

Related Entries: (Not identified at this time)

Energy and Natural Resource Consumption

The Board believes all students and staff should be made aware of their responsibility regarding Environmental Stewardship. Everyone must make efficient use of electricity, fossil fuels, water, and reduce the production of solid waste. Our goal is to optimize the use of natural resources in the schools on a daily basis yet maintain a safe, secure, and comfortable learning environment.

(1) The goal of the Board's Energy Policy is to reduce energy and natural resource consumption by a minimum of 10% upon implementation of this policy. Implementation and success of the Energy Policy is a joint responsibility of administrators, teachers, students, and the community. Cooperation of each of us is essential for success.

(a) Every employee and student is expected to contribute to the District's efforts to conserve energy and natural resources. Every person will be expected to be an "energy saver" while being an "energy consumer."

(b) All unnecessary lighting in unoccupied areas must be turned off. Teachers and custodians are asked to turn on lights only in the areas in which they are working. All lights will be turned off when teachers and students leave school. Custodians will turn on lights only in the immediate areas in which they are working. Safety lighting will be held to the minimum level necessary for safe passage.

(c) Computers, copy machines and all other office equipment shall be turned off at the end of the day.

(d) A school closure of two or more days will be viewed as an "energy conservation opportunity." The Building Supervisor shall be responsible for the complete and total shutdown of the school buildings when closed for the weekend or during extended vacations (winter and spring break).

(2) Guidelines for Operating Lighting Equipment

(a) Natural light shall be utilized as much as possible before supplementing with artificial lighting.

(b) Lights in classrooms should not be turned on unless definitely needed. Teachers are asked to make certain that lights are off when leaving the classroom, even for a short period of time.

- 46 (c) Gymnasiums, multi-purpose rooms, and cafeteria lights should not be left on
47 unless they are going to be used within a 15 minute time frame.
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- 49 (d) All outside lights should be turned off during daylight hours. (Adjust time
50 clocks and check dusk to dawn sensors). Site lighting should be set to go off
51 a half hour after occupants leave in the evening and back on a half hour
52 before arrival (if needed).
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- 54 (e) Hallway and “commons” lighting should be turned off at the end of the
55 instructional day.
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- 57 (f) Night custodians should turn lights on only in their work area and turn off
58 immediately upon completion of work.
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- 60 (3) Guidelines for Operation of Heating, Ventilating, and Air Conditioning (HVAC)
61 Systems
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- 63 (a) General Guidelines
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- 65 1. HVAC systems should always be operated in the most economical
66 and efficient way possible and only for the amount of time required to
67 provide the required climate for a specific activity.
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- 69 2. Building Supervisors and energy systems technicians should monitor
70 weather reports. It is their responsibility to make adjustments to the
71 HVAC control systems and District’s Energy Management Systems
72 (EMS) to compensate for changes in the weather (i.e., chillers and
73 fans should start later when the weather is cooler and earlier when
74 warm and humid.)
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- 76 3. When temperature is expected to change significantly over a
77 weekend, clocks and EMS should be adjusted to provide proper
78 temperatures on Monday morning.
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- 80 4. Every opportunity to decrease HVAC operating times should be
81 considered by the Building Supervisors and energy systems
82 technicians.
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- 84 (b) School Days
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- 86 1. On regular schools days, the HVAC systems should be adjusted to
87 provide the following temperatures from the time of teaching staff
88 occupancy to the time of last class dismissal in the building.
89 Temperatures are measured four feet above floor level on either the
90 wall opposite the cooling unit or in the center of the room. An
91 acceptable set point level of 76 degrees for cooling and 68 degrees
92 for heating is established as the District’s Policy standard.

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2. Acceptable temperature deviation from the 76 degree set point is plus or minus 2 degrees. (74-78 degrees)
 3. Air conditioned spaces shall not be cooled below 74 degrees.
 4. Close doors and windows when systems are operational.
 5. Window blinds should be closed at the end of each day.
- (c) School Vacation Days (Winter, Spring, Summer), Weekends and Holidays
1. When schools are closed or not in session, the entire building should be operated with a target limit of 78 degrees. Variations for working staff comfort can be made via over-ride controls for specific zones and lengths of time, with cooling temperatures not to go below 74 degrees.
 2. If offices are occupied by regularly assigned staff, zoning shall be used in lieu of building wide operation. Thermostat settings shall be the same as school day operation.
 3. Normal cooling and ventilation shall be provided for scheduled activities and athletics. If possible, only the area of the activity should be cooled and ventilated, and temperature restrictions shall be the same as school day operation.
- (4) Guidelines for Operation of Domestic Water Heaters
- (a) School Days
1. Thermostats for water heaters shall be set so water temperature at all sinks will not exceed 100 degrees.
 2. Thermostats for water heaters that service kitchens shall be set at 140 degrees.
 3. When available, time clocks shall be set to provide for maximum efficiency.
- (5) Guidelines for New School Installations
- (a) High efficiency HVAC equipment.
 - (b) Multiple frictionless magnetic chillers.
 - (c) Thermal storage system to reduce the load on chillers during peak electrical times.

- 140 (d) Demand controlled ventilation (to control carbon dioxide during low load).
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142 (e) Pre-treat outside makeup air to wring moisture out of the air before dumping
143 it into the building (reduces indoor air quality problems).
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145 (f) Pressurize the building to prevent outside air from entering the building when
146 doors or windows are opened (reduces indoor air quality problems).
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148 (g) All plumbing fixtures shall be low water usage.
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150 (h) All faucets shall be low water usage or timer controlled.
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152 (i) Electronic ballast light fixtures.
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154 (j) Motion sensor lighting controls.
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156 (k) Use of solar panels or any new method to reduce energy consumption when
157 cost effective.
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160 **STATUTORY AUTHORITY:** 1001.42, 1001.43, F.S.
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162 Adopted: 10/11/11