Energy Guidelines

(Energy Conservation and Building Management)

Responsibilities:

- Every person is expected to become an "energy saver" as well as an "energy consumer."
- Maintenance of the learning environment shall always take precedence over energy conservation measures.
- The staff member is responsible for implementing the guidelines during the time that he/she is present in the instruction room or office.
- The custodian is responsible for control of common areas, i.e. halls, cafeteria, etc.
- Since the custodian is typically the last person to leave a facility in the evening, he/she is responsible for verification of the nighttime shutdown.
- The facility administrator is responsible for the total energy usage of his/her facility.
- The Energy Specialist provides regular (at least semi-annual) program update reports to the Board.
- The Energy Specialist performs routine audits of all facilities and communicates the audit results to the appropriate personnel.
- The Energy Specialist is responsible for either directly or indirectly making adjustments to the Organization's Energy Management System (EMS), including temperature settings and run times for Heating, Ventilation and Air Conditioning (HVAC) and other controlled equipment.
- The Energy Specialist will monitor indoor conditions and the District will strive for continuing compliance with the most recent version of ASHRAE Standard 90.1 (minimum standards for energy efficiency), ASHRAE Standard 62.1 (minimum standard for indoor air quality), and ASHRAE Standard 55 (minimum standard for human comfort).
- Administration will regularly communicate the importance and impact of the energy conservation program to its internal and external constituents.
- The Energy Specialist provides monthly energy savings reports to facility administrators detailing performance results.
- The organization is committed to and responsible for a safe and healthy learning environment.
- To complement the organization's behavioral-based energy conservation program, the organization shall develop and implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.

General:

1. Instruction room doors shall remain closed when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e. between hallways and gym or pool area).
2. Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the organization's facilities to ensure compliance with organization guidelines.
3. All exhaust fans should be turned off daily.
4. All office machines (copy machines, laminating equipment, etc.) shall be switched off each night and during unoccupied times. Fax machines should remain on.
5. All computers should be turned off each night. This includes the monitor, local printer, and speakers. Network equipment is excluded.
6. All capable PC's should be programmed for the "energy saver" mode using the power management feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10-minutes of inactivity.
7. All classroom refrigerators shall be defrosted and unplugged over Summer Break.

Cooling Season Occupied Set Points[1]:	**74°F - 78°F**
Unoccupied Set Point:	**85°F**
Heating Season Occupied Set Points[1]:	**68°F - 72°F**
Unoccupied Set Point:	**55°F**

[1] Set points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"

Air Conditioning Equipment

1. Occupied temperature settings shall *NOT be set below 74°F.*
2. During unoccupied times, the air conditioning equipment shall be **off**. The unoccupied period begins when the students leave the area at the end of day. It is anticipated that the temperature of the instruction room will be maintained long enough to afford comfort for the period the staff remains in the instruction room after the students have left.
3. Air conditioning start times may be adjusted (depending on weather) to ensure instruction room comfort when instruction begins.
4. Ensure outside air dampers are closed during unoccupied times.
5. Ceiling fans should be operated in all areas that have them.
6. Relative humidity levels shall not exceed 60% for any 24 hour period.
7. Air conditioning should not be utilized in facilities during the summer months unless the facilities are being used for summer school or year-round school. Air conditioning may be used by exception only or in those facilities that are involved in team-cleaning.
8. Ensure dry food storage areas are maintained within code requirements. Typically, this is 55F-75F temperature and 35%-60% Relative Humidity. Utilize loggers to verify.

Heating Equipment

1. Occupied temperature settings shall NOT be above 72°F.
2. The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather.
3. The unoccupied time shall begin when the students leave an area.
4. During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times.
5. Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
6. Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
7. For heat pumps, ensure a 6 °F dead-band between heating and cooling modes.

Lighting

1. All unnecessary lighting in unoccupied areas will be turned **off**. Staff should make certain that lights are turned off when leaving the instruction room or office when empty. Utilize natural lighting where appropriate.
2. All outside lighting shall be **off** during daylight hours.
3. Gym lights should not be left on unless the gym is being utilized.
4. All lights will be turned **off** when students and staff leave for the day. Custodians will turn on lights only in the areas in which they are working.
5. Refrain from turning lights on unless definitely needed. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.

Water

1. Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately.
2. Grounds watering should only be done between 4am-10am. Do not water during the heat of the day, typically between 10am – 8pm.
3. When spray irrigating, ensure the water does not directly hit the facility.