# THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10910 Clarksville Pike Ellicott City, MD 21042

Circular No. 25 Series 2019-2020

October 3, 2019

**Chief Operating Officer** 

**Guidelines for Energy Conservation** 

To: All Staff

From: Scott W. Washington, Acting Chief Operating Officer

Proper energy management must be a paramount year-round concern by all members of the Howard County Public School System. We again ask for your collective support of our energy management efforts. We need every individual's participation in this effort. The cost of energy 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 about 250 teachers' positions for one year. Heating and cooling accounts 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 pieces of equipment that are 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 one hour after dismissal of students.
- 2. Units will not run outside of these hours unless school based or community activities (including PTSA and booster clubs) are scheduled in the Event Management Software (EMS) maintained by the Community Use of School Facilities Office. See Policy 10020 Use of School Facilities by Non-School Groups 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 at all times.
- 5. 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 following the end of the evening custodial services shift. 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 410-313-7024, ext. 3259.

- 7. Portable space heaters work against the HVAC system or mask serious problems with the heating system and are not allowed in the buildings.
- 8. 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 (one hour after dismissal of students), the temperature setting is to be 55°F in all areas.
- 3. NO PORTABLE HEATERS will be used unless a mechanical failure necessitates supplemental heat.

## 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 approved school start time until one hour after dismissal of students. Following the end of the academic school year in June, air conditioning will be provided only to maintain the integrity of the building environment, to support HCPSS summer school services and for programs where the energy component is requested and paid for 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. 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 start up times of the heating and cooling equipment 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. 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. If an HCPSS employee has a concern about a space temperature within an occupied area of a school building or portable, they are to follow the procedures listed below for reporting the concern.

- 3. The person filing the concern shall contact the school's Day Building Supervisor (DBS).
- 4. The DBS will visit the room and measure the temperature of the wall next to the light switch with a handheld infrared temperature sensor.
- 5. If the temperature is between 68°F and 72°F during heating operation, or between 74°F and 78°F during cooling operation, 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 with the concern feels that the temperature is not acceptable, 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 ticket will be logged by the HVAC Shop as a space temperature concern that was within the Board-approved range requiring no corrective action to the HVAC system.
- 6. If the temperature is below 68°F during heating operation, or above 78°F during cooling operation, the space temperature is outside of 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 who will evaluate the HVAC system and perform appropriate corrective action. The ticket will be logged by the HVAC Shop as a space temperature concern that was outside of the Board-approved range requiring corrective action to the HVAC system.

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