

## **HEATING, VENTILATING, COOLING AIR HANDLING UNIT SURVEY PROCEDURE**

**INTRODUCTION** This document clarifies procedures in keeping with the Agency’s mission to champion accessible, affordable, quality health care for all Floridians. The guidelines were developed to establish uniform inspection criteria for clean, maintained Air Handling Units, which are part of a safe environment in health care facilities.

<b>CONTENTS</b>	Survey Purview	Page 1 & 2
	Surveyor Checklist	Page 3
	Authorization Approval	Page 4

**BACKGROUND INFORMATION** Research included data from the following entities: Department of Labor; Department of Health; Health Care Financing Administration (HCFA); Environmental Protection Agency; Occupational Safety and Health Administration (OSHA); Joint Commission on Accreditation of Healthcare Organization (JCAHO); National Fire Protection Association; American Society of Heating Refrigerating & Air-conditioning Engineers.

The consensus is there are no regulatory standards for indoor air quality for health care facilities, with the exception of those protecting employee safety. There are recommended practices, guidelines, and manufacturers’ procedures, most of which are generalities. HCFA does not have a specific protocol for inspecting air-handling units. JCAHO has no air handling unit standards, but has a comprehensive guide for managing air quality in health care facilities. Only OSHA and the Department of Labor have standards for protecting employee safety.

The legal authority with appropriate Code standards reference under licensure and certification guidelines are listed by facility type on the following page.

**APPLICABILITY** The purpose of the procedure is to achieve regulatory consistency in the application of standards for a safe, clean environment in Florida’s licensed and certified health care facilities. The standards are not newly developed. This is an effort to uniformly apply them via the survey process. These procedures will be shared with the provider community via their Associations. This will be implemented on January 31, 2000.

The fire protection specialists, having received training in Tampa on October 24, 1999, will include these procedures in surveys, working with the providers to effect compliance and communicating the standard to assist providers in achieving compliance. Unsafe conditions shall be handled per procedures and cited as appropriate.

All appropriate Agency staff will receive training on these procedures to maximize survey consistency.

The air handling unit survey sampling should not add more than 20 minutes to the routine environmental evaluation. Questions can be directed to Mr. Jim Temkin, via email at: [temkinjh@fdhc.state.fl.us](mailto:temkinjh@fdhc.state.fl.us).

**ENFORCEMENT PLAN**

- Central Office Units will notify facilities and associations of this survey procedure.
- Prior to December 1, 2000, appropriate staff will be trained for procedures and safety by the Health Standards & Quality Unit and the Department of Health. Concerns will be related as recommendations to the facility during this period. This will serve as our state plan in concert with federal protocol.
- After December 1, 2000, all trained staff will include AHU assessments with facility environmental inspections per procedure as part of survey cycle.

**LEGAL AUTHORITY**

The following facility types have existing, state licensure, Florida Administrative Code standards and/or certification, Code of Federal Regulation standards with survey tags appropriate to deficient practice related to a safe and clean environment.

	Florida Administrative Code	Survey tag	Federal	Survey tag
Ambulatory Surgical Centers	59A-5.016(1)	(M51)	42 CFR 416.44	(Q10)
Birth Centers	59A-11.023(8)(b)	(BC105)	N/A	N/A
Crisis Stabilization Units	65E-12.106(12)(c)3&(14)	(C43&51)	N/A	N/A
Hospitals	59A-3.222(1)(d)& (g)	(H231)	42 CFR 482.41(a)	(A227)
Intermediate Care Facilities	Fla Statute 400.967(1) & (2)(c)	N/A	42 CFR 483.470(1)(1)	(W454)
Long-Term Care Facilities	59A-4.122(1)& (2)(a)	(N110&111)	42 CFR 483.70(c)(2)&(h)	(F456 & 465)
Residential Treatment Centers	65E-4.016(17)(b)3 & (e)1	(R200)	N/A	N/A

## Surveyor Checklist on Air Handling Environmental Safety and Sanitation

An effective assessment of compliance would be based on the following:

1. Review of documentation of resident/staff complaints of odors, excessive warmth, cold, or humidity.
2. Review of documentation of preventive maintenance plan and cleaning logs for the system.
3. Tour the building with observations. (Does NOT REQUIRE SURVEYOR TO OPEN AHUs or Ducts)

### **Air Handling Unit Preventive Maintenance (PM)**

- Yes*    *No*    **Is P.M. plan documented with logs** for equipment cleaning and filter exchange?
- Yes*    *No*    If facility staff performs cleaning, are **safety procedures documented and practiced**, minimizing dust and dirt from air stream surfaces in air handling units, during maintenance or cleaning work?

### **Moisture Issues in Air Handling Units**

(SEE NOTES 1 & 3 BELOW)

- Yes*    *No*    **Does overflowing or leaking water occur in drain pans?** [If yes, maintain for drainage].
- Yes*    *No*    **Is bio-film present in drain pans and on other wet surfaces?** [If yes, physical removal and disinfection (AHU off) is required. Observe documentation of patient care (relocation) contingency plan, & upgrade of P.M. to prevent recurrence.]
- Yes*    *No*    **Does chronically damp porous materials occur on filters?** [Observe replacement and documentation that cause was eliminated.]

### **Condensation in Occupied Spaces**

(SEE NOTES 1, 2 & 3 BELOW)

- Yes*    *No*    With system in cooling mode, does **condensation or dampness occur on the inner surface of outside walls?** (If yes, observe overcooling, excess negative pressure, & use of wall coverings impermeable to moisture.)
- Yes*    *No*    With system in cooling mode, does **condensation or dampness occur on chilled water pipes or on surfaces** (supply air vent louvers) chilled by conditioned air? (If yes, observe poorly insulated chilled water pipes & supply air directed on overcooled surfaces.)
- Yes*    *No*    With system in heating mode, does **condensation or dampness occur on outside walls?** (If yes, observe thermal bridges, poor insulation & ventilation to perimeter areas.)

*Note #1:* The bracketed texts are guidance to surveyors.

*Note #2:* Request a written determination of cause and correction signed by a Florida licensed Professional Engineer (Mechanical).

*Note #3:* With change or renovation to ventilation or climate control systems, request documentation of review by the Agency Office of Plans & Construction staff.

**STAFFING:** Prior to exiting facility, significant findings should be reported to the Field Office Manager to communicate conditions, including scope and severity.

When a significant deficiency is written, the Department of Health, Office of Indoor Air Quality shall be notified of the conditions, by phoning and briefing the Indoor Air Coordinator, at 1 800-543 8279, and sending a copy of the deficiency.