

MANAGEMENT SUPPORT SERVICES

Utilities Management

Introduction

In support of Central Kitsap School District (CKSD) Utilities Conservation Policy, the following procedure is set forth to establish operating standards for energy conservation in District facilities. Following these standards will minimize CKSD's impact on the environment and reduce energy usage and utility expenditures.

The goal of CKSD's Utilities Conservation Procedure is to increase energy efficiency to improve the learning and teaching environment. A successful Utilities Conservation Procedure relies on active participation by all – administrators, teachers, support staff, students, and community members.

Communication is key to the success of any Utility Conservation Procedure. A one-page summary of these guidelines will be provided for posting in schools and support facilities. In addition, a monthly utilities use report will be sent to each building administrator and head custodian. The administrator is encouraged to share this information with building staff. The District's Maintenance Department Environmental Resource Coordinator is available to discuss utility savings and energy conservation.

Any exceptions to this policy and procedure shall be addressed through the building administrator in collaboration with the Director of Facilities, Maintenance, and Construction.

**I. HEATING, VENTILATION AND AIR CONDITIONING (HVAC)**

HVAC systems shall be operated in the most efficient manner possible. HVAC systems shall operate for the minimum amount of time required to provide the approved temperature for a specific area and activity.

**A. District Standard Temperature Settings**

The temperature settings to be used throughout the District are summarized in the following table (State/OSPI information provided for reference only):

Area	Occupied Set Points		Unoccupied Set Points		State <sup>(1)</sup> /OSPI <sup>(2)</sup> <u>Minimum Setpoints</u>
	Heating	Cooling	Heating	Cooling	<u>Heating</u>
Classrooms	70	75	55	85	<u>65</u>
Administrative Offices	70	75	55	85	<u>65</u>
Cafeterias and Multi-purpose Rooms	67	75	55	85	<u>65</u>
Gyms	65	75	55	85	<u>60</u>
Locker Rooms	69	75	55	85	<u>65</u>
Shops and Industrial Arts	67	75	55	85	<u>65</u>
Kitchens	65	75	55	85	<u>65</u>
Hallways and Common Areas	65	75	55	85	<u>65</u>
Maintenance and Transportation Shops	65	75	55	85	<u>65</u>

(1) WAC 246-366-090, Primary and secondary schools

(2) OSPI Health and Safety Guide for K-12 Schools in Washington, Section G001

1. Each space shall be allowed plus or minus two-degree F for heating set points controllable at the local thermostat or through the Energy Management Control System (use the work order system if no local thermostat control exists). Cooling set points shall be no lower than 75 degrees F.
2. Mechanical Cooling shall not be activated until May 15<sup>th</sup> and shall be deactivated no later than September 25<sup>th</sup>.
3. Some variations to the above set points may be allowed based on special considerations and with authorization from the Director of Facilities and Maintenance.
4. Spaces without Mechanical Cooling shall set cooling set points for 70 degrees F with an economizer cycle enabled with no outside air temperature lockout points.
5. Network server spaces are exempt from the standard set points to protect equipment.

**B. District HVAC Standard Operating Schedules**

1. Start times shall be set to achieve occupied temperatures one hour prior to the start of school.

2. Systems will go into unoccupied mode 30 minutes after school ends.
3. Start times for support facilities shall be set to achieve occupied temperatures one hour prior to the start of normal occupancy.
4. Support facility systems will go into unoccupied mode 30 minutes after normal occupancy.
5. Exhaust fans and outside air dampers will be locked out during morning warm-up periods.
6. Storage buildings will be set to maintain unoccupied temperatures.

**C. Exceptions to HVAC Operating Schedules**

1. Start times shall be set to achieve occupied temperatures one and one half hours prior to the start of school for schools starting after 9:00 AM.
2. Exhaust fans in science storage areas as identified by the Environmental Resource Coordinator are to remain on 24/7. Exhaust fans in custodial storage areas will be scheduled to run as necessary to purge contaminants.
3. If the building has an Energy Management Control System a holiday schedule will be set at the beginning of the year for all holidays and non-school days. The control system will minimize HVAC system usage during holidays and non-student days.
4. Variations from the set schedule will be made via Holiday and Event Schedules or for staff by use of push-button override controls when available.

**D. After-Hour Use of Buildings**

“After-hour” means any time before and after regularly scheduled school or work hours.

1. System push-button override controls will be programmed for two-hour increments. These system overrides should be used only if necessary.
2. Non-school hours of HVAC operation will be authorized via the administrator and rental procedures through Community Schools.

**E. Allowances and Responsibilities**

To optimize our efforts District administrators, teachers, support staff and students will be expected to follow these guidelines:

Building Occupants	<ul style="list-style-type: none"> <li>➤ May adjust occupied space set point temperatures from the standard by plus or minus 2 degrees if the control system allows local occupant adjustment.</li> <li>➤ May use push-button override controls for after-hour use if the control system allows local occupant adjustment.</li> <li>➤ Staff shall keep doors and windows closed when HVAC systems are operating.</li> </ul>
Facilities and Maintenance Staff	<ul style="list-style-type: none"> <li>➤ Setup and maintain HVAC system schedules including holidays and events.</li> <li>➤ Modify occupied space set point temperatures from the standard by plus or minus 2 degrees in spaces without local occupant adjustment.</li> <li>➤ Setup and maintain all remaining control strategies.</li> <li>➤ Perform Planned/Preventative Maintenance duties as required to maintain the systems in proper operating order.</li> </ul>
Custodial Staff	<ul style="list-style-type: none"> <li>➤ Night custodians should light only the specific area in which they are working.</li> <li>➤ Use push-button override controls for drying of floors after cleaning if available. Otherwise schedule system operation through the Maintenance Department.</li> </ul>

**F. Portables**

1. Start times shall be set to achieve occupied temperatures one hour prior to the start of school.
2. Systems will go into unoccupied mode 30 minutes after school ends.
3. During school hours the fan will run in “on” mode.
4. During non-school hours, the fan will be set to run in “auto” mode with a setback temperature set point.

**II. LIGHTING**

**A. Interior Lighting**

1. Daylight should be used whenever available.
2. Staff are responsible for ensuring that lights in unoccupied spaces are turned off. It is always cost effective to turn lights off.

3. Lights in gyms and multi-purpose rooms may remain on when the room will be re-occupied within 30 minutes to one hour. Lights should be turned off, or half-off, during longer periods of vacancy.
4. Hallway and common area lighting shall be turned off no later than 30 minutes after school ends. For after school activities in these areas, partial lighting will be permitted.

**B. Exterior Lighting**

The majority of District facilities have exterior lights controlled by the Energy Management Control System via a time schedule in conjunction with a photocell. Programming of exterior lights is the responsibility of the Maintenance Department and the work order system should be used to change the schedule for special events and approved District functions.

1. All exterior lights are expected to be off during daylight.
2. In the morning, lights shall turn on no earlier than 30 minutes before the custodial staff arrives.
3. In the evening, lights shall turn off no later than 30 minutes after the building is secured for the evening after custodial staff leaves.
4. For buildings with multi-zone exterior lighting control, lights shall be scheduled on only in areas where needed.
5. On weekends, exterior lighting will be allowed for District authorized facility events otherwise building and parking lot lights shall remain off.
6. Schedules for exterior lighting will be reviewed for summer operation and at the beginning of the school year.

**III. Building Domestic Water**

The majority of District facilities have the building domestic hot water system controlled by the Energy Management Control System. Programming of these systems is the responsibility of the Maintenance Department and the work order system should be used to change the schedule for special events and approved District functions.

1. Leaks should be reported immediately to building custodial staff for investigation and isolation. After custodial staff has attempted to isolate the leak, a work order should be submitted to the Maintenance Department and given a high priority.

2. Faucets should not be left running and unattended.
3. Domestic water temperatures will not exceed 120 degrees F.
4. Exception for Food Services: For individual building cafeterias with electric dishwashers or hot water tanks dedicated for Food Services, the Food Services Department will determine the necessary operating temperature and coordinate with the Maintenance Department.

**IV. General Building Procedures**

**A. Office Equipment and Computers**

1. Office and common area equipment (copy machines, printers, radios, etc.) will be shut down each evening by a dedicated staff person.
2. Prior to 8 pm computers should be logged off and the machine left on for DIS to perform its daily maintenance. The computer will be shut down by the DIS software. After 8 pm the user should shut down their computer.
3. Monitors and printers will be shutdown each evening by the staff member responsible for the equipment.
4. Electrical equipment in classrooms (overhead projectors, TVs, VCRs, computer monitors, printers, etc.) will be turned off at the end of each day by classroom occupants.

**B. Vending Machines**

1. Lights will be removed from all vending machines.
2. Vending machines shall have Energy Misers if they do not contain perishables.
3. Vending machines shall have the power cord unplugged during the summer break for unoccupied buildings.
4. Sponsors of each refrigerated vending machine shall pay \$50 per machine, per year to offset the cost of utilities. This amount will increase by \$50 per year until the amount reaches \$150 per machine, per year.

**C. Refrigerators, Freezers, Kilns, and Small Appliances**

1. Refrigerators and freezers should be cleaned out and turned off during summer break. Doors should be left open to prevent mold.
2. Food Services will coordinate the shutdown of all Food Services refrigeration during the summer break with the Maintenance Department.

3. Kilns, self-cleaning ovens, and any other high-energy use items should be run only during off-peak energy hours; after 10 PM. This will help to reduce electric demand charges.
4. Staff lounges and lunch rooms typically have refrigerators and coffee pots. Other locations of small refrigerators, freezers, and coffee pots should be discouraged. Exceptions will include refrigerators for medication for special education students and junior high or high school science rooms when the use of these refrigerator/freezers is part of the science program.
5. Schools or classrooms with water coolers will unplug the units during the summer, winter, and spring breaks.
6. Task and accent lighting will be allowed only if compact fluorescent light bulbs are used. If there is a medical reason for special lighting needs the Principal should contact the Director of Facilities and Maintenance to address the issue and review it annually.
7. For safety reasons, space heaters may only be used when authorized by the Maintenance Department.

**V. Water Conservation**

1. Students and staff are expected to practice water conservation at every opportunity.
2. Landscaping should use draught tolerant design and native plants whenever possible. These areas will not be irrigated once established.
3. Irrigation months shall be limited to June through October.
4. Irrigation timers will be programmed for the most efficient watering schedule for a specified landscape and soil type. Irrigation control systems will only be operated by district grounds staff.
5. All outdoor watering should be scheduled to minimize evaporation, prevent disease, and protect irrigation equipment.
6. During drought seasons, irrigation will be limited to secondary school playfields and newly planted landscaping.

**VI. Solid Waste and Recycling**

1. All students and staff will maximize efforts to recycle materials such as paper, cardboard, and metal/plastic containers to minimize the amount of solid waste entering our dumpsters and landfills.
2. The custodial staff will monitor the quantity in the garbage and recycling dumpsters. Dumpster size and frequency of pick-ups will be adjusted according to need and cost economy.
3. Regular hauling service will be discontinued and put into “On Call” status during winter and summer vacations whenever possible.