

812A ENERGY MANAGEMENT GUIDELINES

A. Objective

School District 206 is committed to promoting energy efficient best practices to its faculty, staff, students and community.

The district shall strive to conserve energy and improve the energy efficiency of its buildings, vehicles and equipment and the goods and services that it uses. The district shall use environmentally safe and sustainable energy sources as often as practical while achieving savings. The district shall strive to increase its use of energy from renewable sources.

The district shall implement these principles by demonstrating community leadership, collaborative planning and by adopting best energy management practices. It shall establish goals, objectives and indicators; conduct an annual self-evaluation of our progress and communicate regularly with the School District 206 community.

B. Responsibility

The success of this policy is the joint responsibility of school board members, administrators, teachers, students and support personnel and is based on their cooperation. Every student and employee is expected to contribute to energy efficiency and be an “energy saver” as well as an “energy consumer.”

Each person is responsible for turning off all energy using devices such as computers, monitors, copiers and all other office equipment when not in use. One should not assume that someone else will do it.

Faculty, staff and students should report inoperable equipment to maintenance and wasteful practices to a designated person or team so corrective action can be taken. The designated person or team shall monitor utility usage and strive to promote and implement the guidelines outlined in this policy.

School principals shall be accountable for energy efficiency efforts in their facilities, working closely with maintenance employees and a designated person or team.

The superintendent is to help develop the necessary administrative guidelines and plans to implement energy awareness and energy efficiency in the district.

C. Temperature

To maintain reasonable comfort and lower energy expenditures, District 206 has established the following standards for comfortable heating and cooling.

- Summer thermostat settings (air conditioning) during occupied periods are to be at 74-76°F. During unoccupied periods, thermostats are to be set back to 78°F.
- Winter thermostat settings (heating) during occupied periods are to be at 68-70°F. During unoccupied periods, thermostats are to be set back to 65°F.
- Exceptions to these guidelines must be approved by the School Board and a designated person or team.

To properly sense temperature in rooms, areas around thermostats must be clear of computers, televisions and other electric appliances that give off heat. Additionally, supply air vents must be clear of obstructions such as flags, banners, signs, etc., that may interfere with the design airflow which in turn affects occupant comfort.

D. Building Resource Management

Windows and doors should be kept closed during the heating season and during the summer in those areas that have mechanical cooling. Gym exhaust fans are to be turned off when the air conditioning unit serving that area is operating.

Schedulers of classes, meetings and other school activities should endeavor to minimize energy use. Evening activities should be concentrated in the fewest areas possible, and where appropriate, the areas used should be those that already have late night temperature setback.

E. Lighting

Interior lighting shall be fluorescent, whenever possible. New energy-saving fixtures, lamps and ballasts will be used to replace existing less efficient lighting whenever economically feasible and appropriate. Exterior lighting will be high-pressure sodium or metal halide (metal halide is preferred) whenever possible and will meet minimum current safety requirements.

Decorative lighting shall be kept to a minimum. Lighting levels recommended by the most recent edition of the IES (Illuminating Engineering Society) Lighting Handbook shall be used as guidelines. Where it makes economic sense, occupancy/motion sensors (ultrasonic or infrared) wired to area lighting will be installed to reduce and/or turn off lights in unoccupied, vacated areas.

Day-lighting controls will be installed, if economically feasible, to automatically adjust lighting levels as appropriate. Task lighting, such as desk lamps, is recommended to reduce overall ambient lighting levels. Teachers are encouraged to use task lighting at the end of the day after the students have left instead of the overhead fluorescent lighting. Compact fluorescent light bulbs (CFLs) should be used in desk lamps.

F. Space Heaters

Space heaters are not to be used unless approved by a building principal or immediate supervisor.

All space heaters used must be approved for fire safety as classified by the National Fire Protection Association and Energy Star Rated. No liquid fueled space heaters (e.g., kerosene heaters) shall be used in any office or classroom. Some electric space heaters also pose an unacceptable fire hazard.

All space heaters must meet the following four specifications:

Heaters must:

- (1) be UL approved;
- (2) have elements that are protected from contact;
- (3) be tilt-proof [when tipped over, heater goes off]; and
- (4) be thermostat-controlled.

Space heaters must be unplugged when not in use.

If a member of the school district feels that a space heater is necessary for adequate warmth, this may indicate that the central heating system needs repair. Maintenance should be consulted if the central heating system is incapable of meeting comfort requirements.

Maintenance should also be contacted if a space heater is to be used to offset excessive air conditioning. Excessive cooling of a space below the summertime Temperature Guidelines should be reported to maintenance so that air-conditioning levels can be adjusted.

G. Seasonal Needs

1. Switchover from Heating to Cooling

Maintenance personnel perform required changeover from heating to air-conditioning in the spring. Because of the varying equipment installed throughout the district, buildings must be changed over individually. Facility maintenance employees perform the changeover on the basis of priorities established to:

- (1) provide comfort to students;
- (2) maintain required temperatures to protect equipment; and
- (3) serve the greatest number of individuals and activities.

Air-conditioning may not begin until outside temperature has reached 75°F for three consecutive days. Temperature projections are also considered. The wide swings in temperature during the spring of the year and the difficulty in switching between heating and cooling make this policy necessary. Special problems or hardships with this policy should be addressed to the Director of Buildings and Grounds.

2. Switchover from Cooling to Heating

Maintenance personnel perform required changeover from air-conditioning to heating in the fall. Because of the varying equipment installed throughout the district, buildings must be changed over individually. Facility maintenance employees perform the changeover on the basis of priorities established to:

- (1) provide comfort to students;
- (2) maintain required temperatures to protect equipment; and
- (3) serve the greatest number of individuals and activities.

Heating may not begin until the high outside air temperature has dropped below at least 55°F for three consecutive days. Temperature projections are also considered. The wide swings in temperature during the fall of the year have made this policy necessary. Special problems or hardships with this policy should be addressed to the Director of Buildings and Grounds.

3. Holiday Periods

Buildings shall use heat as needed during holiday periods. The exception to the policy will be buildings or areas that contain special collections or sensitive equipment or buildings that are officially open during the holidays. Requests for exceptions to this policy with justification should be addressed to the Director of Buildings and Grounds after curtailment plans for the upcoming holiday period have been issued.

H. New Construction

The school district shall seek to reduce future energy costs in new facility construction and renovation when feasible. Current standards outlined in ASHRAE Standard No. 90.1 *Energy Standard for Buildings Except Low Rise Residential Buildings* shall be followed as closely as possible. Additionally, all city and state regulations shall be followed.

All planning for major construction and equipment purchase/installation must include energy life cycle costing. New equipment purchased must carry the Energy Star label as often as practical. As resources become available, District 206 shall develop and implement design standards for new construction to include energy efficiency.

I. Water Conservation

School District 206 is committed to promoting the conservation of water in addition to energy. Faculty, staff and students should report malfunctioning water faucets, toilets and urinals to maintenance so corrective action can be taken. Faculty and staff shall educate students on the importance of turning off water after using restroom facilities. The school district shall seek to implement methods of capturing rainwater for use in non-potable applications and shall use native plantings where possible to reduce the amount of watering needed.

J. State of Minnesota B3 Benchmarking

Utility tracking and measurement will be done by entering data into the B3 Benchmarking System for each building.