

# **District Wide Utility Management Standards**

# Purpose:

To establish a framework of procedures to help the Mansfield Independent School District minimize the cost of energy by ensuring efficient operations throughout the district.

Energy efficient operation means operating an energy consuming device so that it uses only as much energy as necessary to fulfill its intended function. The primary objective of an effective Utilities Management plan is to eliminate or minimize energy waste and control costs while maintaining a comfortable and safe environment.

## Goal:

To assure maximum operating efficiency of lighting and HVAC systems, the primary energy consuming systems in the district. We will also enlist end-users to help make sure that lights are turned off in unoccupied rooms, exterior doors and windows are closed, etc.

# Methodology:

The Assistant Superintendent of Administrative Support will serve as the MISD's Energy Manager and is empowered with sufficient authority to implement programs as approved by executive council and obtain cooperation from district staff.

Each campus will appoint a campus Energy Champion who will be familiar with, support and enforce the district's energy goals and the operational guidelines set forth for achieving them. Each campus Energy Champion will stress the importance of:

- 1. Energy efficiency in general
- 2. Shutting off unnecessary lights
- 3. Closing doors
- 4. Shutting off computers
- 5. Actively promoting energy awareness.
- 6. Reporting energy conservation opportunities or waste.

#### Heating Ventilation & Air Conditioning (HVAC)

- 1. Thermostats/controls will be set and maintained by the HVAC Department. During heating mode (November 1 through March 15), equipment will be set to maintain the temperature between 69 and 72 degrees. During cooling mode (March 16 through October 31), equipment will be set to maintain the temperature between 72 and 75 degrees. Special consideration will be given for drastic weather conditions, as well as to certain preschool and special education classrooms. Warehouse and Maintenance areas where full-time staff are not assigned and where equipment is available will be maintained at 55 degrees during the heating season. The Principal, or their designee, will approve requests for temperature adjustments prior to submitting a work request to the Maintenance Office for the changes.
- 2. Space Heaters are prohibited unless issued by the Maintenance Department to control temperature or during an equipment failure. Space heaters decrease operating efficiency in the operation of central equipment.
- 3. Campus Administrators will ensure that all doors and windows remain closed while HVAC equipment is in operation; classroom doors should remain closed during the school day to help regulate temperature and humidity. Entrances and exits to the building should be limited in number in order to both reduce energy consumption and increase the efficiency of heating and cooling equipment. Broken and/or poorly sealed windows and doors should have work orders created for their repair.
- 4. Under no circumstances will staff block, close, or alter supply or return air grilles. The air is balanced in our buildings and altering an air grill's settings will put the system into an unbalanced, less efficient operating mode.
- 5. Malfunctioning equipment should be immediately reported to the Maintenance Department for repair.
- 6. Non-occupied areas will be maintained at 55 degrees during heating mode and 82 degrees during cooling mode.
- 7. After-hours requests for HVAC should be made 72 hours prior to the event. Where feasible, events occurring simultaneously will be scheduled in the same area of the building so that only one HVAC system has to be turned on. Small group activities are not to be scheduled in the large areas of the building. Area usage will be coordinated with the Principal and Custodial staff in order to reduce energy consumption.
- 8. Special consideration will be given to the location of summer school classes to ensure the most cost-effective operation of cooling equipment.

## Lighting (Interior and Exterior)

- 1. Lighting will be shut off if rooms are unoccupied.
- 2. Staff / Teachers shall be responsible for shutting off lights in their area at the end of the day or class period. Custodial crews shall turn off hallways lights (allowing for adequate safe-passage lighting) 30 minutes after dismissal.
- 3. While cleaning, custodial staff will only turn on lights for the area they are cleaning. When complete, the lights will be turned off before proceeding to the next area.
- 4. Exterior lighting will be controlled with photo-cells, timers or both. At larger campuses, controllers will be used to turn off most parking lot lights at midnight while still allowing perimeter lighting to remain on for security purposes. Perimeter lighting will remain on from dusk to dawn.

#### Technology Equipment

1. Teachers and staff will be responsible for shutting down computers at the end of the work day.

- 2. All computers shall have the power options set to turn monitors off after 20 minutes of inactivity. Printers shall be manually turned off at the end of each day or during long periods of inactivity.
- 3. Copy machines will have power options set to automatically shut down after 4 hours of inactivity.
- 4. Where power options are not available, staff will be responsible for shutting equipment off at the end of the work day.

# Additional Equipment

1. Refrigerators, microwaves, and other small appliances will be limited to the kitchen and teachers lounge. Personal appliances will not be allowed in the classroom unless an academic need can be substantiated.

# **Water Conservation**

- 1. All garden hoses will be inspected for appropriate washers and fittings prior to use. Under no circumstances will hoses be left outdoors overnight.
- 2. Water leaks and malfunctioning fixtures shall be immediately reported to the Maintenance Office for repair.

# **Classroom Instruction**

- 1. Each school will incorporate various energy conservation lessons at the appropriate grade level. Sources of instruction include information from websites such as <a href="www.wattwatchers.org">www.wattwatchers.org</a> and other sources. Additional materials can be obtained by contacting the Maintenance Office.
- 2. The Maintenance Manager will provide an energy conservation *Tip of the Month* for all schools to post and broadcast during public announcements.

#### **Custodial Operations**

1. Custodial staff will utilize checklists at the end of the work shift. Checklists will include the following key items: Lights are off; HVAC is properly adjusted; computers and office equipment are shut down. Doors and windows have been checked for security; alarms are set.

#### **Building Energy Audits**

1. MISD Energy Education Specialists will audit individual campuses/buildings weekly for energy usage to ensure that usage patterns coincide with the energy plan outlined by the Facilities Dept. Typical audits will review lighting, heating/AC, and water usage. The purpose of audits is looking for ways to conserve energy which will, in turn, allow the district to be better stewards of taxpayer dollars and decrease the district's carbon footprint.