

**OSHDP** Office of Statewide Health Planning and Development



**Hospital Building Safety Board**

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**HOSPITAL BUILDING SAFETY BOARD  
Administrative Processes and Code Changes Committee**

**Tuesday, September 23, 2014  
10:00 a.m. - 4:00 p.m.**

**Office of Statewide Health Planning and Development**

400 R Street, Suite 452  
Sacramento, CA 95811  
(916) 440-8453

and

**Metropolitan Water District Headquarters**

700 N. Alameda Street, Suite 2-500  
Los Angeles, CA 90012  
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**Committee Members Present**

Scott Karpinen, Chair  
John Donelan, Vice-Chair  
John Egan  
Rami Elhassan  
Henry Huang  
Bruce Macpherson  
Michael O'Connor  
Carl Scheuerman  
Michael Gritters, Consulting Member

**OSHDP Staff**

Robert P. David, OSHPD Director  
Paul Coleman, FDD Deputy Director  
Hussain Bhatia  
David Castillo  
Glenn Gall  
Eric Jacobsen  
Mohammad Karim  
Roy Lobo  
Ramin Sadr

**HBSB Staff**

Linda Janssen, Executive Director  
Cathy Kane  
Evelt Torres



1 **1. Welcome and Introductions**

2 Committee Chair Scott Karpinen welcomed everyone and invited them to introduce  
3 themselves.

4  
5 **2. ASHRAE 170 Presentation – Public Member**

6 Mr. Abdel Darwich of Guttman and Blaevoet Consulting Engineers gave an overview  
7 of the discussions at the American Society of Heating, Refrigerating and Air  
8 Conditioning Engineers (ASHRAE) winter and summer meetings in 2014.

9  
10 Mr. Karpinen noted that OSHPD is seeking to standardize and follow the ASHRAE  
11 Standard 170 more in the future.

12  
13 Mr. Darwich made the following points.

- 14 • Kaiser noted that 80% of the visits to exam rooms in outpatient clinics are of  
15 consultative nature: the patient comes and chats with the doctor. Kaiser asked  
16 the ASHRAE committee if they could use ventilation rates of 62.1 (office space)  
17 for the exam rooms, in order to save energy. The committee did not consent.  
18 However, Air Changes per Hour (ACH) was reduced from 6 to 4. Kaiser then  
19 reported a huge amount of energy savings.
- 20 • Kaiser asked about the sources of the ACHs on the table. The answer was that  
21 not all are research-based; some are guidance from authorities such as the  
22 Centers for Disease Control (CDC), and others are values that have been  
23 working for years.

- 1 • Kaiser asked to change the ventilation rates in ER and radiology waiting rooms to  
2 62.1 (the rate for lobbies). The committee did not consent because occupants  
3 may have undiagnosed communicable respiratory diseases.
- 4 • Kaiser asked about thermal comfort in the Standard 170 scope. The committee  
5 informed them that Standard 170 does not guarantee compliance with Standard  
6 55 (which has many more requirements).
- 7 • Mr. Darwich had requested interpretation on whether Standard 170 allows low  
8 ventilation rates for 100% Outside Air (OA) systems. The committee responded  
9 that Standard 170 does not differentiate between recirculating systems and  
10 100% OA systems; the latter must meet the total ACH requirements. Mr.  
11 Darwich is hoping for more action on this subject.
- 12 • A German company had given a presentation on Ultra Clean Ventilation in OR  
13 rooms. The concept is used widely outside the U.S. The idea is to treat the OR  
14 as a Clean Room. Mr. Darwich stressed that some kind of performance criteria  
15 is needed.
- 16 • To be consistent with the Facility Guidelines Institute (FGI), the committee  
17 approved condensing the current nine laboratory types into one category entitled  
18 “lab work area.”
- 19 • The committee reached a compromise for ACH in labs: six total with two OA. (A  
20 note was added that designers can reduce the values using a Z9.5 contract  
21 procedure.)
- 22 • Hybrid ORs are becoming more and more common, so they want to add  
23 requirements. Most of the committee felt that the sterile field on OR tables is the

1 original position (they can swing 240° and move 4' each way) where an open  
2 wound is most likely to occur.

- 3 • The total ACH to the OR does not need to be introduced directly above the  
4 surgical table – it is the total ACH in the room.
- 5 • An upper limit needs to be placed on the specification that the primary air supply  
6 must extend a minimum of 12" from each side of the surgical table, because  
7 some designers and architects are taking advantage of the absence of limit.
- 8 • For years isolation rooms were not allowed to be switchable between positive  
9 and negative. This now applies to all rooms – they must be positive or negative  
10 all the time.
- 11 • A Task Group to study Natural Ventilation has met for the first time in Seattle.
- 12 • A group was formed to clarify the scope delineation between Standard 170 and  
13 Standard 62.1.
- 14 • ASHRAE has been working for a few years on a position paper about Infectious  
15 Diseases. It has been approved by the Directors and published.

## 16

### 17 **Discussion and public input**

18 Mr. Karpinen asked when the next Addendums will be published. Mr. Darwich replied  
19 that it would be 2018.

20

21 Mr. Gall asked about non-switchable rooms – had anyone brought up changing the  
22 pressure by varying the supply air into the room? Mr. Darwich responded that they had  
23 not gone into the details. Mr. Gall mentioned that engineers had proposed the idea of  
24 increasing the exhaust to the point that a normally pressurized room or a positively

1 pressurized room would become negative, in order to deal with the decontamination  
2 function.

3

### 4 **3. 2016 Code Amendments – OSHPD Staff**

5 Mr. Gall reported that Mr. Eric Jacobsen is working on a presentation of the proposals  
6 being contemplated for the next code cycle.

7

8 Mr. Coleman stated that an issue has arisen regarding adoption of building codes: they  
9 are subject to the California Environmental Quality Act (CEQA) process. OSHPD  
10 anticipates submitting and RFQ for a CEQA consultant by October 6.

11

12 Mr. Jacobsen summarized the code amendments. There are six packages, described  
13 below, that OSHPD is looking at bringing forward; they fall into different subsections of  
14 Section 12.24.

- 15 • 12.24.4 General Construction: Relocate various support areas for common  
16 reference from unique service spaces. Existing language would go away  
17 (strikeout) and new language is recommended for incorporation (underlined).

18 The following will be moved to this section:

- 19 ○ Nurse stations
- 20 ○ Medication prep rooms and self-contained medication dispensing units
- 21 ○ Nourishment areas
- 22 ○ Clean utility rooms
- 23 ○ Clean supply rooms
- 24 ○ Soiled workrooms

- 1           o Soiled holding rooms
- 2           (Handwashing stations are being viewed as something more than handwashing
- 3           fixtures; for example, soap dispensing and hand drying are included in the whole
- 4           package.)
- 5           • Anesthesia service space: restructure perioperative support for clarification – it
- 6           will include preoperative spaces as well. Mr. Jacobsen detailed further proposed
- 7           changes to the section.

8

9           Mr. Scheuerman and Mr. Gall discussed the use of the word “bed” with Mr.

10           Jacobsen. Mr. Gall noted that the National Fire Protection Association (NFPA)

11           language does not distinguish between licensed and unlicensed beds.

12

13           An Interested Party pointed out that the word “convenient” is not used consistently.

14           Mr. Jacobsen agreed.

- 15
- 16           • Supplemental surgery services: addition of a section to deal with hybrid
- 17           operating rooms. The common modalities are CT, MRI, and vascular imaging.
- 18           They need the sterile environment as well as the room size to deal with the
- 19           imaging equipment. Mr. Gall pointed out that there is a definition for “hybrid OR”
- 20           coming out of Guidelines. Mr. Jacobsen and Mr. Gall explained restricted and
- 21           semi-restricted areas. Mr. Jacobsen explained further requirements for
- 22           interventional radiology, operating room floor area, control rooms, imaging
- 23           equipment rooms, and so on.

- 1       • Emergency services: reformat into three tiers – Standby Emergency, Basic  
2       Emergency, and Comprehensive Emergency Service – for better alignment with  
3       Title 22 physical plan requirements (and coincidentally with FGI Guidelines).

4  
5       Mr. Scheuerman noted the four categories of activity in the Comprehensive tier.  
6       He asked if there were different requirements for the levels in FGI; Mr. Gall  
7       replied that FGI doesn't address trauma in that manner.

8  
9       Mr. Jacobsen explained the changes to Standby Emergency and Basic  
10      Emergency. As Basic Emergency is the next tier up, everything in Standby  
11      Emergency also occurs in Basic Emergency and that is indicated.

12  
13     An Interested Party pointed out the decreased use of desk and wall telephones in  
14     hospitals and asked about revising the language. Mr. Jacobsen explained that  
15     he had to put the requirements of Title 22 into Title 24; the language could be  
16     cleaned up a little.

17  
18     Mr. Donelan asked about putting Waiting Areas into General Construction. Mr.  
19     Jacobsen replied that General Construction does include Outpatient Waiting  
20     Areas, but there are requirements in Title 22 for the waiting areas associated with  
21     Emergency. He would look into moving that section into General Construction.

22  
23     Mr. Jacobsen stated that the new Comprehensive Emergency Service section  
24     will refer back to the previous sections, and contain additional discussions of the

1 triage stations (modeled after FGI). Mr. Gall requested a clarification to the note  
2 on electric outlets. Fast track areas and pre-screening stations are explained  
3 (Mr. Gall suggested a note on ventilation). Diagnostic service areas and  
4 administrative centers/nurse stations are explained.

5  
6 Mr. O'Connor asked about the stat lab; Mr. Jacobsen said that he had included it  
7 because he wanted something lighter than a full clinical lab. Mr. Scheuerman  
8 stated that the code minimum laboratory is basically a stat lab; he would call the  
9 lab in question a "reference" lab. He also questioned the use of the word  
10 "convenience."

11  
12 Mr. Jacobsen discussed the placement of doctor sleeping rooms with Mr.  
13 Coleman.

14  
15 The group discussed the use of the room for uniformed services, and the place to  
16 brief and debrief the press (possibly to be termed a "consultation" room).

17  
18 Mr. Coleman asked if an observation unit could be a separate unit from the  
19 emergency department. Mr. Scheuerman commented that Sutter uses that  
20 arrangement. Mr. Gall commented on the way Licensing views observation  
21 beds.

22  
23 Mr. Karpinen asked about Title 22 requirements for negative pressure exam  
24 rooms. Mr. Gall explained that typically a decontamination function is provided

1            somewhere close to the emergency department; you can get double and triple  
2            duty out of that room. There is no absolute requirement.

3  
4            Mr. Donelan asked about psychiatric observation rooms, which are significantly  
5            different. Mr. Jacobsen replied that there is no requirement under Emergency at  
6            this point.

7  
8            • Nuclear Medicine: addition of discussions for gamma camera facilities, positron  
9            emission tomography (PET), single photon emission computed tomography  
10           (SPECT), and radiosurgery (CyberKnife). Mr. Jacobsen elaborated on the four  
11           new discussions.

12  
13           Mr. Scheuerman commented that often gamma knife procedures require  
14           placement of headgear, and the headgear placement typically occurs in an MRI.  
15           The group discussed the need to have headgear placement near imaging  
16           services.

17  
18           • Outpatient service space: addition of a section on hyperbaric therapy services.  
19           Since hyperbaric oxygen therapy has become more common as a therapy  
20           modality using delivery of oxygen at a higher level than atmospheric pressure, it  
21           is being added. Class B is for individual patients and Class A is for multiple  
22           patients in the same chamber. Mr. Jacobsen elaborated on the Classes.

23

1 Mr. Jacobsen stated that the current rulemaking phase is pre-cycle workshops and  
2 outreach. He reviewed the California Building Standards Commission (CBSC)  
3 Schedule. The effective date should be January 1, 2017.

4  
5 Mr. Coleman informed Mr. Scheuerman that the CEQA can progress concurrently with  
6 the CBSC process. OSHPD hoped to have the initial CEQA studies done by next April,  
7 in order to have a fairly good indication of the direction in which the proposals are going.  
8 Mr. Gall added that the CEQA is not part of the nine-point criteria.

9  
10 **Discussion and public input**

11 Mr. O'Connor referred to the perioperative recovery and staff toilet room requirements in  
12 smaller facilities. In the perioperative area there are toilet rooms for patients; in a small  
13 surgical environment there would be staff changing areas probably located very close to  
14 the holding areas. He asked to look at locating staff toilet rooms in proximity to staff  
15 changing areas in smaller facilities. Mr. Jacobsen responded that the surgery side is  
16 dedicated to surgery; the perioperative side will not be using those toilets. The group  
17 discussed the issue of convenience.

18  
19 Mr. Karpinen opened a discussion on the upcoming meeting schedule combined with  
20 OSHPD's revisions. Dr. Karim stated that a meeting is set up with the Structural/Non-  
21 Structural Committee next February 4. The Administrative Processes and Code  
22 Changes Committee decided to meet again before April 1 to review the Express Terms.

23  
24 **Mechanical Changes**

1 Mr. Castillo presented an initial draft of the proposed mechanical changes using a side-  
2 by-side comparison format.

3 • 325 deals with the humidifier. OSHPD was proposing to take part of the Code  
4 Application Notice (CAN) 408 interpretation and place it in the body of the code;  
5 this would allow elimination of the CAN. Content on dry steam (and other  
6 content as well) actually came from FGI Guidelines.

7 • Some of the humidity requirements and temperatures are being changed to align  
8 with FGI Guidelines.

9 • For the requirement of two low returns in sensitive area rooms, the verbiage "...of  
10 equal capacity..." has been added. Mr. Coleman suggested giving a range of 5  
11 or 10% of capacity.

12 • The Plumbing section contains a change: it notifies the public that OSHPD  
13 intends to allow pressed fittings in OSHPD 1, 2, 3, and 4. Mr. Gall stated that  
14 OSHPD will probably carry this as a separate item – sometimes a CEQA is  
15 needed.

16 • Mr. Gall stated that the New Technologies Committee is looking at facility needs  
17 and basic building code requirements. There is an emerging need to designate  
18 space for dedicated IT rooms. Mr. Gall requested feedback from the group.

19

20 Mr. Coleman pointed out the need to define what constitutes a technology equipment  
21 center or distribution room. Mr. Gall said it would need dedicated cooling systems.

22

1 The group considered Skilled Nursing Facilities (SNFs) and rehabilitation hospitals. Mr.  
2 Coleman suggested tying the section back to “equipment required for operations of the  
3 facility – Basic Services.”

4  
5 Mr. Scheuerman noted that Electronic Health Records (EHRs) need to be protected.

6  
7 Mr. Karpinen noted that hospitals may have small servers throughout the hospital that  
8 are on emergency power while the cooling typically is not. Adding split systems or  
9 dedicated rooms could cause problems for hospitals.

10

## 11 **Structural**

12 Mr. Lobo reviewed the Structural changes.

13 • California Building Code (CBC) 2016 will adopt the amendments in International  
14 Building Code (IBC) 2015, which references American Society of Civil Engineers  
15 (ACSE) 7-10. Generally the demands between CBC 2013 and CBC 2016 will be  
16 the same.

17 • Steel will use the same standards.

18 • Concrete will adopt American Concrete Institute (ACI) 318-14, a complete  
19 reorganization from previous versions.

20 • Wood will use National Design Specification (NDS) 2015.

21 • Masonry will use The Masonry Society (TMS) 402-13.

22 • Dr. Karim is adding content on seismic certification: six more items require a  
23 Certificate of Compliance.

- 1 • International Existing Building Code (IEBC) 2015 adoption will be a substantial  
2 change for OSHPD – they may only adopt Chapter 34, and combine 34 and 34A  
3 to include OSHPD 1, 2, and 3 in that chapter.

4  
5 Mr. Michael Nearman from the California Building Standards Commission  
6 (CBSC) stated that the International Code Council (ICC) had preserved Chapter  
7 34 without adding material that would create additional issues. He agreed that  
8 the 304-page length of the code made for a legitimate argument. However,  
9 whenever there is a national specification available, they are supposed to move  
10 to it rather than creating one. He did feel that the list of ordered items that  
11 OSHPD had sent the CBSC made sense, and the Commissioners would  
12 probably accept it.

13  
14 Dr. Karim pointed out that Chapter 34 of IBC 2012 and Chapter 4 of the IEBC are  
15 virtually identical. OSHPD was actually following what the statute required by  
16 adopting the latest model code – instead of placing it in the International  
17 Electrotechnical Commission (IEC), they would be placing it in the CBC.

- 18  
19 • OSHPD may be adopting ASCE 41-13 and would use the Tier 3 option for  
20 higher-level analysis.

21  
22 Mr. Nearman asked if any other supplements would be incorporated. Dr. Karim  
23 responded that there were be none for ASE 7; there is one supplement for

1 American Institute of Steel Construction Inc. (AISC) 358 that OSHPD plans to  
2 adopt.

3  
4 Mr. Coleman stated that there had been discussion on changing the nurse calls  
5 requirements in the California Electrical Code (CEC), particularly pertaining to SNFs.  
6 Mr. Gall said that it would specifically be the voice requirement from the nurse to the  
7 bed.

8  
9 Mr. Coleman stated that there would be a number of changes in the next CEC.

10  
11 **4. Comments from the Public/Board Members on Issues not on this Agenda**

12 There were no comments on issues not on the agenda.

13  
14 **5. Adjournment**

15 **MOTION:** (M/S/C/) [Scheuerman/Gritters]

16 The committee voted unanimously to adjourn.

17 Mr. Karpinen adjourned the meeting at 12:39 p.m.

18