WATERFORD GRADED SCHOOL DISTRICT

Energy Management and Conservation Program

It is the policy of the Waterford Graded School District to conserve energy and natural resources. Conservation is a joint effort among school board members, administrators, teachers, support personnel, students and parents. The success of an Energy Conservation program is dependent upon cooperation at all levels.

The Buildings and Grounds and Bookkeeping departments are expected to maintain accurate records of energy consumption, cost of energy and the savings as a result of the energy conservation program.

Each building principal is expected to provide leadership and support for energy management and conservation, including the use of energy audits and conservation programs. Judicious use of the various energy conservation efforts is the joint responsibility of the principal and Director of Buildings and Grounds.

The District Administrator and/or designee is expected to develop short and long-range strategies in the areas of facilities management and curriculum development that address energy awareness and conservation. The District Administrator is authorized to appoint an energy manager to monitor energy consumption.

To ensure the overall success of the energy conservation program, the following specific areas of emphasis will apply in the Waterford Graded School District:

- Every student and employee should become aware of and contribute to the efficient use of energy;
- All unnecessary lighting in unoccupied areas will be turned off;
- The custodial staff at each school will be responsible for shutdown of the facility when closed each evening;
- Established standards for ventilation for acceptable indoor air quality will be followed;
- District facilities will be heated to an average of 68 degrees and air conditioned to an average of 76 degrees when temperatures both inside and outside the building dictate the heating and cooling of the school facilities. Set points may be changed with prior approval by the building principal on an as needed basis.
- Proper preventative maintenance of heating, ventilating and air conditioning units will be performed on a scheduled basis;
- Tasks to prevent and respond to water intrusions within buildings will be performed, including maintaining proper drainage around district facilities;
- Relative humidity will be monitored to help ensure a comfortable and healthy environment.

Guidelines will be created to provide direction in the administration of the Energy Management and Conservation Program.

Policy #733
Adopted: 1/17/2005

WATERFORD GRADED SCHOOL DISTRICT

ENERGY CONSERVATION GUIDELINES

Objectives:

- Eliminate energy waste
- Ensure the comfort for the students
- Ensure acceptable indoor air quality per industry standards
- Avoid using energy where practical

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 energy use in 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.

GENERAL

1. 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.
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 teachers leave school. 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.
6. 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, gym and loading dock).
7. All exhaust fans should be turned **off** every day and during unoccupied hours where appropriate. (Review by 11/3)
8. All office machines (copy machines, laminating equipment, etc.) shall be switched **off** each night and during unoccupied times. Fax machines should remain on.
9. All computers should be turned **off** each night. This includes the monitor, local printer and speakers. Network equipment is excluded.
10. 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.

AIR CONDITIONING EQUIPMENT

1. Occupied temperature settings shall *NOT* be set below 76° F.
2. During unoccupied times, the air conditioning equipment should be **off**. The unoccupied period begins when the students leave the area at the end of the school day. It is anticipated that the temperature of the classroom will be maintained long enough to afford comfort for the period the teacher remains in the classroom after the students have left.
3. Air conditioning start times may be adjusted (depending on weather) to ensure classroom comfort when school begins.
4. Ceiling fans should be operated in all areas that have them.

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5. Relative humidity levels shall *not exceed 60%* at any time.
6. 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. Relative humidity levels should be monitored to verify level remains below 60%. Air conditioning may be used by exception only or in those schools that are involved in a team-cleaning concept.
7. 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.
8. Where cross-ventilation is available during periods of mild weather, shut down HVAC equipment and adjust temperature with windows and doors. Cross-ventilation is defined as having windows and/or doors to the outside on each side of a room. Windows must have screens to be opened.

HEATING EQUIPMENT

1. Occupied temperature setting shall NOT be above 68° F except for EC/K/Gr. 1 - 70° F.
2. The unoccupied temperature setting shall be 55° F (i.e. setback). This may be adjusted to a 61° 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. Hot water heating systems should be switched off using the appropriate loop pumps.
5. Ensure all domestic hot water systems are set no higher than 120° F or 140° F for cafeteria service (with dishwasher booster).