LAKE-SUMTER STATE COLLEGE
ADMINISTRATIVE PROCEDURE

TITLE: ENERGY CONSERVATION NUMBER: PRO 7-04

REFERENCE: PAGE 1 OF 3

ENCLOSURE: Indoor Air Quality (IAQ) Investigative Procedures

I. BACKGROUND

The cost of the energy consumed to provide heating, air conditioning, ventilation and lighting is a major portion of the expense incurred in the operation of any facility. In addition, the limited resources (oil, natural gas, etc.) used to produce the electrical and thermal energy consumed in this process require responsible energy management practices in order to ensure the continued availability of these irreplaceable supplies. As a result, Lake-Sumter State College is committed to sound fiscal management, and sound resource management, through an effective energy management program and, at the same time, to maintaining indoor air quality to established standards.

II. RESPONSIBILITY

The LSCC energy management indoor air quality program is administered by the Director of College Facilities under the direction of the Vice President of Business Affairs. However, since no energy conservation program can be fully effective without the cooperation of the user, each member of the College faculty/staff team, individually and collectively, is charged with the responsibility to support established energy conservation measures and to report indoor air quality problems.

III. ENERGY CONSERVATION PROGRAM

a. Energy Management System
   1. The primary means of effecting energy conservation is through a computer operated energy management system (EMS) and room occupancy sensors which have the capability to:
      i. Turn heating, ventilation and air conditioning (HVAC) equipment ON/OFF in support of scheduled activities;
      ii. Maintain set temperatures (within the limits of the original equipment) in occupied and unoccupied spaces;
      iii. Control HVAC equipment to obtain optimum operating conditions;
      iv. Limit peak electrical loads to avoid unnecessarily high peak load penalties charged by the electric utility;
      v. Turn ceiling lights off when the room is unoccupied (not all rooms are so equipped).

2. The Energy Management System does not have the capability to:
    i. Override original, existing room thermostats if set to a temperature outside the EMS control range (e.g.; in the cooling mode, if a room thermostat is set for 80 degrees, the room will be maintained at 80 degrees despite the fact that the EMS might be calling for a lower temperature. However, if the room thermostat is set for 68 degrees, the EMS will prevent anything lower than the room temperature at which it (the EMS) is set. Just the opposite occurs in the heating mode);
    ii. Override original, existing room thermostats or equipment ON/OFF switches that have been set OFF (for the best, most consistent operation of facility HVAC systems, and to ensure that the next user has a conditioned space upon occupancy, all switches should be left ON so that the EMS can affect control);
    iii. Turn equipment ON/OFF if not scheduled to do so (all controlled spaces are programmed for HVAC support through the Request for Use of Building Facilities (IS-002), the credit class Course Schedule Listing by Room printout, and/or the non-credit Course Listing by Room printout. Any changes to these schedules, whether additions or deletions, must be brought to the attention of the Scheduling Authority (Director of College Facilities) for programming of HVAC support will not be available, or worse yet, will operate in an unoccupied space). NOTE: Limited scheduling and/or temperature control is available to the occupants of those spaces equipped with an ALC enhanced temperature sensor (Thermostat). Refer to the faceplate on the sensor for operating instructions.

b. Energy Conservation Measures
    1. HVAC systems will be operated only when the space served is occupied (except the Learning Resource Center, the Computer Center, the TV Studio Control Room, the Mail/Duplicating Room, Central Shipping/Receiving and the FAC costume loft which will be operated as necessary to provide the humidity and temperature control needed to ensure adequate protection for the materials and equipment located therein);
    2. Room temperature will be set at 70 degrees Fahrenheit when heating and at 74 degrees Fahrenheit when cooling (except the Gymnasium which will be set at 68/78) unless such temperatures are unsuitable for the activity in which engaged or inadequate to provide the protection required (in which case, temperatures will be set no lower than necessary to obtain minimum comfort/protection levels);
    3. Classrooms and other spaces shall be scheduled in such a manner as to maximize energy conservation (contact the Director of College Facilities for assistance and/or information if in doubt as to the appropriate action to be taken in this regard);
    4. HVAC preventative maintenance shall not be deferred for any reason;
    5. All doors and windows shall be kept shut when the HVAC system is in operation;
    6. All lights shall be turned off when the area is unoccupied;
    7. All HVAC malfunctions and/or suspected discrepancies shall be immediately reported to the Director of College Facilities for appropriate action.

IV. INDOOR AIR QUALITY lIAQl PROGRAM

a. Source Control
   1. Contamination from outdoor air ventilation sources shall be controlled by:
      i. The use of high efficiency filters and air cleaning devices, if required;
      ii. The use of carbon monoxide monitors and demand control technology to shut down ventilation dampers as necessary.
   2. The use of high outgassing construction and furnishing materials such as particle board, carpeting and wall coverings shall be avoided whenever possible;
   3. The use of chemicals such as paints, pesticides, etc. shall be used in such a manner as to support IAQ requirements;
   4. Contaminant sources and/or generation activities such as duplicating/print shops, laboratories, paint rooms, etc. shall be isolated and/or consolidated to the maximum extent possible and specialized exhaust or localized filtration shall be employed as required to prevent cross contamination;
   5. All products shall be evaluated as to their contamination potential as well as to their appearance, cost, and recycling, etc. benefits (NOTE: Some recycled products contain high contaminant content and high outgassing potential).

b. Ventilation
   1. Proper ventilation rates shall be utilized. Over-ventilation shall be voided;
   2. Building shall be maintained at a positive pressure differential;
   3. Carbon monoxide monitoring, relative humidity monitoring and demand control technology shall be employed to the maximum extent feasible to ensure ventilation rates do not exceed minimum requirements based upon actual occupancy.

c. Filtration
   1. Outdoor air shall be cleansed of ambient pollutants and possible cross-contaminants;
   2. Return air shall be filtered as necessary to protect HVAC systems, avoid growth sites, and reduce housekeeping costs (dust) and control particulates, disease-bearing pathogens, harmful organic and/or inorganic compounds;
   3. Filtration shall be substituted for ventilation to the maximum extent feasible.

d. Operations
   1. HVAC systems shall be operated and maintained for maximum efficiency;
   2. Contaminate generation sites shall be properly controlled to minimize pollutants;
   3. Construction projects shall be isolated from building occupants by space, time or barriers whenever possible;
   4. All indoor air quality concerns and complaints shall be thoroughly investigated. Identified problems shall be promptly corrected.