

October 22, 2015

Chief Operating Officer

Guidelines for Energy Conservation

To: All Staff

From: Camille B. Jones, 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 effort. 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 approaching 20 million dollars annually. To put this in perspective, those dollars could be used to build an elementary school or fund about 250 teachers' positions for one year. Heating and cooling uses up to half of the energy in a building; lighting is the second largest energy consumption. 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, remain on from dusk until dawn with a light level sensor.
6. Encourage staff and students to participate in green school efforts. Point of contact for any questions regarding the energy management program is Diane Sweeney, Energy Management Specialist, at 410-313-7024, ext. 259.
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. Reduce the number of personal microwaves and personal refrigerators.

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 are to be used unless a mechanical failure necessitates supplemental heat.

C. SUMMER/COOLING SEASON OPERATING CONDITIONS

9. 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.
10. 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 for and paid separately. Cooling schedules will be adjusted on Code Orange or higher air quality days, as determined by the Environmental Protection Agency (EPA).

D. PORTABLE CLASSROOMS

1. Portable classrooms have automatic controls installed which work off of occupancy sensors. The schedules and thermostat night set points are adjusted to turn off heating and cooling equipment when no one is inside the portable classroom. The sensor learns from past occupancy history and adjusts the start up times of the heating and cooling equipment to power the 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 grills or tamper with thermostats or associated HVAC equipment.
2. When heating or cooling problems occur within a building, notify the day building supervisor. He/she will verify the space temperature and if necessary, send a work repair request on ASRIS. If the situation is an emergency, call Building Services at 410-313-7084 in addition to sending the request on ASRIS.

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See attachment on recommended conservation measures.

Recommended Conservation Measures

- While the building is being heated or cooled, never open windows or prop open doors. Close doors as soon as students have arrived or been dismissed for the day.
- Maintain a consistent temperature throughout the building to eliminate warmer and cooler areas. Inconsistent temperatures add to discomfort when moving from one area to another.
- Portable space heaters are a safety hazard and are not allowed in the buildings. Building Services may provide approved heaters in emergency cases. In many cases, the heaters work against the HVAC system or mask serious problems with the heating system.
- Reduce the number of microwaves and personal refrigerators.
- Work Orders through ASRIS should be issued when temperatures are outside the temperature guidelines set forth by the School Board. Currently, the winter temperature is 68 degrees and the summer temperature is 78 degrees.
- Do not block the heating or return air vents with furniture, books, drapes or other articles. Proper air flow is essential to the performance of the HVAC systems.
- Operate ventilating fans in kitchens, home economics areas, etc. only when using the equipment.
- Close draperies and/or blinds after school to reduce heat loss through window areas in winter and to keep solar heat out in summer months.
- Turn lights off whenever any area or room is not in use.
- Reduce classroom lighting, particularly on bright days, by turning off those lights nearest the window walls, if possible.
- Instruct custodial staff to turn off lights as they finish cleaning each room or building area.
- Computers should be turned off after use, especially overnight. The heat the computer generates when left on wears down the computer parts faster than turning the equipment on and off.