RIDGEWOOD BOARD OF EDUCATION

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R 7651 ENERGY CONSERVATION AND BUILDING MANAGEMENT

Responsibilities

Every person is expected to become an "energy saver" as well as an "energy consumer."

The staff member is responsible for implementing the guidelines during the time that he/she is present in the instruction room or office.

The custodian is responsible for control of common areas, i.e. halls, cafeteria, etc.

Since the custodian is typically the last person to leave a facility in the evening, he/she is responsible for verification of the nighttime shutdown.

The building administrator is responsible for the total energy usage of his/her facility.

The Energy Specialist provides regular (at least semi-annual) program update reports to the Board.

The Energy Specialist performs routine audits of all facilities and communicates the audit results to the appropriate personnel.

The Energy Specialist is responsible for either directly or indirectly making adjustments to the Organization's Energy Management System (EMS), including 24-hour monitoring, temperature settings, and setting and adjusting run times for Heating, Ventilation and Air Conditioning (HVAC) and other controlled equipment.

Administration will regularly communicate the importance and impact of the energy conservation program to its internal and external constituents.

The Energy Specialist provides monthly energy savings reports to building administrators detailing performance results.

The district is committed to and responsible for a safe and healthy learning environment.

To complement the district's behavioral-based energy conservation program, the district shall develop and will cause the contracted service company to implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.



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General

Instruction room doors shall remain closed when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e. between hallways and gym).

Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the organization's facilities to ensure compliance with organization guidelines.

All applicable exhaust fans should remain on as per code.

Each office area's personnel will ensure all office machines (copy machines, laminating equipment, etc.) shall be switched off each night and during unoccupied times. Fax machines should remain on.

Each staff member will ensure that their own area's computers are turned off each night. This includes the monitor, local printer, and speakers. Network equipment should be excluded.

All capable PC's should be programmed for the "energy saver" mode using the power management feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10-minutes of inactivity.

Cooling Season Occupied Set Points	74°F - 78°F
Unoccupied Set Point:	85° F
Heating Season Occupied Set Points	$68^{\circ}F - 72^{\circ}F$
Unoccupied Set Point:	55°F

¹Set points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"

Air Conditioning Equipment

Occupied temperature settings shall NOT be set below 74°F.

During unoccupied times, the air conditioning equipment shall be off. The unoccupied period begins when the students leave the area at the end of day. It is anticipated that the temperature of the instruction room will be maintained long enough to afford comfort for the period the staff remains in the instruction room after the students have left.



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Air conditioning start times may be adjusted (depending on weather) to ensure instruction room comfort when instruction begins.

Ensure outside air dampers are functioning correctly and to code.

Relative humidity levels shall not exceed 60% for any 24 hour period.

Air conditioning should not be utilized in facilities during the summer months unless the facilities are being used for summer school or administrative areas. Air conditioning may be used by exception only with approval of the building administrator.

In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned instruction rooms or dining areas should be kept closed as much as possible.

Ensure dry food storage areas are maintained within code requirements. Typically, this is $55^{\circ} - 75^{\circ}$ F temperature and 35% - 60% Relative Humidity. Utilize loggers to verify.

Heating Equipment

Occupied temperature settings shall NOT be above 72°.

The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather.

The unoccupied time shall begin when the students leave an area.

During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times.

Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.

For heat pumps, ensure a 6° F dead-band between heating and cooling modes.



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Lighting

All unnecessary lighting in unoccupied areas will be turned <u>off</u>. Staff should make certain that lights are turned <u>off</u> when leaving the instruction room or office when empty where auto lighting systems are not in place. Utilize natural lighting where appropriate.

All outside lighting shall be off during daylight hours.

Gym lights should not be left on unless the gym is being utilized.

All lights will be turned off when students and staff leave for the day. Custodians will turn on lights only in the areas in which they are working.

Refrain from turning lights on unless definitely needed. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.

Water

Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately.

Ground watering should only be done between 4am - 10am. Do not water during the heat of the day, typically between 10am - 8 pm.

When spray irrigating, ensure the water does not directly hit the facility.

Disclaimer: The Board shall adopt, observe and implement these guidelines as provided. However, these guidelines are not intended to be all-inclusive, and they may be modified for local conditions. These guidelines supersede all previous instructions related to energy conservation or facility management.

Adopted: 22 April 2013

