#### **ENERGY MANAGEMENT CONSERVATION**

731

It is the policy of the School District of Kettle Moraine to conserve energy and natural resources. The implementation of this policy is the joint responsibility of board members, administrators, teachers, students and support personnel and its success is based on cooperation at all levels.

The Facility Services Department will maintain accurate records of energy consumption and cost of energy and progress of the energy conservation program.

The principal will provide leadership and support for energy management and conservation, including use of energy audits and conservation programs. Judicious use of the various energy conservation efforts will be the joint responsibility of the principal and lead custodian.

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

- 1. Every student and employee should contribute to energy efficiency.
- 2. All unnecessary lighting in unoccupied areas will be turned off.
- 3. The custodial staff at each school will be responsible for shutdown of the facility when closed each evening.
- 4. Established standards for ventilation for acceptable indoor air quality will be followed.
- 5. Proper preventative maintenance of HVAC units will be performed.
- 6. Tasks to prevent and respond to water intrusions within buildings will be performed, including maintaining proper drainage around buildings.
- 7. Relative humidity will be monitored and maintained at appropriate levels.

The Superintendent and/or his/her designee shall develop short and long-range strategies in the areas of facilities management and curriculum development that address energy awareness and conservation.

Approved: October 12, 2004

Clerk

# ENERGY CONSERVATION Administrative Rules

731-R

These guidelines are not intended to be all-inclusive and supersede all previous instructions related to building management or energy usage guidelines.

### Objectives:

- 1. Ensure adequate comfort of students, staff and other users of facilities.
- 2. Ensure acceptable indoor air quality in accordance with industry standards.
- 3. Eliminate energy waste.

## 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.
- The custodian is responsible for control of common areas, i.e. halls, cafeteria, etc.
- Since the custodian is typically the last person to leave a building in the evening, he/she is responsible for verification of the nighttime shutdown.
- The principal is responsible for overall energy usage of his/her building.
- The Energy Manager will perform routine audits of all facilities and communicate the audit results to the appropriate personnel.
- The Energy Manager will provide regular reports to principals indicating performance with regard to energy savings.

#### General

- All unnecessary lighting in unoccupied areas will be turned off. Teachers should utilize
  natural lighting where appropriate and make certain that lights are turned off when leaving the
  classroom when empty.
- 2. All lights will be turned off when students and teachers leave school.
- 3. Outside lighting should be off during daylight hours.
- 4. Gym lights should not be left on unless the gym is being utilized.
- 5. All lights, except security lighting, will be turned off when facilities are not occupied. Exceptions may be made for homecoming or other times when safety and protection of persons or property require additional lighting.
- 6. During unoccupied periods, custodians will turn on lights only in the areas in which they are working.
- 7. Educational efforts will be made to help staff refrain from turning lights on unless definitely needed and to understand that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.
- 8. Coffee makers, hot plates, toaster ovens, and other appliances, not required for instructional purposes or deemed by the Safety Coordinator as a potential fire hazard shall not be kept in classrooms.
- Effective with the 2005-2006 school year, refrigerators, space heaters, and microwave ovens, other than as needed for instructional or health reasons, will be removed from classrooms.
   Such appliance will be confined to staff and faculty planning rooms where they can be appropriately used and monitored.
- 10. Doors and windows between conditioned space and non-conditioned space should remain closed as much as possible.
- 11. Data loggers to document building humidity, temperature, and light levels to ensure compliance with district guidelines will be utilized.
- 12. Exhaust fans should be turned off every day and during unoccupied hours.

- 13. Office machines (copy machines, laminating equipment, etc.) shall be switched off each night and during unoccupied times, unless equipped with a power saver mode. Fax machines may remain on.
- 14. Computers should be turned off each night, including the monitor, local printer, CPU, and speakers. Network equipment may be left on.
- 15. PC's should be programmed for the "energy saver" mode using the power management feature. If network constraints restrict this for the PC, monitors should be set to "sleep" after 10 minutes of inactivity.
- 16. Areas of water intrusions will be repaired and standing water eliminated.
- 17. Positive building pressure will be maintained.
- 18. Moisture extraction plan should be implemented when cleaning carpets.

Cooling Season Occupied Set Points: 74°F - 78°F Heating Season Occupied Set Points: 68°F - 72°F

# Air Conditioning Equipment

1. Occupied temperature settings shall NOT be set below 74°F.

- 2. During unoccupied times, the air conditioning equipment should be turned off or set at higher temperatures. The unoccupied period begins at the end of the regular school day, unless community activities are scheduled. 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. Efforts will be made to operate air conditioning in occupied zones only.
- 3. Air conditioning start times may be adjusted (depending on weather) to ensure classroom comfort when school begins.
- 4. Outside air dampers will be closed during unoccupied times.
- 5. Ceiling fans should be operated in all areas that have them.
- 6. Relative humidity levels should not exceed 60% at any time.
- 7. MERV 8 filtration is recommended, provided the filter housing is adequately sealed to prevent air bypassing the filter.
- 8. A district wide maintenance program to ensure clean coils and drain pans will be established.
- 9. Air conditioning should be utilized in classrooms during the summer months only when classrooms are scheduled for summer school or other community activities. Relative humidity levels should be monitored to verify level remains below 60%. Air conditioning may be used by exception as needed (e.g. cleaning crew, maintenance, etc.).
- 10. In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned classrooms or dining areas should be kept closed as much as possible.

#### **Heating Equipment**

- 1. Efforts shall be made to operate heating systems in occupied zones only, except as noted below.
- 2. Occupied temperature settings shall NOT be above 72°F.
- 3. The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather.
- 4. The unoccupied time shall begin at the end of the regular school day, unless the area is used for community activities.
- 5. Domestic hot water systems should be set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).

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