

TO: ALL COUNTY PERSONNEL

**FROM: VERDENIA C. BAKER
COUNTY ADMINISTRATOR**

PREPARED BY: FACILITIES DEVELOPMENT & OPERATIONS (FDO)

SUBJECT: INDOOR AIR QUALITY (IAQ) PROGRAM

PPM #: CW-L-037

ISSUE DATE
March 18, 2020

EFFECTIVE DATE
March 18, 2020

PURPOSE:

To provide programs for supplying sufficient air quality and quantity in County-owned or leased facilities, and procedures for addressing the indoor air quality concerns of individuals who occupy these facilities.

UPDATES:

Future updates to this PPM are the responsibility of the FDO Director in consultation with the Manager of Employee Safety & Loss Control (ES/LC) under the direction of the Director of Risk Management.

AUTHORITY:

- OSHA Act of 1970 Section 5(a) (1) – Duties, as may be amended.
- Standards and Guidelines, American Society for Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), as may be amended.
- PPM # CW-P-021, Employee Injury/ Illness Reporting and Management

POLICY:

To provide indoor air quality and quantity that meets or exceeds the guidelines set by ASHRAE and to provide air that is as free as feasible from potentially harmful contaminants in County-owned or leased facilities.

RESPONSIBILITIES:

A. Risk Management ES/LC shall;

1. Lend all appropriate assistance and/or support to FDO in its daily administration of the IAQ Program. Examples include, but are not limited to: back-up for the performance of inspections and/or reporting during peak times/events and/or instances of staffing shortage

upon request by FDO; third party communication and/or coordination to uphold customer relations; and sustained knowledge of industry standard practices and trends pertaining to IAQ.

2. Maintain a set of, or rental agreements for, IAQ evaluation equipment to duplicate that of FDO Strategic Planning for overall continuity of the IAQ program. This requires Risk Management ES/LC and FDO Strategic Planning to coordinate the routine maintenance and/or repair of equipment to prevent any avoidable lapse in or delay to program delivery.
3. Refer employees experiencing health symptoms potentially associated with work related IAQ issues to the Occupational Health Clinic (OHC) for further evaluation.
4. Respond to any potential workers' compensation claim(s) that are associated with an IAQ concern, condition or complaint, in collaboration with Human Resources and any other affected department(s) or entity(s).

B. FDO, Airports, Water Utilities and any other authorized County department or constitutional officer performing construction without the assistance of FDO shall;

1. Design and renovate Heating Ventilating and Air Conditioning (HVAC) and facility systems in accordance with the indoor air quality guidelines of ASHRAE.
2. Develop departmental policies and procedures addressing design, renovation and preventive maintenance for HVAC systems.

C. FDO Strategic Planning shall;

1. Respond to IAQ concerns, conditions and/or complaints that have been initially assessed by FDO Facilities Management Division (FMD) or other appropriate department representative and evaluate County-owned and leased facilities to ascertain the nature of any IAQ issue and the appropriate means for resolution.
2. Coordinate all IAQ remediation activities in collaboration with the applicable consultant(s) and/or contractor(s) holding an applicable continuing services contract with the County.
3. Maintain a set of IAQ evaluation equipment to perform initial IAQ evaluations, including coordination of routine equipment maintenance and/or repair with Risk Management ES/LC to prevent any avoidable lapse in or delay to program delivery.
4. Refer employees experiencing health symptoms potentially associated with work related indoor air quality issues to Risk Management.
5. Coordinate with Risk Management ES/LC and the director or designee of the affected department(s) or entity(s) as appropriate during heightened IAQ evaluations.
6. Ensure the completion of advanced HVAC evaluations and/or alterations if recommended by ES/LC and/or warranted by discovery resulting from an IAQ inspection.

D. FMD or other responsible facility management personnel shall;

1. Maintain County owned and leased facilities in accordance with ASHRAE standards.
2. Maintain facility HVAC equipment according to industry standards, including recurring preventative maintenance, periodic cleaning and necessary servicing, as required.
3. Perform an initial review of the area(s) of concern and initial evaluation of the HVAC system in response to observed conditions and/or complaints. Findings shall be reported to FDO Strategic Planning.

E. County employees shall;

1. Report IAQ concerns in accordance with PPM # CW-P-021 and directly to their FMD Regional Manager or other responsible facility management personnel.
2. Provide as much information as possible regarding the IAQ concern upon first report and thereafter upon all requests to support evaluations and closure.
3. Maintain their workspaces in a neat and orderly fashion. Personal possessions shall be kept to a minimum to ensure custodial personnel are able to thoroughly clean surfaces. Plants shall be kept to a minimum, with flowering plants strongly discouraged, and shall have a sufficiently sized water tray beneath to prevent impact to building materials.
4. Not bring in aerosols or any other chemicals from home. Refer to “The Employee User Guide for County Buildings,” page #17, Personal Effects.
5. Report to the OHC in accordance with Procedure D.2 on page 5 of this PPM in all applicable instances. The OHC will document any symptoms experienced by the employee(s) and evaluate the potential for the symptoms to be caused by IAQ at work versus at home or other frequented areas.

F. County Supervisors shall;

1. Report IAQ concerns in accordance with PPM # CW-P-021 and directly to their FMD Regional Manager or other responsible facility management personnel.
2. Complete the on-line Employee Injury/Illness Report if the IAQ complaint is specific to an employee’s medical condition and forward the report to Risk Management ES/LC.
3. Send the affected Employee to the OHC for evaluation with a copy of the completed Employee Injury/Illness report.
4. Maintain their workspaces in a neat and orderly fashion.

PROCEDURES:

A. PREVENTION OF IAQ PROBLEMS

To prevent indoor air quality problems, the following strategies should be implemented by facility management personnel working in County-owned or leased facilities.

1. In facilities with mechanical cooling systems, maintain relative humidity below 60%.
2. Use general or local exhaust ventilation where housekeeping and maintenance activities involve use of equipment or products that could reasonably be expected to result in harmful or hazardous chemical or particulate exposures to occupants in other areas of the facility.
3. Maintain mechanical equipment rooms and any non-ducted air plenums or chases that transport air in a clean condition. Store harmful or hazardous substances properly in areas other than mechanical equipment rooms.
4. Promptly respond to and repair water leaks and areas where condensation collects to mitigate damage to building materials and reduce the potential for mold growth.
5. Use and apply cleaning and maintenance chemicals according to manufacturers' recommendations.
6. Perform monthly preventative maintenance and routine cleaning of HVAC equipment to include cleaning of the blower wheel, condensing coils, and Air Handler Unit (AHU) housing, as well as supply air grills. Inspect the supply air duct exiting the AHU for cleanliness and clean as needed.
7. Custodial service vendors shall routinely work to reduce dust load in facilities from all horizontal surfaces, hanging light fixtures, and behind furniture and equipment.

B. REPORTING PROBLEMS WITH COMFORT VENTILATION

All problems with air conditioning or ventilation systems (e.g., temperature control problems, drafts, lack of air movement) should be reported directly to FMD or other applicable facility management personnel to perform any necessary system adjustments.

C. IAQ EMERGENCIES

1. Sudden problems associated with a contaminant release, catastrophic failure of facility infrastructure (i.e. burst pipe, sewage backup, etc.), or other emission or discharge having the imminent potential to affect personal health and/or safety shall be reported to the 24-hour dispatch center at the Emergency Operations Center who will contact the appropriate FMD Regional Manager or other responsible facility management personnel.

2. Decisions to send employees home as a result of an IAQ emergency occurrence will be made by the director(s) of the department involved or his or her designee in conjunction with the Directors of Risk Management, FDO or other applicable department(s) or entity(s). Employees with health symptoms (where feasible, at the discretion of the Department Director or designee) must otherwise report to the OHC prior to leaving work for the day.

D. REPORTING “CHRONIC” IAQ CONCERNS

1. Chronic IAQ concerns may include persistent odors, suspect visible mold (SVM) growth, visible indications of the presence of water (i.e. surficial staining, streaking on vertical surfaces, bubbling paint, etc.), excessive dust, and/or health symptoms thought to be due to air quality. Occupants of County buildings may initiate a request for an IAQ evaluation by contacting their FMD Regional Manager or other responsible facility management personnel.
2. Employees who feel they are experiencing health symptoms related to IAQ issues at work must report to the OHC for a medical evaluation. The OHC will document any symptoms experienced by the employee(s) and evaluate the potential for the symptoms to be caused by work related IAQ issues. Any evaluation that concludes in support of an IAQ issue or concern from the work area shall be directed to Risk Management/Loss Control for purposes of initiating responsive action.

E. INITIAL IAQ EVALUATION FOR A REPORTED “CHRONIC” CONDITION

The initial IAQ evaluation will consist of the following steps:

1. FMD or other responsible facility management personnel will perform an initial review of the area(s) of concern. This review will include a visual evaluation of the area as well as an initial evaluation of the HVAC system. Should the initial evaluation identify and resolve the “chronic” condition, FDO Strategic Planning shall be notified and advised that no further action is necessary.
2. Based on the findings reported from FMD or other responsible facility management personnel, FDO Strategic Planning personnel will perform further evaluation to include the following:
 - Conduct an initial walk-through survey to observe the area(s) of concern and the characteristics of the facility;
 - Obtain background information from FMD or other responsible facility management personnel and the affected employee(s) about the condition of concern;

- Review the HVAC design, the HVAC major components and the HVAC operation and maintenance history for any apparent need for corrective action; and,
 - Collect data pertaining to, but not necessarily limited to, temperature, relative humidity, carbon dioxide, and airborne particulate counts for comparison with both exterior facility conditions and ASHRAE standards.
3. FDO Strategic Planning personnel will document all conditions found from its evaluation, corrective actions taken and/or to be taken, and any additional recommendations. FDO Strategic Planning will provide a copy to Risk Management ES/LC and to the respective FMD Regional Manager or other responsible facility management personnel for any necessary implementation, distribution and for recordkeeping purposes.

F. HEIGHTENED IAQ EVALUATIONS

If the initial IAQ evaluation and corrective actions related thereto were not successful at eliminating the IAQ concern, or included the completion of remediation, a heightened IAQ inspection shall be performed by FDO Strategic Planning to ensure sustained attention and enduring results. The heightened IAQ inspection shall duplicate those steps prescribed in Procedures E.2 and E.3 on pages 5 and 6 of this PPM, prompt any repetitive and/or new measures that are necessary to meaningfully respond to the specifics of the concern, and continue at not less than six (6) month intervals until such time that two (2) consecutive inspections result in no remediation and otherwise produce no meaningful findings/issues of concern. Further detail shall be prescribed in a department PPM, and shall include Risk Management ES/LC as a recipient of all resulting reports.



VERDENIA C. BAKER
COUNTY ADMINISTRATOR

Supersession History:

1. PPM # CW-L-037, effective 07/21/00
2. PPM # CW-L-037, effective 02/09/12
3. PPM # CW-L-037, effective 01/13/17