



Chief Operating Officer

Guidelines for Energy Conservation

To: All Staff

From: Scott W. Washington

Chief Operating Officer

Proper energy management must be a paramount year-round concern for all Howard County Public School System members. We again ask for your collective support of our energy management efforts. We need every individual's participation in this effort. The energy cost alone demands that stringent and effective conservation measures be practiced. Collectively our total utility costs are averaging 15 million dollars annually. To put this in perspective, those dollars could be used to build a portion of an elementary school or fund approximately 250 teaching positions for one year. Heating and cooling account for up to half of the energy in a building; lighting uses the second largest amount. Most of the remainder of the consumption comes from the equipment plugged into electric outlets. With that in mind, please follow these energy conservation practices:

A. YEAR-ROUND

- 1. HVAC equipment runs from one hour prior to the Board of Education approved school start time until two hours after the dismissal of students.
- 2. Units will not run outside these hours unless school-based or community activities (including PTSA and booster clubs) are scheduled in the Event Management Software (EMS) maintained by the Use of School Facilities Office. See Policy 10020 Use of School Facilities for further details.
- 3. All lights and computers will be turned off when areas are not in use. Pay particular attention to common areas and corridors, including cafeterias and gymnasiums. Instruct custodial staff to only turn on lights as needed when cleaning each room or building area.
- 4. All doors and windows will remain closed to ensure the safety and integrity of the HVAC systems.
- 5. On days when school is in session, parking lights will be timed to come on at approximately 5:00 AM and will turn off with a light level sensor. Lighting will resume at dusk until approximately 11:15 PM or no later than 15 minutes after the evening custodial services shift. When weekend or non-school day activities require parking lot lighting, this request must be made at the same time as the scheduled activities. All outside lighting attached to the building remains on from dusk until dawn with a light level sensor.
- 6. Encourage staff and students to participate in green school efforts. The point of contact for any questions regarding the energy management program is Diane Sweeney, Energy Management Specialist, at 410-313-1555, ext. 25011.
- 7. We highly suggest all personal microwaves and refrigerators be removed.

B. WINTER/HEATING SEASON OPERATING CONDITIONS

- 1. School day (Monday-Friday) Temperatures are to be maintained as follows:
 - a. Classroom areas, portable classrooms, media centers, cafeterias, multipurpose rooms, administrative areas, and teacher planning areas will be 70°F (+/- 2°F).
 - b. All other areas shall be set at 65°F.
- 2. On days when school is not in session and overnight (two hours after dismissal of students), the temperature setting is to be 55°F in all areas.
- 3. NO PORTABLE SPACE HEATERS will be used unless Building Maintenance provides them for a mechanical failure. Space heaters work against the HVAC system and can mask serious problems with the heating system.

C. SUMMER/COOLING SEASON OPERATING CONDITIONS

1. School day (Monday-Friday) – In spaces where cooling is available, temperature settings in all areas of the building being used will be 76°F (+/- 2°F). Air conditioning units will operate from one hour prior to the approved school start time until two hours after the dismissal of students. Following the end of the academic school year in June, air conditioning will be provided only to maintain the building environment's integrity, support HCPSS summer school services, and for programs where the energy component is requested and paid separately. Cooling schedules will be lengthened when the Environmental Protection Agency (EPA) designates a Code Orange or higher air quality day.

D. PORTABLE CLASSROOMS

- 1. Most portable classrooms have occupancy sensors that adjust schedules and night temperature set points to reduce heating and cooling equipment when no one is inside the classroom. The sensor learns from past occupancy history and adjusts the heating and cooling equipment's start-up times with sufficient time prior to normal occupancy so that the space reaches the temperature set point before staff arrival. The units are then turned off after one-half hour when no occupancy is detected. Other portables have a programmable thermostat that energizes the HVAC equipment to run in the same fashion described above for the main school. Temperature set points remain the same as the school buildings.
- 2. Avoid using portable classrooms for activities outside of normal school hours.

E. PROCEDURE FOR ADDRESSING COMFORT ISSUES

- 1. Do not block air distribution vents and grilles or tamper with thermostats or associated HVAC equipment.
- 2. Suppose an HCPSS employee is concerned about a space temperature within an occupied school building or portable area. In that case, they must follow the following procedures to report the concern.
 - a. The person filing the concern shall contact the school's Day Building Supervisor (DBS).
 - b. The DBS will visit the room and measure the wall's temperature with a handheld infrared temperature sensor next to the light switch.

- c. If the temperature is between 68°F and 72°F during the heating operation or between 74°F and 78°F during the cooling process, the space temperature is within the Board-approved range for space temperatures. The DBS should explain this to the person with the concern. If the person concerned feels that the temperature is unacceptable, the DBS can explain the situation to the school principal. The school principal can decide whether or not to create a School Dude ticket. If so, the School Dude ticket should be assigned to HVAC and include the school name, room number, space temperature, and the date and time of the temperature measurement. The HVAC Shop will log the ticket as a space temperature concern within the Board-approved range requiring no corrective action to the HVAC system.
- d. If the temperature is below 68°F during the heating operation or above 78°F during the cooling process, the space temperature is outside the Board-approved range for space temperatures. The DBS will report the school name, room number, space temperature, and the date and time of the temperature measurement in a School Dude ticket assigned to HVAC. The HVAC Shop will dispatch a technician to evaluate the HVAC system and perform appropriate corrective action. The HVAC Shop will log the ticket as a space temperature concern outside the Board-approved range requiring corrective action to the HVAC system.

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