#### **USD 480 ENERGY CONSERVATION PROGRAM**

# **Responsibilities:**

- Every person is expected to be an "energy saver" as well as an "energy consumer."
- The teacher is responsible for implementing the guidelines during the time that he/she is present in the classroom.
- 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 building in the evening, he/she is responsible for verification of the nighttime shutdown.
- The principal is responsible for the total energy usage of his/her building.
- The Energy Manager performs routine audits of all facilities and communicates the audit results to the appropriate personnel.
- The Energy Manager provides regular reports to Principals indicating performance with regards to energy savings.
- The district is-committed to and responsible for maintenance of the learning environment.
- To complement the district's energy management program, the district shall develop and implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.

### **GENERAL**

- Classroom 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).
- Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the district's buildings to ensure compliance with district guidelines.
- All exhaust fans should be turned off every day and during unoccupied hours.
- All office machines (copy machines, laminating equipment, etc.) shall be switched off
  each night and during unoccupied times. Fax machines should remain on.
- All computers should be turned off each night. This includes the monitor, local printer, and speakers. Network equipment is excluded.
- 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.

# **District Set Points**

- Cooling Season
  - Occupied 74°F 78°F
  - Unoccupied 85°F
- Heating Season
  - Occupied 68°F 72°F
  - Unoccupied 55°F
- These Set Points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"
- OCCUPIED is simply defined as normal CLASS times.
- UNOCCUPIED is defined as normal NON CLASS times.

## AIR CONDITIONING EQUIPMENT

- Occupied temperature settings shall NOT be set below 74°F.
- During unoccupied times, the air conditioning equipment shall be <u>OFF</u>. The
  unoccupied period begins when the students leave the area at the end of the
  school day. It is anticipated that the teacher remains in the classroom after the
  students have left.
- Air conditioning start times may be adjusted (depending on weather) to ensure classroom comfort when school begins.
- Ensure outside air dampers are closed during unoccupied times.
- Ceiling fans should be operated in all areas that have them.
- For any 24-hr period of time, relative humidity levels shall NOT average greater than 60%.
- Air conditioning should not be utilized in classrooms during the summer months unless the classrooms are being used for summer school or year-round school. Air conditioning may be used by exception only in those schools that are involved in team-cleaning.
- In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned classrooms or dining areas should be kept closed as much as possible.
- Where cross-ventilation is available during periods of mild weather, shut down HVAC
  equipment and adjust the temperature with windows and doors. Cross-ventilation is
  defined as having windows and/or doors to the outside on each side of a room.

### **HEATING EQUIPMENT**

- Occupied temperature settings shall NOT be above 72°F.
- The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather.
- The unoccupied time shall begin when the students leave an area.

- 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. Hot water heating systems should be switched off using the appropriate loop pumps.
- Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
- Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
- For heat pumps, ensure a 6 °F dead-band between heating and cooling modes.

# HEATING AND AIR CONDITIONING USAGE DURING NORMAL UNOCCUPIED TIMES

- All School Sponsored events during normal school year.
- All Teacher Contract Days.
- All outside activities who pay fees for building usage.
- All outside activities who receive fees waived by BOE.
- Rooms set to "Occupied" will be determined by request and limited to areas used only.

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# **LIGHTING**

- All unnecessary lighting in. unoccupied areas will be turned off. Teachers should make certain that lights are turned off when leaving the classroom when empty. Utilize natural lighting where appropriate.
- All outside lighting shall be off during daylight hours.
- Gym lights should not be left on unless the gym is being utilized.
- All lights will be turned off when students and teachers leave school. Custodians will turn on lights only in the areas in which they are working.
- 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.

## **SUMMER 4 DAY WORK WEEKS**

- The district will work 4 10 hour days during the months of JUNE and JULY.
- Days the district is shut down, NO extra power may be used by individuals
  - Buildings are off limits. If permission is given to use a room on a down day, no power will be used.
  - Outside contractors will be discouraged from working these days.
  - Auxiliary Services office my give permission in extreme circumstances.
- Buildings/areas will be set to "unoccupied" when administrators are not under contract or cleaning crews are not in the buildings.

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# **CAMPS**

- Activity camps are not sponsored by USD 480
- Requests for climate control for such camps will fall under restrictions of outside users.
  - o Request for usage approved and booked.
  - o Fees followed.
  - Insurance certificate on file.
- Camps needing climate control, and not able to follow above stipulations, should schedule camps during times buildings are scheduled to be on for cleaning/maintenance.

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# **WATER**

- Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported immediately.
- All watering should be done between 5:00 AM and 10:00 AM.
- When spray irrigating, ensure the water does not directly hit the building.

These guidelines are not intended to be all-inclusive and may be modified by Auxiliary Services Office.