

**Interpretation IC 170-2008-14 of
ANSI/ASHRAE/ASHE Standard 170-2008
Ventilation of Health Care Facilities**

Date Approved: February 4, 2020

Request from: Todd Lindsey, Medical Management Associates, Inc., 3330 Cumberland Blvd.; Ste. 200, Atlanta, GA 30339.

Reference: This request for interpretation refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 6.1.1, regarding the requirement for Class B operating rooms to maintain pressure and ventilation relationships in the event of a loss of normal electrical power for a specific ambulatory health care facility that is certified by The Centers for Medicare & Medicaid Services (CMS).

Background: This interpretation relates to a specific ambulatory health care facility (the “Subject Facility”) that is certified by The Centers for Medicare & Medicaid Services (CMS). The 2012 editions of NFPA 99 & 101 (“NFPA”) are the most current NFPA editions that CMS has adopted and control all facility guidelines and interpretations related to this facility. Consequently, the 2008 edition of ASHRAE/ASHE 170 (“ASHRAE/ASHE 170”) is the relevant edition for purposes of this interpretation since that edition was the most current edition at the time that the controlling editions of NFPA were published.

Section 4.1 of NFPA 99 adopted a risk-based classification system focusing on potential harm to patients due to power and equipment failure in order to categorize patient care areas. Based on the simplicity, safety, and short duration of the procedures performed in the Subject Facility, the NFPA analysis determined that the Subject Facility (including the operating rooms) is a Category 3, Basic Care Environment since the failure of equipment is not likely to cause major or minor injury to patients, only minor discomfort. As such, NFPA 6.3.2.2.10.4 states that “basic care rooms are not required to be served by an EES.” The only equipment in this Subject Facility requiring emergency power (egress lighting, fire alarm system) are powered by battery backup units. This satisfies all emergency power requirements directly within the text of NFPA for a facility in this category.

However, NFPA 99 incorporates the entirety of ASHRAE/ASHE 170 through reference. Based on the surgery classification system outlined in ASHRAE/ASHE 170 Section 3, the Subject Facility contains Class B operating rooms. ASHRAE/ASHE 170 Section 6.1.1 requires all Class B operating rooms to maintain pressure and ventilation relationships in the event of a loss of normal electrical power. However, maintaining pressure and ventilation relationships in the Subject Facility would require the installation of an EES for this singular purpose despite NFPA 99 stating that an EES is not required in Basic Care Environments. Since the different facility category classification systems used by ASHRAE/ASHE 170 and NFPA 99 do not cleanly align, the codes conflict on whether the Subject Facility needs to install an EES at significant expense.

For operational context, in the event of a loss of normal electrical power, the Subject Facility would begin orderly cessation of any procedure underway at the time. Based on the risk assessment prescribed by NFPA 99, orderly cessation and evacuation is not expected to exceed 5-10 minutes for any procedure. Furthermore, the Subject Facility would not resume procedures

until power had been restored and the procedure areas had been terminally cleaned to ensure proper sterilization. In this scenario, maintaining pressure and ventilation indefinitely would not benefit patients in any material way.

Interpretation: It is our interpretation that since NFPA 99 does not require an EES for Category 3, Basic Care Environments, ASHRAE/ASHE Standard 170-2008 Section 6.1.1 does not apply.

Question: Is this interpretation correct?

Answer: Yes

Comments: If essential/emergency power system is not required, then it is reasonable that the ventilation/pressure requirements in 170-2008 Section 6.1.1 are not applicable.