(b)(1), which permits certain furrow guided vehicles that travel less than two miles per hour to have an operator not on the equipment. However, an operator is still required and must have access to vehicle controls and a good view of the course of travel of the equipment and any employees in the immediate vicinity.

Both subsections 3441(b) and 3441(b)(1) require an operator for self-powered agricultural equipment. Thus, these subsections do not permit the use of an autonomous vehicle controlled solely by artificial intelligence or other type of computer control.

2.2 Not all autonomous agricultural vehicle use is prohibited

If there are no employees at a worksite and no employee access to a worksite, autonomous agricultural vehicles usage at that site does not constitute a violation of title 8 per decisions from the Occupational Safety and Health Appeals Board (OSHAB).

Per case law from the OSHAB, Cal/OSHA must prove employee exposure to a hazard for it to be able to cite an employer. According to the OSHAB, employee exposure exists where employees can access the zone of danger or area of the hazard while in the course of their assigned work duties, pursuing personal activities during or at work, and normal means of ingress and egress at work. The area of the hazard is accessible to employees if it is reasonably predictable by operational necessity or otherwise, including inadvertence, that employees have been, are, or will be in the zone of danger. The zone of danger is that area surrounding a violative condition that presents the danger to employees that the regulation is intended to prevent.

For further details regarding employee exposure, please see the following Decisions after Reconsideration from the OSHAB:

- Dynamic Construction Services, Inc. (Dec. 1, 2016)
- Ja-Con Construction Systems, Inc. (Mar. 27, 2006)
- Benicia Foundry & Iron Works (April 24, 2003)

2.3 Experimental Variance with Monarch Tractor

On August 6, 2021, Cal/OSHA granted an experimental variance to Monarch Tractor to operate autonomous tractors in two fields for a period of five years, The experimental variance contained numerous conditions for required safety protocols and reporting including requiring an operator at the controls in the initial stages of the experimental variance.

On January 28, 2022, Operating Engineers Local 3 (OE3), filed an appeal of the experimental variance with the Occupational Safety and Health Standards Board (Standards Board) and requested the experimental variance be vacated. OE3 alleged that its union members are adversely affected by the experimental variance. On December 21, 2023, Cal/OSHA, OE3, and

Monarch reached a settlement agreement prior to an appeal hearing. The agreement partially consists of the following:

- 1. OE3 withdrew its appeal
- 2. Cal/OSHA will provide OE3 with periodic updates on the progress of the experimental variance in January, April, July and October of each calendar year in which the experimental variance is in effect.
- 3. Cal/OSHA will provide OE3 notice of potential changes to the terms of the experimental variance and allow OE3 30 days to comment and provide input about any changes to the experimental variance, as well as to provide recommendations regarding questions and information for Cal/OSHA representative to ask and collect from workers and the employer as part of Cal/OSHA's evaluation of the experimental variance.
- 4. OE3 may ask Cal/OSHA questions about the TEV and Cal/OSHA will provide timely responses and may include information from Monarch.

The experimental variance has not produced data to evaluate autonomous tractor safety around workers as anticipated because there have been no workers in the fields where the Monarch tractors operate. Cal/OSHA has permitted the experimental variance to continue as it is still able to gather data and knowledge on the operation of the tractors.

3.0 Future Advisory Committee Recommendation.

Cal/OSHA believes that lightweight, low power, and slow autonomous vehicles (under 500 lbs., less than 20 horsepower total, and a maximum speed under two miles per hour (normal walking speed and consistent with subsection 3441(b)(1)) would be appropriate to consider for an advisory meetings and possible future rulemaking.

Autonomous vehicles in this class are already available on the market and are designed to work collaboratively with and in close proximity to workers. Several anti-collision safety features would be necessary, which at a minimum would include:

- Vehicle control by a computer with a deep learning neural network,
- Three-dimensional cameras all around the vehicle to detect persons and objects to slow and stop the vehicle to prevent collisions.
- Energy absorbing bumpers around the vehicle that will automatically and immediately stop the vehicle on contact in case other safety systems do not operate properly or fail. The bumpers would function independently of any other technology or safety system.

Use of lightweight, low power, and slow vehicles initially is the best way to collect data on how the autonomous and anti-collision technology works in practice around persons. Since they work closely with people, there would be ample data to collect on person-vehicle interactions. Part of any proposal would be a requirement for the vehicles to record and store detailed data (video, audio, computer control commands, etc.) before and after near misses and contacts. The data would be uploaded to a central database that could be analyzed and studied.

Lightweight, low power, and slow vehicles are ideal for initial usage of autonomous technology because in the event that such a vehicle contacts a person, an injury is unlikely. Whereas a larger tractor would be much more likely to cause injury. Once sufficient data is collected and studied, a determination can be made about expanding the use of autonomous technology to larger vehicles.

4.0 MAKE-UP OF AN ADVISORY COMMITTEE

To ensure the credibility of the advisory committee, it is important that it be well balanced and not dominated by any one perspective on autonomous vehicles.

The advisory committee should consist of: manufacturers of autonomous vehicles, agricultural employers, labor organizations, labor advocates, agricultural workers, academia and researchers with expertise in agriculture and occupational safety, and applicable governmental agencies.