

PLANT OPERATIONS PROCEDURE MANUAL

Building the Future



Energy Conservation

SECTION 6

ENERGY CONSERVATION

ENERGY CONSERVATION.....6-1
Energy Conservation6-2

ENERGY CONSERVATION

Energy conservation must be an important part of the planning and budgeting process, because of the high cost of fuels and electricity, the need to conserve resources, and reduce costs wherever possible.

Quite often it becomes the duty of the custodians to regulate or control the heat or air conditioning source. These duties should be well regulated with times and temperatures predetermined, and as much as possible, should be automatic. Some Carroll County Public Schools currently make use of a computer to effect energy conservation.

The following list can be used as a check list to insure continuous energy conservation efforts.

1. Caulk all windows and doors as needed.
2. Be sure that proper amounts of insulation are in place, if insulation is used.
3. Be sure that outside doors are weather stripped and close properly.
4. If oil is the fuel being used, be sure nozzles are clean and of proper size and burner is adjusted properly.
5. Be sure that the combustion air to the burner is at a minimum.
6. Keep doors and windows closed during heating season.
7. Be sure that outside ventilating air is at currently acceptable levels.
8. Be sure that steam traps, if used, are operating properly.
9. Be sure that all filters are clean and changed frequently.
10. Be sure heating system on-off timers are operating properly.
11. Be sure that lights are off when areas are not in use.
12. Be sure that hot water leaks are repaired at once whether domestic hot water or heating.

ENERGY CONSERVATION

The Carroll County Board of Education endorses all appropriate measures to conserve energy and energy resources (Board Policy EDBC).

Energy consumption throughout the year, both during the heating and cooling seasons, is a costly item for the Board requiring careful management.

The following guidelines should be adhered to:

Heating Season

1. Thermostats in all schools shall be set to provide an ambient room temperature of 68F during the regular school day. This pertains to classrooms, relocatables, offices, corridors, gyms, locker rooms, multi-purpose rooms and auditoriums. Relocatable classrooms not on a timer must be manually set back. Thermostats in relocatables should be set at day setting when temperatures below 20 are expected.

As a general rule, thermostats shall be cut back to a night setting on school days between the hours of 4 p.m. and 6 p.m. Earlier set backs may be instituted with the intent of allowing building temperature to coast for the last hour of student occupancy, thus conserving energy. On holidays and non-school days the night setting shall be in effect throughout day hours as well. When this procedure starts, all windows and doors will remain closed so that we are not "heating the outdoors."

Carroll County Board of Education does not provide heating of school facilities for third, fourth, fifth or sixth priority users (church services, community recreational councils, for profit groups etc.) and schools should be left on the night setting during the hours established above unless otherwise approved by the Director of Facilities and a fee established. Additional charges for use of facilities should be noted on the Use of Facilities Application.

2. In extremely cold weather (when the nighttime low is expected to drop in the teens), building supervisors should place the heating temperatures on a daytime setting to prevent freezing of pipes. If there is any doubt as to when to do this, the Office of Plant Maintenance or the Director of Facilities should be consulted.
3. On warm, temperate days, building supervisors are directed to turn the boilers to the summer position except where automated energy management systems are in control. Do not turn the boilers off. Second shift staff should return the boilers not on energy management systems to a nighttime setting when they leave for the night.

Cooling Season

4. Thermostats in all schools shall be set to provide ambient room temperature of 74F during days when schools are in session for students and instructional staff. This pertains to classrooms, relocatables, offices, corridors, gyms, locker rooms and auditoriums. Air conditioning shall be controlled in the same manner as heat with night time settings being regulated via a timer or energy management system. Manual override of the air conditioning controls is permitted for school related after school activities. Schools on energy management systems must pre-program the scheduled occupancy in advance in order to provide appropriate cooling for the required period of occupancy.

It is the responsibility of the building supervisor in conjunction with the school principal to pre-arrange and coordinate that the schedule is properly programmed into the energy management system.

The Carroll County Board Of Education does not provide air conditioning for third through sixth priority users of facilities unless payment for such is made by the user agency. This only occurs in special circumstances. Notation must be made on the Application for Use of Facilities in the Building Changes section so that an invoice can be generated.

Summer Season

5. Zoned air conditioning for the office area is permitted throughout the summer months. Other zones throughout the building may be cooled only when Board of Education summer school or Board of Education inservice classes are in attendance or when carpet shampooing is occurring in a particular area. An ambient temperature of 74F shall be maintained.

Air conditioning should be operated to provide cooling in the zones where carpet shampooing is occurring and not the entire building. Cooling should remain on in the area being shampooed until carpet is completely dry to prevent mold and mildew.