ENERGY MANAGEMENT

PURPOSE

SAMPLE ISD is responsible for the efficient use of its natural resources and shall provide leadership in developing a realistic energy use ethic, increasing awareness of energy needs and their associated costs in the operation of its facilities to conserve energy while maintaining a comfortable learning and working environment.

STATEMENT OF OBJECTIVES

SAMPLE ISD will assign responsibility for supervision of the Energy Management Program to one or more administrators in the District. The designated administrator(s) will be responsible for the development, implementation, administration, and reporting of the annual Energy Conservation Goals and Plan.

Every employee, student and school volunteer is expected to contribute to energy efficiency and be an "energy saver" as well as an "energy consumer". Implementation of this policy shall be the joint responsibility of the Energy Management Administrator(s), administration, teachers, students, staff and volunteers. Its success shall be dependent on cooperation at all levels. Each employee, student and school volunteer shall actively participate in their campus energy conservation program. Administration shall assist the Energy Management Administrator(s) in implementing, directing, monitoring, evaluating and reporting each school's energy conservation and efficiency.

The top goal of the Energy Management Program is to reduce energy consumption by 5% per year for six years beginning in 2008-2009. The Energy Management Administrator(s) shall maintain accurate records of energy consumption and associated costs and shall provide information on the goals and progress of the District's energy conservation program.

Each Principal shall designate a Campus Energy Coordinator. The senior manager at non-school facilities will also designate a Campus Energy Coordinator for the non-school facility. Judicious use of the various energy systems at each site shall be the joint responsibility of the administrative and instructional staff of each facility, the custodial staff, the maintenance department and the Campus Energy Coordinator.

ROLE OF ENERGY MANAGEMENT ADMINISTRATOR(S)

- Develop recommendations for long-term and short-term energy conservation goals
- Develop annual energy management plan for the district
- Train Campus Energy Coordinators

- Work with Principal and Campus Energy Coordinator to develop energy management goals and plan for each campus by month
- Monitor and report results by campus monthly
- Develop energy management capital improvement program and oversee implementation
- Conduct campus energy audits
- Implement centralized monitoring and control of automated energy management systems at all campuses
- Work with Maintenance to insure that regular and emergency HVAC maintenance is performed on the proper schedule

ROLE OF CAMPUS ENERGY COORDINATOR

- Communicate energy conservation goals to all campus employees, students and volunteers
- Facilitate development and implementation of campus energy conservation programs
- Conducts campus energy audits
- Report campus energy management results monthly
- Provide training to students, faculty and staff

ENERGY CONSERVATION GUIDELINES

- *Temperature* – To maintain reasonable comfort and lower energy expenditures, the District has established the following standards for comfort heating and cooling. Cooling period thermostat settings (air conditioning) during occupied periods are to be 73-75ºF. During unoccupied cooling periods thermostats are to be set back to 78-80º or turned off, as appropriate. Winter thermostat settings (heating) during occupied periods are to be 68-70ºF. During unoccupied heating periods, thermostats are to be set back to 65ºF or turned off, as appropriate.

- *Building Resource Management* – Computer monitors should be turned off or set to a "sleep" mode when not in use and printers should be turned off at the end of the day. Computers should be turned off when school will be out for extended periods such as Winter Break, Spring Break and Summer Break. 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. After school and evening use of schools should be concentrated on a limited number of days each week (i.e. Monday/Wednesday or Tuesday/Thursday).

- *Capital Upgrades* – Evaluate all school facilities for upgrading of the energy management systems. Pursue all equipment retrofits with a payback of three years or less. Implement a District wide energy management system that allows central office monitoring and control of all school facilities by the Energy Management Administrator(s).

- *Holiday Periods* – A period of closure for the District offers a great opportunity to save money on utilities that can be spent in other areas. With this in mind, buildings shall be only minimally heated/cooled 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.

- *Lighting* – Interior lighting shall be fluorescent, whenever possible. Halogen lamps are not permitted. Seasonal and temporary lighting is permitted only in common areas, with the approval of the campus Principal. Task lighting, such as desk lamps, is recommended to reduce overall ambient lighting levels. Teachers are encouraged to use task lighting, if available, at the end of the day after the students have left instead of the overhead fluorescent lighting. Office and classroom lights shall be turned off when not in use. Night custodial staffs shall use minimum lighting necessary to accomplish tasks. All outside lights should be off during daylight hours. Once school activities have ended, all outdoor lights should be at a pre-set minimum.

- *Hot Water Heaters* – Hot water temperature will be set according to local health department regulations.

- *Space Heaters, Mini-Refrigerators, Etc.* – Personal appliances such as coffeemakers, Microwaves, refrigerators, and space heaters are not permitted in classrooms. Any of these items should be approved by the campus Principal and kept in common areas (teacher's lounge break rooms, common work rooms, departmental offices, etc.). These items should be left free of debris and have at least a six-inch area of clearance. Emphasis should be placed on using commercial rated and/or UL listed appliances.

- Principal and Campus Energy Coordinator Guidelines

    - ✓ Establish an Energy Smart Team for your campus to help monitor school energy use
    - ✓ Make sure room temperatures are consistent with procedures in the Energy Policy
    - ✓ Schedule the use of classrooms and other spaces wisely to reduce energy consumption
    - ✓ Solicit feedback from students and staff on energy conservation

- ✓ Inform the public, parents and other groups about your school's energy conservation efforts
- ✓ Campuses and facilities that can override the air conditioning are responsible for making sure that the air is turned off when the facility is vacated

- Teachers and Staff Guidelines

  - ✓ Keep lights off when space is unused
  - ✓ Do not block classroom air supply and return grills with furniture of displays
  - ✓ Close all windows and doors when leaving the classroom at the end of the day and turn off all machinery and lights
  - ✓ Do not cover or block thermostats
  - ✓ Do not adjust thermostats beyond the program guidelines
  - ✓ Report faulty thermostats and other equipment that may be malfunctioning
  - ✓ Involve students in monitoring energy usage

- Student Guidelines

  - ✓ Teach energy conservation
  - ✓ Involve the students by giving them energy conservation responsibilities

- Facility Operations Guidelines

  - ✓ The regular school a/c schedule will begin one week prior to the start of school
  - ✓ The abbreviated a/c summer schedule will begin the Monday following the last day of school
  - ✓ All summer programs that can be consolidated into one facility should be scheduled as such
  - ✓ Scheduling of after-hours programs should be done at least 5 days in advance
  - ✓ All booster clubs and student organizations that meet after regular school hours should meet on school designated meeting days in the same areas of the facility
  - ✓ All rental fees should be reviewed to make sure all cost to the District is recovered
  - ✓ All waxing and carpet shampooing must be scheduled in advance
  - ✓ All after-hour events should be reviewed to see if they are necessary

- Maintenance Guidelines

  - ✓ Routine filter changes and coil cleaning will be performed on all air handlers in the District
  - ✓ Periodic inspections and cleaning will be made of all air handler rooms
  - ✓ There will be annual inspections and service of all air conditioning equipment
  - ✓ Electrical panels will be periodically cleaned and inspected for hot spots
  - ✓ All plumbing leaks will be repaired as soon as possible, and routine inspections of each facility's plumbing will be done
  - ✓ Energy usage/cost data will be tracked and annual reports prepared for each facility
  - ✓ This list by no means is all inclusive. Other preventative measures will be implemented.

ENERGY MANAGEMENT
GOALS

1. Reduce energy consumption by 5% per year for six years beginning with the 2008-2009 school year.

2. Implement centralized monitoring and control of automated energy management systems at all campuses.

3. Execute energy management capital improvement program included in 2008 bond referendum.