**Seattle University Facilities Services Resource Management Plan**

In support of Seattle University's many resource conservation and sustainability policies and practices, the following guidelines are set forth to establish general operating standards for energy and resource consumption in occupied buildings. Adherence to these standards will reduce utility expenditures, optimize indoor environmental conditions, and minimize environmental damage through reduced greenhouse gas emissions.

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

### Allowances & Responsibilities

| | |
|---|---|
| Building Occupants | • Adjust occupied space temperatures by 4 degrees<br>• Use push-button overrides for after-hours use<br>• Keep materials away from/off of HVAC vents |
| Maintenance & Operations | • Setup and maintain HVAC schedules including holidays and campus events<br>• May modify occupied space temperatures by 4 degrees |

### Operating Schedules

Heating systems should be operated in the most economical and efficient way possible, i.e., they should operate for the minimum amount of time required to provide the approved climate for a specific area and activity.

- Start times shall be set to achieve occupied temperatures no earlier than 7:30 AM, unless standard operating hours precede this time. For building control systems which have intelligence that determines when to start heating to bring space to its set temperature by the occupied time, i.e., OPTIMUM function, these systems will achieve optimum function no earlier than 15 minutes prior to 7:30 or standard occupied time. Exhaust fans shall be locked out during WARM-UP periods.
- Systems shall shut OFF, or change into UNOCCUPIED mode, at the end of standard operating hours (between 5 and 7 PM).
- Heat and ventilation may continue to reception areas until the posted office close time.
- All systems shall remain in UNOCCUPIED mode during non-scheduled work hours.
- EXCEPTION: Exhaust fans in critical areas as identified by OSHA or other regulator/safety agencies are to remain on as required by code.
- Variations from the set schedule will be made via the campus Holiday and Event Schedules or for staff, via use of push-button override controls when authorized (See After-Hours Use below).
- HVAC in storage areas shall be setup to cycle fans to maintain unoccupied temperatures.
- For buildings with an Energy Management Control System (EMCS), a holiday schedule shall be set prior to all holidays and non-work days. The EMCS will order "ALL OFF" for these days.

### After-Hours Use of Buildings

"After-hours" refers to any time before and after regularly scheduled office/shift hours.

- System override buttons shall be programmed for one-hour increments.

- Non-work hour HVAC operation shall be authorized when either building managers or Conference & Event Services makes a request via the work order system.
- Building managers should make efforts to group after-hours activities into a specific HVAC zone such that minimal system energy is required.
- Full building systems should not be activated if only one or two staff people are in a building.

**Temperature Settings**

| Area | Occupied Set Points | | Unoccupied Set Points | |
|---|---|---|---|---|
| | Heating | Cooling[1] | Heating | Cooling[1] |
| Offices | 70 | 74 | 55 | 85 |
| Meeting Rooms & Libraries | 70 | 74 | 55 | 85 |
| Staff Lounges & Cafeterias | 70 | 74 | 55 | 85 |
| Locked Rooms | 69 | 74 | 55 | 85 |
| Work & Copy Rooms | 70 | 74 | 55 | 85 |
| Computer Labs | 70 | 74 | 55 | 80 |
| Shops & Industrial Arts | 69 | 75 | 55 | 85 |
| Gyms | 69 | 74 | 55 | 85 |
| Kitchens | 69 | 74 | 55 | 85 |
| Restrooms | 69 | 74 | 55 | 85 |
| Hallways & Common Areas | 70 | 76 | 55 | 85 |
| Storage Rooms | 62 | 78 | 55 | 85 |

[1] For buildings with mechanical cooling. For buildings without mechanical cooling, see special notes below.

- Each individual office space will be allowed a four-degree programmed temperature deviation controllable at the local thermostat. Residential units shall have more control over room temperature.
- The difference between heating and cooling set points shall be set no smaller than 4 degrees.
- Space heaters may only be used when authorized by the Controls Shop Lead.
- In the event of cold weather, building maintenance will be responsible for ensuring that freeze-protection set points are reasonable and are returned to standard set points once the danger of sustained freezing temperatures has passed.
- Staff should implement a "*Hot Tips for Staying Cool*" program in the fall and spring to improve comfort and avoid interior building heat gain.
- Some variations to the above set points may be allowed based on the special considerations listed below or with authorization from maintenance.

**Special Considerations for Specific HVAC Systems**

- Optimum start/morning warm-up controls shall be enabled.
- Economizer cooling shall be enabled with the lockout set to 73$^{o}$F outside air temperature.
- Occupancy sensor control of HV shall be enabled (if available).
- For most building areas, heating offset will be set to 1; cooling offset will be set to 5.

- For hallways; heating offset will be 5, cooling offset will be 6.
- In areas where a single sensor or thermostat serves multiple spaces, it may be necessary to deviate from recommended set point levels in order to provide a reasonable level of comfort throughout all areas served.

**Boiler Systems**

- Boilers shall be locked out when outside air temperatures are above the balance point.

**Spaces without Mechanical Cooling**

- Cooling set points as low as 73 $^{o}$F will be allowed with an economizer cycle enabled as described above.
- Unoccupied cooling set points shall be set to 85 $^{o}$F.
- Morning cool-down cycles shall be implemented to pre-cool buildings during hot weather.

**Stand-alone Thermostats**

- Stand-alone thermostats shall be programmed with the same schedules and temperatures as noted above.
- During occupied hours, the fan shall be programmed to run continuously.
- During non-work hours, the fan shall be set to run in OFF or AUTO mode with a setback.
- The thermostat should be kept in the RUN PROGRAM mode at all times except during holidays to facilitate full shutdown.
- If the system is not capable of programmed holidays, it should be placed in the OFF position and/or setback to 55$^{o}$ F during holidays.
- Thermostat programs and battery backups should be checked a minimum of twice yearly, as dictated by a Preventative Maintenance (PM) schedule. Batteries should be changed once a year.

**General Building Operation**

- Staff should keep exterior doors and windows closed when mechanical ventilation is on.
- Exterior doors should not be propped open.
- Staff members are responsible for closing their blinds at the end of the day.

## *Interior Lighting*

- Daylight shall be used whenever available; natural daylight provides free lighting and free heating and has been shown to increase employee morale and productivity.
- All staff are responsible for ensuring that lights in unoccupied spaces are turned off. It is always cost effective to turn lights off no matter how long you will be away.
- Hallway and common area lighting shall be turned off no later than 30 minutes after office hours typically end. For after-hour activities, half-lighting will be permitted in these areas.
- Lighting scheduling and occupancy sensors shall be used where feasible to ensure common area lighting is utilized efficiently. Overrides will be available when lighting is needed during off times.
- HID (High Intensity Discharge) lights that require warm-up periods may remain on when the area will be re-occupied within 30 minutes. HID lights should be turned off, or half-off, during longer periods of vacancy.
- Staff working in large rooms should take steps to light only the area they are working in (if possible).
- Nighttime janitorial staff should light only the specific area in which they are working.

## *Exterior Lighting*

- All exterior lights are expected to be off during daylight.
- Exterior lighting should be connected to the direct digital controls system (DDC) and scheduled via a photocell to light spaces efficiently during dark hours.
- Where connection to the DDC is not possible, lighting should turn on no earlier than 30 minutes before standard building hours and turn off no later than 30 minutes after the building is secured for the evening, except where lighting is needed for security purposes.
- For buildings with multi-zone exterior lighting control, lights should be scheduled on only in areas where needed.
- On weekends, exterior lighting will be allowed for authorized work or events; otherwise building and parking lot lights should remain off except for security purposes.
- Schedules for exterior lighting will be reviewed periodically for improvements and adjustments during night walks.

## *Plug Loads*

- Electrical equipment (computers, copy machines, printers, coffee pots, radios, etc.) should be turned off at the end of each work day.
- Computer monitors should be turned off when not in use.
- Power management settings on computers shall meet EPA energy star criteria.
- Personal appliances are discouraged in offices and other areas that are not designed as staff lounges or kitchens. This includes refrigerators, microwaves, coffee pots, etc. These resources will be provided in break areas. Distribution of personal appliances throughout our buildings adds stress to electrical circuits, consumes unnecessary energy, and can be tagged as a fire hazard by local officials.
- Building refrigerators and freezers will be cleaned out and coils vacuumed periodically based on preventative maintenance schedules.

## *Building Water*

- Leaks should be reported immediately to the Facilities Resource Center (FRC) via an emergency work order request and phone call for investigation and isolation.
- Toilets shall not be used for trash.
- Faucets should not be left running and unattended.
- Automatic faucets will be set to run no longer than 15 seconds.
- Domestic water temperatures shall not exceed 120 degrees, unless where required by public health.
- Dishwashers should be run with full loads.
- In restrooms, all faucets shall be equipped with low-flow aerators. These are available from many local water districts. Maintenance staff will be given aerators to install and a backup supply for when they need to get switched out. Aerators should be checked periodically and replaced as necessary.
- Use of low-flow toilets, sprayers, aerators, and other equipment shall be standardized by the Mechanical Shop.

## *Irrigation Water*

https://seattleu.policystat.com/policy/7811240/latest/

- Irrigation shall start no earlier than dusk and be completed prior to three hours past sunrise.
- Irrigation of lawns and fields should be limited to one inch per week.
- Landscape vegetation should be allowed one-half inch of water per week.
- Native and drought tolerant vegetation are encouraged and shall not be irrigated.
- Irrigation will be turned off when rainfall nears one inch per week. Systems that are equipped with a rain gauge will facilitate this automatically; maintenance shall be responsible for modifying operation of systems without rain gauges.
- Staff should report irrigation system running during the day, standing water or wet pavement when it has not rained, and/or muddy areas to the FRC as an emergency work request.

## *Solid Waste and Recycling*

- The Resource Conservation Manager shall monitor volumes of waste and coordinate changes in dumpster size and frequency of pick-up as necessary.
- All staff shall minimize waste and recycle/compost to the greatest extent possible. This includes, but is not limited to, participation in the following recycling/reuse programs:

## Waste Reduction

### Waste Minimization

- First and foremost, the university should focus on reducing the items and materials our community uses and wastes, and re-use or repurpose items when acceptable/possible.
- Recycling and composting should be the last course of action, and only done if items are recyclable, clean, and empty.
- Only items or materials that are non-recyclable should they be disposed of in a landfill receptacle.

## Recycling

### Basic Recyclables

- Our blue bin recycling program allows for collection of mixed paper, cardboard, aluminum and tin cans, and rigid plastic containers. These materials must be clean, empty, and dry.
- Collection sites are located throughout campus and should be clearly labeled.
- If a facility does not have recycling collection, needs new signs stating what may be recycled, or if assistance is needed with the recycling of bulky, large or unusual items, contact the Recycling Coordinator via a work order.

### Cardboard Recycling

- Students who live in Residence Halls should flatten cardboard boxes and place them next to a recycling receptacle to be recycled.
- Faculty and staff should place flattened cardboard next to indoor waste station near their offices, classrooms, or in common areas where waste is collected. For large pick-ups, please submit a work order.

### Toner Cartridges

- The Recycling Coordinator accepts toner cartridges. To recycle these, place small cartridges in an envelope addressed to "Recycling" and send via campus mail.
- For large quantities of cartridges, tape a piece of scrap paper to the cartridge box addressed to "Recycling" and send via campus mail, or submit a work order for pickup.

**Computers and Electronics**

- The Recycling Coordinator accepts computers and electronic waste, both of which must be properly recycled. To recycle cellphones and small electronics, place them in a box or envelope addressed to “Recycling” and send via campus mail.
- For larger electronics and light bulbs, submit a work order.

**Batteries**

- Staff and faculty can place batteries in a box or envelope addressed to “Recycling-Dead Batteries” and send via campus mail.
- Students in the university-owned Residence Halls and Murphy Apartments can place batteries in the battery bin in the trash/recycling closets.
- Rechargeable batteries from your home should be recycled at a local store's drop off bin - find a store. Take alkaline batteries from your home to a King County Household Hazardous Waste Facility.

**Polystyrene**

- Polystyrene, or Styrofoam™, products can be collected for recycling; place them next to your recycling bin in a plastic bag to keep them clean and dry. Styrene foam must be dry and clean and have no tape, labels, metal objects, or food on it.
- Consider reusing packing peanuts or drop them off at SUperCopy for other to use.
- For large pickups, submit a work order to the Recycling Coordinator.

## Composting

- Seattle University composts organic waste in accordance with university policy and city of Seattle regulations. Green bins for organic waste can be found in interior and exterior spaces across campus, and new locations for bins can be proposed by submitting a work order.
- The Recycling Coordinator/Compost Technician maintains the university’s compost facility, which turns pre-consumer organic waste from campus kitchens and cafés into a soil amendment used by the Grounds department. It is the Compost Technician’s responsibility to ensure that all compost feedstock is collected in a timely manner and properly processed.
- All other organic waste generated by the campus is to be collected and hauled to a regional commercial composting facility.

## Surplus

https://seattleu.policystat.com/policy/7811141/latest/

**Office Furnishings**

- If you have items that are in relatively good condition (large cabinets or light fixtures, for example) that you no longer have a use for, contact the Recycling Coordinator.
- Seattle University partners with Habitat for Humanity, Goodwill, and the Northwest Furniture Bank to find new homes for functional furniture.

- The Recycling Coordinator will also recycle non-reusable furnishings as scrap metal or construction & demolition debris material.

**Office Furniture**

- Office furniture is managed by the Furniture, Fixtures, and Equipment Manager, who is responsible for deciding the highest use of furniture items on campus and recycling them when they can no longer be used.

**Office Supplies**

- Consider setting up an office supply exchange area for used office supplies such as binders, folders, envelopes, in-boxes and small office equipment.
- For collection of office supplies, submit a work order to the Recycling Coordinator.

**Clothing & Textiles**

- Students can donate and recycle clothing and textiles (cloth and woven fabric) in the donation bins are set up in the residence hall lobbies. Please bag these items and place them in the clothing donation collection areas. Textiles should be bagged and labeled as such.
- Faculty and staff should contact the Recycling Coordinator, submit a work order for pick up, or utilize campus recycling events to donate and recycle clothing and textiles.

## *Landscaping and Grounds Management*

https://seattleu.policystat.com/policy/7947891/latest/

- The Guidelines for Sustainable Landscape Management at Seattle University informs campus maintenance and can be found here.
- Campus grounds shall be maintained using organic practices, including integrated pest management, composting, and chemical-free weed suppression
- SU has at least five rain gardens on campus, which collect rain water runoff from streets, sidewalks and roofs. The soil and plants remove pollutants as the runoff slowly infiltrates the groundwater table. Rain gardens are recommended for future campus locations to reduce pollution and control stormwater while providing an attractive environment for campus enjoyment.
- SU's grounds are designated as a Backyard Wildlife Sanctuary, a Wildlife Habitat, and Tree Campus USA. These certifications are an important part of providing enriched outdoor classroom space, preserving natural green spaces in our urban landscape and maintaining local wildlife and plant populations, helping to ensure our campus remains safe, attractive, and sustainable.
- SU Grounds hosts an Edible Campus Internship coordinating staff, faculty, student urban gardening at two organic community gardens on campus, where community members can grow their own vegetables and herbs in raised beds and access hand tools, watering cans, and hoses. The student urban agriculture club, Food With Spirit, hosts a vegetable plant sale fund raiser each year during Earth Month.
- Grounds and student interns maintain several other spaces on campus for edible plants. Learn more at The Edible Campus page.