

GRAPEVINE-COLLEYVILLE ISD  
ADMINISTRATIVE REGULATION  
ENERGY MANAGEMENT & CONSERVATION

Shared Responsibility

Employees of the district share responsibility for using their best efforts to conserve the district's consumption of electricity, gas and water. This regulation shall be provided to all employees at least annually by campus administrators, department directors, etc.

Every person is expected to become an "energy saver" as well as an "energy consumer." Staff members are responsible for observing and/or implementing these guidelines.

The custodian is responsible for control of common areas, i.e. halls, cafeterias, etc. Since the head custodian is typically the last person to leave a facility in the evening, he/she is responsible for verification of the nighttime shutdown. Facilities will develop a light management plan for custodial staff working in the evenings that maintains safety and serves to conserve.

The facility administrator is responsible for the total energy use of his/her facility.

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 preventative maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.

Reporting

The Energy Specialist shall maintain timely and accurate records of consumption for each district facility. On a monthly basis, the Energy Specialist shall provide principals and other building managers with energy use data reports. The Energy Specialist shall provide campus administration and building administration with completed audit forms after each visit noting positive findings and areas for improvement.

The Energy Specialist shall provide regular (at least semi-annual) program update reports to the district's Leadership Team and/or Board.

Operational Oversight

The Energy Specialist is responsible for either directly or indirectly making adjustments to the district's Energy Management System (EMS), including temperature settings and run times for Heating, Ventilation and Air Conditioning (HVAC) and other controlled equipment.

Administrators will regularly communicate and model the importance of the energy conservation program to its internal and external constituents.

Campus administration, building managers and facilities personnel have joint responsibility for monitoring employee's behaviors and shall reinforce the district's conservation program guidelines. Campus administrators and designated building

managers shall have responsibility for energy management at their campus or facility. As such, they shall be responsible for coordinating campus-sponsored after-hours events at their facility and requesting appropriate heating or air conditioning.

Specific areas of emphasis include:

1. Unnecessary lighting shall be turned off where sensors do not exist to shut off lights.
2. Leaking faucets, toilets, hose bibs, etc. shall be promptly reported through the SchoolDude work order system.
3. Classrooms doors shall be maintained closed except for student passing periods.
4. Requests for heating and cooling systems to operate at temperatures outside of their prescribed range for events occurring outside of the designated school day hours, shall be submitted to facilities through the SchoolDude system denoting the event, specific areas where heating and cooling are needed, and the times of the event. If the event will be attended by more than 100 people, that should be noted in the request.
5. Employees shall use blinds to help maintain temperatures during extreme hot or cold weather events.
6. Computers, printers, and copiers shall be turned off at the end of the day or when no longer needed. Individual computers and printers may be placed into the energy savings mode for remote access.
7. Principals and other facility managers shall limit the amount of personal energy-consuming devices. These include coffee makers and refrigerators (see rules later in this regulation).
8. Maintaining sensors free of clutter and equipment that can affect the temperature reading at the sensor.

#### HVAC Operational Guidelines

The Energy Specialist or Facility Services will schedule the Energy Management System (EMS) to operate heating and cooling systems as defined below.

#### Procedures for Operating Air Conditioning Equipment

To maintain an environment conducive to the educational process, thermostat controls and/or the EMS are to be set as follows:

1. Classroom temperature is no cooler than 73 degrees and no warmer than 77 degrees during the cooling season.
2. Gymnasiums shall be no cooler than 73 degrees and no warmer than 77 degrees.
3. The air conditioning equipment shall change to after-hours or holiday temperature settings thirty minutes **after** the end of the designated student school day for middle and high schools, thirty minutes **before** the end of the elementary staff work day, and thirty minutes **after** the end of the designated workday for all other facilities. Teacher "contract time" periods shall be observed. The "set-back" temperature shall be 85 degrees.
4. During breaks (e.g. Spring Break and Summer Break) air conditioning in schools shall be maintained at 85 degrees in all areas unless the school is being used for district-approved programs. Areas scheduled for

- approved programs shall be maintained at the temperatures listed in paragraph one or two.
5. Campus administration and facility managers may request that office/administrative area temperatures be scheduled at the temperatures in paragraph one during break periods. Such requests shall be submitted to the Energy Specialist and Chief Operations Officer for approval.
  6. When carpet is being cleaned, air shall be appropriately circulated and facilities personnel will use box or floor fans to dry the carpet. Facilities personnel shall work to coordinate special cleanings in an efficient manner.
  7. Air conditioning start times may be adjusted (depending on weather) to ensure instructional room comfort when instruction begins.
  8. Outside air dampers shall be closed during unoccupied times.
  9. Relative humidity levels shall not exceed 60% for a 24-hour period.
  10. Air conditioning shall not be used in facilities during the summer months unless the facilities are being used for summer programs. Temperatures may be adjusted when facilities personnel are working in a group for cleaning or other major projects.

#### Procedures for Operating Heating Equipment

To maintain an environment conducive to the educational process, thermostat controls and/or the EMS are to be set as follows:

1. Classroom temperature shall be no cooler than 70 degrees and no warmer than 72 degrees during the heating season.
2. Gymnasiums shall be no cooler than 68 degrees and no warmer than 71 degrees.
3. Heating equipment shall change to after-hours or holiday temperature settings thirty minutes **after** the end of the designated student school day for middle and high schools, thirty minutes **before** the end of the elementary staff work day, and thirty minutes **after** the end of the designated workday for all other facilities. The "set-back" temperature shall be 65 degrees.
4. During breaks (e.g. Spring Break and Summer Break) heating in schools shall be maintained at 55 degrees in all areas unless the school is being used for district-approved programs. Areas scheduled for approved programs shall be maintained at the temperatures listed in paragraph one or two.
5. Campus administration and facility managers may request that office/administrative area temperatures be scheduled at the temperatures in paragraph one during break periods. Such requests shall be submitted to the Energy Specialist and Chief Operations Officer for approval.

#### Temperature Verification

When employees have concerns about the thermal comfort of their room or workspace, that information should be communicated via a work order submitted through the SchoolDude System. Emergency temperature issues should be reported by calling the

Facilities help desk at 817-251-5600. SchoolDude will generate an email to the Energy Specialist and Facilities HVAC Technologist with a copy to the administrative assistant to the facility services director and other designees. The Energy Specialist will perform temperature verification first by checking and adjusting the EMS system as needed. When warranted, temperatures also will be taken by physically making a temperature reading in the center of the room or workspace, and at several other points of the space, during occupied and unoccupied periods. [See the Administrative Regulation for reporting comfort complaints.]

#### Procedures for After Hours Meetings and Events

1. The auditorium, gymnasiums, cafeterias and media centers shall only be used for large groups.
2. Small group meetings shall be held in areas with individual cooling units (check with the Energy Specialist or facility services).
3. Requests for use of facilities to occur after regular school hours and on weekends shall be submitted through the district's facility scheduling program. This generates automatic requests to the Energy Specialist for air conditioning or heating for the event. Requests shall indicate the room(s) and/or area(s) needed, the number of people anticipated, and the specific time of the meeting or event.
4. Heating and cooling will be scheduled to cool/heat earlier than the time of the meeting/event to assure the area has reached the appropriate temperature for the number of participants by the time of the meeting/event.

#### Procedures for Operating Lighting Equipment

1. Lights and lamps shall not be turned on until needed.
2. Lights and lamps shall be turned off when leaving rooms or areas for more than 10 minutes.
3. EMS shall schedule outdoor lighting and make appropriate adjustments in connection with daylight savings schedules to maintain safety.
4. Outside lighting shall be off during daylight hours.
5. Gym lights shall not be left on unless the gym is being used.
6. Facilities personnel shall check and monitor lighting through routine PMs.
7. Lights shall be turned off when students and staff leave for the day. Staff should make certain that lights are turned off when leaving the instruction room or office when empty. Use natural light where appropriate.
8. Custodians shall turn on lights only in the areas in which they are working.

#### Additional Equipment Operating Guidelines

1. Scoreboards shall be turned off when not in use.
2. During warm months, art kilns shall not run before 7 p.m. and shall only run until 2 a.m. During cool months art kilns may run at anytime.
3. Microwave ovens and mini refrigerators (defined as less than 1.7 cubic feet (capacity) or equal to or less than 17.3" x 19.7" x 18.3") may be used in classrooms upon permission of the principal and only if use of these devices does not overload circuitry. These devices shall be directly plugged into outlets and may not be connected with extension cords. Other electricity consuming devices used for food preparation and storage, other than those provided in designated break room areas, shall not be used in classrooms or other parts of school buildings. All such devices shall be energy star rated.

4. Electric wax burning devices of any type are not permitted. This rule also applies to plug-in air fresheners as these may affect and/or compromise indoor air quality.
5. Coffee makers, refrigerators, and microwave ovens shall be unplugged during break periods.
6. Domestic hot water heater thermostat settings in kitchens without a booster heater shall be 140 degrees. All others shall be set at 120 degrees.
7. The Nutrition Services Department shall establish energy-saving operating schedules for kitchen equipment and equipment shall be turned off when not needed. Equipment shall be turned on in an efficient manner.
8. Computer equipment
  - a. Labs in schools may be left on during the school day but should be shut-down at the end of the school day.
  - b. Labs and computer workstations shall not be turned on more than 30 minutes before scheduled use.
  - c. Screen monitors shall be turned off when not being used.
9. Water Use – Employees are expected to contribute to water conservation by:
  - a. Reporting plumbing and/or intrusion leaks (e.g. roof leaks).
  - b. Installing low-volume plumbing devices.
  - c. Grounds watering only between 4 AM and 10 AM.
  - d. Spray irrigation shall be monitored and corrected to assure accuracy, reduce evaporation and not reach buildings.
  - e. Install sub-meters on irrigation and cooling tower supply lines to eliminate sewer charges.