

6811P: Resource Conservation Management Program

Introduction

The focus of the Resource Conservation Management Program is long-term, sustainable measures, practices and procedures that reduce consumption of natural resources. A successful Resource Conservation Management Program welcomes and relies upon active participation by all members of the Camas School District. Every person will be expected to be an "energy saver" as well as an "energy consumer."

Responsibilities

The principal/administrator will be responsible for the total energy usage of her/his building.

The teacher will be responsible for implementing the guidelines during the time that she/he is present in the classroom.

The building maintenance personnel will be responsible for the efficient operation of all mechanical systems and run times of the HVAC, hot water, and lighting equipment.

The custodians will report water leaks, electrical, mechanical problems and all out of the ordinary changes in heating and cooling to building maintenance. The custodians will also provide staff and students with assistance for recycling. The custodians will use district approved "green" cleaning products which will reduce waste, promote a healthier workplace and environment for learning.

Students and staff will be given the opportunity to recycle and reduce all classroom, cafeteria, kitchen and office solid wastes. They will also be given the opportunity to participate in awareness and training components to enlist the support of all district staff and students in reducing unnecessary consumption of electricity, natural gas, water and consumable materials.

The Energy Utilities Secretary will make available the data reflecting energy consumption to the district administration, building conservation groups and school board. She/he will support the Director of Operations by tracking energy use, alerts, trend data, and maintaining the resource conservation management website.

The Director of Operations will provide support for each buildings energy conservation efforts by monitoring and enforcing energy and resource conservation management measures under adopted policies and procedures.

Heating, Ventilation, Cooling Set Points

- Space temperatures will be set in accordance with the following table:

Area	Occupied Set Points		Unoccupied Set Points	
	Heating	Cooling	Heating	Cooling
Classrooms, admin. offices, work rooms, libraries, meeting rooms, staff lounges, locker rooms.	68°-70°	74°-76°	55°	90°
Cafeterias, commons, shops, industrial arts, gyms, kitchens, restrooms, hallways.	65°	76°-80°	55°	90°
Storage rooms.	60°	80°	55°	90°
Computer labs, print shop	68°-70°	74°-76°	55°	85°
Headend or MDF rooms	NA	NA	65°	72°

Procedures for Heating, Ventilating and Cooling (HVAC)

- The difference between heating and cooling set points will be no less than 6 degrees.
- Windows and doors to the building envelope, classrooms and offices are to remain closed while mechanical heating or cooling equipment is in operation.
- Space heaters may only be used by prior authorization and only for times when a building's heating system cannot deliver space temperature within district temperature ranges. Space heaters will be provided by the maintenance department. Space heaters brought from home will not be permitted.
- If an Arctic air outbreak occurs, the 55 degree setback could cause coils/pipes to freeze or not allow the building to heat to a comfortable level by the time students arrive. The set point for unoccupied time will be moved to 60 degrees.

Operating Schedule for HVAC

- Monday – Friday HVAC schedules are based on staff contract work times.
- After school and weekend HVAC are provided for academics, athletic, school clubs, community education events and parent meetings only.
- Heating and cooling systems will not be enabled during non-school hours from April 1st through October 15th unless weather events indicate otherwise.
- Professional development days, the HVAC system will only be enabled in occupied areas to the minimum extent necessary.
- The HVAC system should not operate during school breaks and holidays except for freeze protection, school related activities, and custodial/maintenance worker occupied zones if needed.
- Start times for heating and cooling equipment will be set to achieve occupancy temperature no sooner than 15 minutes prior to required staff arrival time for a majority of the staff.
- Heating, cooling, and ventilation systems will turn off no later than 30 minutes after student dismissal times for typical school days. Locker rooms and gyms will be in the occupied mode until after school activities (practices and contests) are concluded.
- Unless otherwise stipulated, after hours use of buildings will be set in the unoccupied mode.
- Occupied hours are considered those where a majority of building staff is required to be in the building or when groups of students, parents or staff are in attendance in portions of a building. (athletic events, daycare, school related activities and community education events). All other times, will be considered unoccupied.
- During the unoccupied summer weeks, the HVAC system will operate in the unoccupied mode. Exceptions will be made for custodial/maintenance work zones if necessary. Summer school and other related activities will be concentrated to occupy the minimum number of buildings, building areas, and rooms for cooling if necessary.

Procedures for HVAC Maintenance

- Building maintenance personnel will be responsible for entering heating and cooling set points and HVAC run times.
- All HVAC equipment shall be operated and maintained in accordance with the manufacture's recommendations and warranty requirements or as conditions dictate.
- All HVAC equipment shall be maintained in accordance with the district's preventative maintenance program.

- All district boilers will be tested yearly and tuned up as required to pass performance testing.
- Calibrate temperature thermostats every three years (preventative maintenance program).
- Recalibration temperature controls every year (preventative maintenance program).

Procedures for Lighting

- Lights will be on only when a room or space is occupied.
- Reduced wattage task lighting is encouraged in large spaces, such as classrooms, where only one or two people occupy the space. Consider lighting only a portion of the room.
- Custodians should only light their immediate work area when working after dark and determine that all other lighting is off.
- Daylight should be used whenever possible. If day lighting is adequate for a specific task then artificial light for the task should be eliminated.
- Spaces will be lit in accordance with generally accepted industry standards for specific spaces and uses.
- All staff and students are responsible for turning lights off in space they are the last to exit.
- Lights in all gymnasiums, cafeterias, commons, and auditoriums will be off unless the area is being utilized.
- All building lights will be off during unoccupied hours.
- All outside lights will be turned off during daylight hours.
- Exterior lights/parking lot lights are to remain off at night except during hours when egress lighting is required for occupied spaces.
- In the morning, exterior lights/parking lot lights are to be turned on no more than 15 minutes prior to the arrival of the first building occupant.
- In the evening, exterior lights/parking lot lights are to be turned off no more than 15 minutes after the building is secure for the evening.
- All exterior lights/parking lot lights are to remain off over night and for the weekend and unoccupied school breaks and holiday.
- Failed outside lights and photocells shall be assigned for normal maintenance work order status.

Plug Loads

The School Board and the Operations Department recognizes that a need exists to use helpful electrical appliances in the schools. Every effort will be made to accommodate a reasonable use of equipment. Because of fire codes, safety regulations and energy consumption issues, the School Board and the Operations Department will limit the use of such devices as follows:

- No personal appliances will be allowed in classrooms without prior written approval. Mini refrigerators, microwaves, coffeemakers, hot plates, toaster ovens, crock pots, bread making machines, specialized grills must be approved for commercial use and be limited to the kitchen, faculty lounge or other appropriate area defined by the principal and approved by the Operations Department.
- Electric fans must be U.L. approved and used in accordance to the manufacturer's specifications.
- Electric staplers, hole punches, computers, clocks, radios, televisions and similar devices used in instructional related services are allowed but must be U.L. approved.
- Electrical equipment used by vocational education and consumer science must be approved by the Director of Career and Technology Education.

- Aquariums must be U.L. approved. This includes all components including, but not limited to, lights, heaters and pumps.
- Extension cords must be U.L. approved and a minimum of 12-gauge wire and will be for temporary use only.
- Electrical equipment in classrooms (overhead projectors, TVs, VCRs, DVD players, document cameras, etc.) shall be turned off at the end of each school day by the classroom person in charge.
- All office equipment is to be turned off daily. Exceptions would include fax machines and critical computers (HVAC computer).
- Copiers and printers should utilize power saver modes when not in use for more than 60 minutes.
- Lights are to be removed from vending machines.
- Where applicable, vending machines will be equipped with venter miser, or other energy limiting equipment, to limit machine cycling during unoccupied hours.
- During summer break, food from district refrigerators and freezers shall be consolidated into the smallest space necessary. Refrigerators and freezers not being used shall be cleaned and turned off/unplugged (kitchens and faculty lounges).

Computers

- Computers will be programmed to have equipment "sleep" when not in use for more than 20 minutes. Turn computers off at the end of each day unless instructed otherwise by the technology department for after hour's service.
- All non-networked CPUs and computer peripherals will be turned off at the end of the school day each day (monitors, speakers, etc.).

Solid Waste Reduction

- Every classroom, kitchen, cafeteria, commons and office will be provided opportunities to recycle.
- Staff and students shall participate in Camas Public Schools recycling program by recycling cardboard, cans, glass, paper, plastic, and wet garbage from lunches.
- Set double-sided printing as a default for copiers and printers where possible.
- Promote the use of .pdf files and email correspondences in lieu of hardcopies.

Water Conservation

- Domestic hot water systems will be set no higher than 120 degrees.
- Kitchens and cafeteria hot water systems will be set as directed by manufactures' recommendations and warranty requirements for kitchen equipment to function properly.
- All hot water heating systems will be turned off during unoccupied times unless freeze protection is required.
- School gardens, landscaped areas, lawns, and non-scheduled fields shall be minimally irrigated unless the area is being established. Landscaped areas should be planted with drought tolerant species where possible.
- Scheduled fields shall be mechanically irrigated; watering systems shall only operate at night.
- All plumbing, flush valve, and irrigation leaks shall be assigned emergency work order status.

Communication

- Provide conservation trainings for district staff members with responsibilities over

the utilities resources.

- Provide utility data to administration, principals, building conservation groups, maintenance and school board.
- Promote and recognize successful conservation programs in schools.
- Model conservation and recycling in the classroom.
- Each building shall form an Energy Conservation Committee (Green Team) formed of staff and students to work on energy cost savings, recycling issues and educational outreach.
- The Director of Operations, the Energy Utilities Secretary and the PIO will develop a plan, using a variety of media to communicate the district's conservation efforts to staff, students, and community.

Camas School District
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