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2170 South Parker Road, Suite 300 • Denver, CO 80231 • (800) 755-2676 • www.aorn.org

May 19, 2026

California Department of Industrial Relations
Division of Occupational Safety and Health
1515 Clay St., Suite 1901
Oakland, California 94612

Via Email: rs@dir.ca.gov

RE: Revised Discussion Draft: § 51XX. Occupational Exposure to Plume in Health Care

To the Division of Occupational Safety and Health:

On behalf of the Association for periOperative Registered Nurses (AORN) and our more than 4,300 members in California, we write to comment on the April 6, 2026 discussion draft of possible regulatory language regarding AB 1007 (2023-2024; Occupational safety and health standards: plume). As the leading expert on the management of surgical smoke, AORN appreciates the opportunity to provide our comments and information to the Division.

We appreciated the Division's public meeting with stakeholders and agency staff on January 20, 2026, to discuss the agency's original discussion draft and goals for implementing statewide surgical smoke evacuation policy. The stakeholder feedback and staff questions during the public meeting were enlightening and clearly served to advance the work Cal/OSHA is doing to ensure operating room staff and patients are safe from surgical smoke.

Thank you for including AORN's *Guideline for Surgical Smoke Safety* as part of the discussion draft Appendix A. AORN's evidence-based *Guidelines for Perioperative Practice* are the gold standard for operating room practice. Updated annually, these *Guidelines* provide the only evidence-based national recommendations for patient and healthcare worker safety in the surgical setting. AORN's evidence-based *Guideline for Surgical Smoke Safety* documents the harmful effects of surgical smoke and the safety hazard it poses to patients and perioperative personnel. This *Guideline* also outlines recommendations for safe and cost-effective smoke evacuation.

AORN Comments by Section

Definitions
AORN has suggestions for clarifications and additions to definitions enumerated in Section (b). AORN's suggestions are highlighted in yellow. Specifically,

(4) “Capture device” means an accessory of a plume evacuation system that captures the plume near the site-of-origin and passes it into the transfer tubing. ~~A capture device can be single use or reusable.~~

This sentence is unnecessary as users should be following the manufacturer’s instructions for the capture device.

(12) “Medical-surgical vacuum” means a ~~method~~ system designed ~~used~~ to ~~provide a source of~~ facilitate drainage, aspiration, and suction in health care settings. ~~order to remove body fluids from patients.~~

(15) “Qualified person” for the purposes of this section, means a person designated by the employer, and who by extensive instruction, knowledge, training, and experience, has demonstrated their ability to effectively identify, evaluate, and control the hazards of occupational exposure to plume. The qualified person shall be knowledgeable in this standard and shall be competent in industrial hygiene practice. ~~A Certified Industrial Hygienist as codified in California's Business and Professions Code sections 20700-20705 is considered competent in industrial hygiene practice.~~

AORN is concerned that as drafted, the final sentence in this definition implies that only Certified Industrial Hygienists are considered competent in controlling the hazards of occupational exposure to plume. We suggest deleting this final sentence as the definition clearly outlines the facility personnel that will be designated by the employer as such and there are many qualified medical professionals working in surgical facilities. Alternatively, AORN’s state affiliate, the California Alliance for Perioperative Practice (CAPP), has suggestions for additional qualified staff to add to this definition, and we support expanding the definition to include those personnel.

(d) Control Measures.

(1) Engineering Controls.

(B) General Ventilation. The minimum total air exchange rate for ~~the~~ an operating room ~~or area~~ where ~~surgical~~ plume is generated shall be at least 20 air changes per hour and shall be used in addition to plume evacuation systems and other local exhaust ventilation systems. The room air shall be exhausted directly to the outdoors or returned to the air circulation system through a HEPA filter.

Air exchange rates for operating rooms are a minimum of 20 air changes per hour. For procedure rooms the minimum rate is 15 air changes per hour. In GI/Endoscopy rooms, air changes should be a minimum of six per hour. AORN’s *Guideline for Design and Maintenance of the Surgical Suite* contains recommendations for the physical design of

the surgical suite to support safe patient care, efficient movement of patients and supplies, and workplace safety and security. A copy of the *Guideline*'s table on heating, ventilating and air conditioning design parameters is included with this letter for your reference.

Appendix A (Non-Mandatory)

CSA Z305.1313, (reaffirmed 2020) Plume scavenging in surgical, diagnostic, therapeutic, and aesthetic settings.

CSA Z7001:24 National Standard of Canada. Safe use of energy-based medical and surgical devices in health care.

AORN would like to offer additional AORN guidelines as references for this document, in lieu of references to Canadian standards that may not be applicable to surgical practices in California. The *AORN Guideline for the Safe Use of Surgical Energy Devices*, *AORN Guideline for Laser Safety*, and *AORN Guideline for Minimally Invasive Surgery* will be sent to Cal/OSHA following this letter.

We appreciate the Division's attention to implementing AB 1007 in a manner that best protects the health and safety of everyone in the operating room. We are pleased that Division staff were able to receive a demonstration on surgical smoke evacuation through AORN's state affiliate, the California Alliance for Perioperative Practice (CAPP).

AORN appreciates the Division's continued commitment to this important health care worker safety issue, and we are happy to provide additional information, research, and discussion at the Division's request.

Sincerely,

Jennifer Pennock
Director, AORN Government Affairs
jpennock@aorn.org
(303) 368-6271