

## ENERGY MANAGEMENT AND CONSERVATION

### Policy Statement

The Board of Education for the Trumbull Public Schools believes that every effort should be made to conserve energy and natural resources while exercising sound financial management. The implementation of this policy is the joint responsibility of board members, administrators, teachers, students, and support personnel and its success is based on the cooperation at all levels.

The day-to-day use of energy shall be the joint responsibility of the principal and head custodian in their school. The supervisor of maintenance shall be responsible for the efficient use of energy and resources at all barns, storage facilities, etc. The superintendent or his designee shall be responsible for the administration building.

To ensure the overall success of the energy management program, the following specific areas of emphasis shall be adopted:

1. All district personnel will be expected to contribute to energy efficiency in our district. Every person will be expected to be an “energy saver” as well as an “energy consumer.”
2. Each building principal will encourage compliance with the energy management program in their buildings.
3. The administrative Energy Guidelines shall serve as the rules for implementing our energy program.
4. The proper maintenance and operation of all energy and natural resource systems (HVAC, lighting, water, electrical, etc.) shall be the responsibility of the Plant Operations Department.

The Board of Education of the Trumbull Public Schools directs the superintendent and/or his agents to develop short and long-term strategies in the areas of facilities management and preventative maintenance.

Further, the Board of Education of the Trumbull Public Schools shall include in any request for a major school renovation or new construction project, a stipulation that such projects be built to, at minimum, a high performance energy standard such as LEED Silver or equivalent.

Policy re-written: 2/28/2011

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### Regulations

#### 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, paying particular attention to shutdown upon leaving.
- The custodian is responsible for all school areas, i.e. halls, cafeteria, gym, etc.
- Since the custodian is the last to leave the building each day, he/she shall be responsible for the verification of the nighttime shutdown.
- The principal is responsible for encouraging the implementation of the Energy Management Plan within their building including the enforcement of all Plan rules or regulations.
- The Plant Administrator shall conduct routine audits of each building and shall communicate the results to the appropriate personnel. Violations of the Plan rules shall be reported to the Superintendent.
- The Plant Administrator shall work with the Maintenance department to develop appropriate HVAC settings and procedures in order to meet the guidelines of the Energy Management Plan.
- The Plant Administrator shall report any significant conservation gains or losses to the building principal as determined during routine audits.
- The District is dedicated to and responsible for the maintenance of the learning environment.
- To complement the District’s Energy Management Program, the Plant Operations department shall develop and implement a preventative maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.

### Rules and Guidelines

#### General

Classroom doors shall remain closed when the heating and/or cooling system is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e. computer labs, office areas, gyms, etc.).

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Windows must remain closed and locked during unoccupied hours.

Windows must remain closed when the heating and/or air conditioning system is active for that space.

All exhaust fans shall be turned off every day during unoccupied hours.

Small appliances are not allowed in classrooms unless they are necessary for instruction. i.e.: portable heaters, refrigerators, coffee pots, microwaves, etc. are not permitted in the classrooms. Where refrigeration is required for science supplies or materials, a single refrigerator shall be designated for use by the department.

All office machines (not including computers) shall be switched off each night and during unoccupied times. Fax machines may remain on.

All computer monitors, printers, and other peripherals shall be turned off each night by the PC Power Management application.

HVAC Guidelines

Temperature Set Points for Heating and A/C Systems\*

Cooling Season	Occupied Set Points:	74 -- 78 deg. F.
	Unoccupied Set Point:	85 deg. F.
Heating Season	Occupied Set Points:	68 -- 72 deg. F.
	Unoccupied Set Point:	55 deg. F.

\* Exceptions may be made if Plant Operations determines average space temperature cannot be maintained between the stated set points

Air Conditioning Equipment

1. Occupied setting shall not be set below 74 degrees F.
2. During unoccupied times, air conditioning equipment shall be shut-off or set-back when the students leave the area at the end of the 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 the weather) to ensure classroom comfort when school begins.
4. Ensure outside dampers are closed during unoccupied times.

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5. Where the controls exist, relative humidity levels shall not exceed 60% for any 24-hour period.
6. Air conditioning shall not be used during the summer months unless the classrooms are being used or if the head custodian has been directed to turn on the air-conditioners to prevent mold growth. In such cases, minimum temperature guidelines will be determined by the IAQ (Indoor Air Quality) person and must be adhered to by the custodial staff.
7. Where cross ventilation is available, during the shoulder seasons and periods of mild weather, a/c and heating systems may be shutdown and the temperature controlled by the use of windows and doors. Cross ventilation is defined as having windows or doors on both sides of classroom.
8. Close blinds or adjust them to decrease direct sunlight on sunny days to help cool the classroom.

#### Heating Equipment

1. Occupied temperature settings shall not exceed 72 deg. F.
2. The unoccupied setting for setback shall be 55 deg. F.
3. The unoccupied time shall be when the students leave an area or when the last scheduled building program has finished.
4. Gyms shall be left in unoccupied mode for recreation and practices unless the HVAC system must be in occupied mode to provide proper air exchanges or if the “gym zone” includes the locker rooms when players are expected to change and shower.
5. In the spring and fall when there is no threat of freezing, hot water heating systems should be switched off during unoccupied times.
6. Ensure that all domestic hot water re-circulating pumps are switched off during unoccupied times.
7. Airflow for all radiators, vents, and unit ventilators shall be free of all obstructions. Radiators and unit ventilators need to be kept clear at the bottom of the unit as well as on top.
8. Open blinds on sunny days to help heat the classroom. Close the blinds at night to conserve heat.
9. Exhaust fans shall be shut off at the end of the day (unless otherwise instructed by the IAQ (Indoor Air Quality) person or a department supervisor).

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### Lighting and Electricity

1. All unnecessary lighting in unoccupied areas will be turned off. Teachers should make certain that lights are off when leaving the classroom empty. Use natural light where appropriate. In rooms with multiple light controls, lights near the windows will remain off when sunlight is sufficient.
2. In common areas where sufficient natural light is available (lobbies, halls, cafeterias, etc.) lights shall be partially or completely shut-off.
3. All outside lights shall be off during daylight hours.
4. Gym lights shall be shut-off when the gym is not being used.
5. All lights will be turned off when the building is closed. Only lights where the custodians are working will be left on.
6. Parking lot lights will be shut-off 15 minutes after an event ends or when the parking lot is empty—whichever comes first. Canopy lights and building lights shall be left on until all building patrons have left the premises. Additional lighting may be left on at the direction of the building principal or Plant Operations for security purposes if necessary.
7. Staff are not allowed to bring in lamps or other light fixtures from home.
8. In staff common areas (department offices, lounges, etc.) coffee pots and other electric appliances must be turned off when not in use.
9. For all departments, only EPA Energy Star Appliances shall be purchased when available. This includes items such as but not limited to, washers, dryers, freezers and refrigerators.
10. Wherever possible vending machines will have the lighting removed. Watt misers or time management shall be used on all refrigerated vending machines.
11. Refrigerators and freezers in all academic areas are to be emptied, defrosted, and turned off during the summer.
12. The Food Service Department will take steps to minimize the amount of freezers and refrigerators they leave on during the summer.

### Water

1. Ensure that all plumbing leaks are reported and repaired immediately.

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2. Use cold water whenever possible.
3. Watering will not occur during the heat of the day, typically between 10:00 am and 8:00 pm. Only athletic fields that have sprinkler systems installed shall be watered.
4. Landscape design should incorporate the use of plants that do not require additional watering.

#### **Use of Building – Event Guidelines**

All building patrons and events shall conform to the Trumbull Public Schools Board of Education Conservation Plan. In addition:

1. The heat or A/C will not be turned on (or set to occupied mode) during weekend activities for fewer than 10 people or for activities of less than 3 hours in duration.
2. The minimum safe lighting level shall be used for all after hour activities and events.
3. Where the heat or A/C needs to be adjusted for an activity, the custodian is responsible for making sure the building returns to the set-back schedule after the activity or sooner if possible.
4. Building users are not allowed to bring in any appliances, lighting, etc. without noting the planned use of such items on the building use form and they must obtain the permission of the Plant Operations department.
5. When athletic events such as practices and games are scheduled in the school's gyms, the temperature setting shall be set to the "unoccupied" mode if practicable.
6. The Trumbull Public Schools and the Plant Operations department has the right to relocate an event to another part of a school, to another school, or to deny the use of the building to conserve or eliminate the use of additional energy.