

## Physical Environment PortalModule 1, EC.02.05.01 Leadership

Utility System Definition

From the HAP Glossary: Building systems that provide support to the environment of care, including

A survey finding at EC.02.05.01 EP 1 and 15 will result in CLD Status

A survey finding at EC.02.05.01 EP 1 (COP §482.42 (A-0747)) and EP 15 (COP §482.41 (A-0700)) will result in a Condition Level Deficiency (CLD), which also results in a Medicare Deficiency Follow-up Survey within 45 calendar days of the final survey report being published. This follow up survey will focus on the survey issues, but may also address any other non-compliant conditions identified at this time.

## **Design and Installation of Utility Systems (EC.02.05.01 EP 1)**

Design includes the features of the utility systems that support patient care. For example, if Lab bought new equipment and did not include facilities in the planning, and then finds that the power supply is not adequate for the equipment would be an example of lack of design.

Compliance includes improperly installed systems. For example, improperly installed equipment for heating that results in patient dis-satisfaction (patients often complain they are cold, as evidenced by the high use of additional blankets in the patient care rooms). The Joint Commission expects utility systems

management (add-mixing, chemotherapy preparation, microbiology, etc.), and sterile processing and supply rooms.

What is Ventilation?

Ventilation is moving air from one location to another. This includes bringing in air from the outside

door opening, windows, and building leaks), or air from that return air vents (which is air that has been conditioned and used in the house and enters the return air vents. These return air vents are usually located throughout the home without a damper. Regardless of the source of the air, the air enters the supply side of the furnace. As the air enters the furnace it is first cleaned by filters, and then travels through the burners and then through the air conditioning 'A' coil. In heating months the burners are active and heats the air; in cooling months the burners are off but the 'A' coil is cooled by refrigerant

- a. Can you explain the equipment/system/features of this utility system? And then, could you show me your monitoring process (as discussed in EC.04.01.01)?
  - i. RESPONSE: the identified utility system supports patient care by [explanation follows].
  - ii. RESPONSE: we monitor the outcome based on our experience or industry best practice (which may or may not include manufacturers' recommendations or incorporates an alternative equipment maintenance strategy)
- b. Does our current installation meet the current code requirements?
  - i. RESPONSE: No, but they were compliant with the original building design and installation, and we have performed a gap analysis to insure that any identified associated risks are mitigated by operational activities or use restrictions.
- c. Are there significant advantages to upgrading, or should we upgrade based on current technology enhancements or code requirements?
  - i. RESPONSE A: Certainly we would like to upgrade but it is not necessary to continue providing services to patient care delivery
  - ii. RESPONSE B: The code community strongly supports the increased requirements that will enhance our system reliability, so our upgrading would be consistent with the experts that develop current requirements
  - iii. RESPONSE C: Although our current systems are functional, from an energy conservation perspective if we upgraded we could see an ROI in 3 – 5 years, enhance the environment by reducing waste, and increase system reliability by 30% based on improved technology

#### Evaluating the Utility System: Ventilation, Air Filtration and Air Changes in Critical Care Areas (EP 15)

Facilities should be able to produce a list of monitoring points and a schedule. The Joint Commission has not established monitoring frequencies as each building is different, but we would expect the organization to establish this. Some organizations establish an annual Test & Balance practice, where they measure air flow and the number of air changes per hour on an annual basis, while some installed building automation system can provide data needed for air balance measurements. However, seasonal changes may affect the performance of the systems, so we would suggest the organization be able to explain the stability of the system to perform as required if they are monitoring annually. Using the simple screening of a tissue or other methods throughout the year could establish reliability and then use the annual Test & Balance to calibrate the systems.