

# RESOURCE CONSERVATION POLICY GUIDELINES

**The University of Texas Medical Branch is committed to a policy of efficient energy management, environmental excellence, and resource conservation.**

As such, all UTMB buildings and facilities will be operated in the most energy efficient manner while maintaining quality of patient care, education or research.

All UTMB faculty students and staff will comply with the Resource Conservation Policy.

Implementation, education and enforcement of this policy is a departmental responsibility. The Facilities Operations and Management department will be available to assist in this effort and provide educational, as well as performance, information.

## **Energy Conservation**

### **Operations and Daily Activities**

#### Space Temperatures

1.01 Building workspace temperatures will be allowed to fluctuate between 72-76 degrees in summer, and 68-72 degrees in winter. UTMB entity leaders will be the approvers for exceptions to the above space operating conditions. Generally, summer is considered to be the months of April through November and winter, the months of December through March.

1.02 Where possible, air conditioning and heating equipment will be set back during evenings, weekends and holidays, for varying periods except where it would adversely affect occupied or critical space requiring specific climate control. Entity leaders will approve exceptions.

1.03 Except for areas requiring special operating conditions such as patient care, electronic data processing facilities or other scientifically critical areas where rigid temperature controls are required, building and/or facility temperatures will be allowed to fluctuate between the limits stated above.

1.04 Reasonable accuracy will be maintained. Temperatures and relative humidity will be measured and monitored by Facilities Operations and Maintenance.

1.05 Room temperature will be determined by a thermometer within 24 inches of the thermostat.

1.06 For the situation of multiple rooms with one thermostat, the temperature will be measured as stated above in the room with the thermostat. The department will be responsible for adjusting the temperature setting.

### HVAC Operation

2.01 Scheduling of building and/or facility usage will be optimized consistent with approved academic and non-academic programs to reduce the number of buildings operating at partial or low occupancy. To the extent possible, academic and non-academic programs will be consolidated in a manner to achieve the highest building utilization. Further, the scheduling of buildings will be implemented in a manner to promote central plant and individual building air conditioning system shutdown to the greatest extent possible during the evenings, weekends and other holiday periods. Campus energy/utilities managers will make all attempts to change or update building operating schedules to match the changes in the academic programs on a continuing basis.

2.02 Where possible, air conditioning equipment (including supply and return air fans) will be set back evenings, weekends, holidays, and for varying periods each night, except where it would adversely affect critical or 24-hour operations. Returning these systems to operation should include enough time to bring space temperatures within seasonal ranges at the scheduled occupancy time (i.e. 8:00 AM)

2.03 Outdoor air ventilation will be set at 10 cfm/person or such other higher limits as prescribed by state law or regulations. This restriction does not apply to situations where 100% outside air is called for by equipment design or specific space requirements.

### Portable Electric Heaters

3.01 Non-University portable electric heaters or any other energy consuming warming devices are not to be used. Where possible, employees will dress for the comfort within their work environment and in accordance with departmental policy.

### Domestic Hot Water

4.01 Domestic hot water temperatures will not be set above 115 degrees. These limits will not apply in areas where other temperature settings are required by law or by specialized needs of equipment or scientific experimentation.

### Blinds/Shades/Doors

5.01 Close blinds and shades on sunlit windows during the cooling season (east windows during morning hours and west windows during the afternoon). Close east blinds at night to reduce morning heat gain. During the heating season, close blinds and shades at night to reduce heat loss. Close all unoccupied office doors

### Lighting

6.01 All lighting, except what is required for security purposes, will be turned off when buildings, facilities and space are unoccupied. Housekeeping personnel will turn the lights back on only for the time actually required to complete their work.

6.02 All outside lighting except what is required for security purposes will be turned off.

6.03 When buildings are occupied, it is the responsibility of the department to turn off all lights in unoccupied areas.

6.04 Lighting levels recommended by the Illuminating Engineering Society Lighting Handbook should be used as guidelines to avoid over-lit space. Auxiliary Fans

7.01 Ventilating or freestanding fans should not be left unattended.

### Lab Equipment

8.01 Vent hood sashes should be closed when not in use.

8.02 Bio-Safety Cabinets: Recirculating bio-safety cabinets (Class II, type A2) should be shut off at the end of the work day. 100% exhaust bio-cabinets (Class II type B2) are part of the calculated laboratory exhaust and are not to be shut off.

8.03 Autoclaves: The use of autoclaves should be optimized for batch loads for the processing of waste and sterilization of materials. Specific containment laboratory standard operating procedures may require that waste be processed at the termination of each project.

8.04 Laboratory Washers and Dryers: Use of laboratory washers and dryers should be optimized for batch load processing of laboratory glass and plastic ware. Washers and dryers should not be run with partial loads. Specific containment laboratory standard operating procedures may require that laboratory plastic ware be processed at the termination of each project.

### Office Equipment

Energy efficient equipment should be purchased whenever possible.

9.01 Turn on computers, monitors and printers only as needed and turn them off when not actively in use. Computer systems with “sleep” modes should also be activated for energy conservation while not in use. Computer labs need not have all the computers on when use is sparse. Even if computers must be on, monitors and printers can be switched off or put in sleep mode unless actively in use (including monitors for servers). Don’t leave equipment on continuously unless it is continuously in use.

9.02 Ensure all computers, monitors and laser printers have their energy management features enabled (sleep mode).

9.03 Use desk jet printers whenever possible. These are low wattage and give off much less heat than laser printers.

### Water Conservation

Domestic water/sewer services are a major expense at UTMB; in order to reduce the amount of wasted water, the following practices should be followed.

10.01 Low water use flush valves and flow restrictors on faucets and showers will be installed in all new and replacement projects.

10.02 All water leaks, dripping faucets, and fixtures should be reported promptly to Maintenance.

10.03 No single-pass cooling water will be used on mechanical equipment in new construction or remodels.

10.04 The use of irrigation water should be minimized through the installation of rainfall monitoring devices.

10.05 Never use RO/DI (purified) water for tasks where domestic water can be used.

## **Recycling Guidelines**

1. **Paper:** UTMB recycles all color and grades of paper. All paper is defaced before leaving campus and a certificate of destruction will be issued on request, by contacting the Waste Stream Coordinator at 23599. Paper is collected and transported in a double zipper recycle bags that are locked with plastic locks. **Fill recycle bags with less than 40 pounds of paper.** Call CLEAN or 26151 to schedule a pickup.
2. **Cardboard:** Remove all packing material such as shrink wrap, and styrofoam and flatten boxes. Call the CLEAN or 26151 to schedule a pickup.
3. **Pallet and Shipping Crate Recycling and Reusing:** Return all empty pallets and crates to the dock areas.
4. **Landscape Debris:** Landscape debris such as palm fronds, tree limbs, leaves, weeds, shrub cuttings etc. are collected in a 30 yard container and processed into landscape mulch.
5. **Ink Jet and Toner Cartridges:** Cartridges are collected and recycled two ways. The small inkjet cartridges are mailed directly to the vendor in a postage paid envelope. Contact the Waste Stream Coordinator at 23599 and these envelopes will be sent to you in the campus mail. The toner cartridges are to be put back in the original box with **Recycle** written on the box. Call CLEAN or 26151 to schedule a pickup.
6. **Metal:** A designated container for recycling mixed metals has been setup on campus for recycling ferrous metals: shelving, lockers, equipment, etc. Contact the Waste Stream Coordinator at 23599 for the location of the metal container or how to recycle non ferrous metal.
7. **Plastic & Aluminum:** UTMB has pilot recycling programs on campus for these items. Contact the Waste Stream Coordinator at 23599 to discussing recycling these items from your area.
8. **Office Supply Swap Shop:** UTMB's Online Swap Shop [www.utmb.edu/swapshop/](http://www.utmb.edu/swapshop/) offers members of the campus community an easy way to share surplus supplies and materials.
9. **Battery Recycling:** If you generate used batteries please collect for appropriate handling through Environmental Health and Safety (EHS). The battery casing will specify category. It is important to separate batteries by the categories below:
  - Nickel Cadmium - (rechargeable power tool, radio, camera)
  - Lithium - Battery terminals must be taped, capped or covered to prevent short circuiting (cell phone, watch battery, medical monitoring equipment)
  - Lead Acid - Battery terminals must be taped, capped or covered to prevent short circuiting (vehicle, computer)
  - Alkaline – (pager, flashlight)

Please label the collection box for the batteries collected in your by specific category, for example “Lithium Battery Disposal ONLY”. Improper mixing of batteries could cause release of toxic materials or fire. Schedule battery pick up on-line at:

[www.utmb.edu/ehs/epm/epm.html](http://www.utmb.edu/ehs/epm/epm.html) ; click on the **Chemical Waste Pick-up Request** form.

For all spills and emergencies please call EHS at 21781 or after hours the university operator and request the EHS on-call person.

10. **E-Waste:** Electronic devices such as computers and cell phones contain heavy metals such as lead, mercury, and cadmium. Environmental Health and Safety is now offering an electronic recycle program. UTMB manages E-Waste by following the procedures:
  - Any item with a UTMB identification tag must be returned to Inventory through Materials Management warehouse
  - Broken non Atos Origin computers are collected by Materials Management Warehouse staff for recycling
  - Atos Origin provides computer hardware and services to UTMB – computers through this service are returned to Atos Origin
  - If your department generates e-waste that is not managed in the above processes, please collect it to be recycled through EHS
  - Schedule e-waste pick up on –line at: [www.utmb.edu/ehs/epm/epm.html](http://www.utmb.edu/ehs/epm/epm.html) ; click on the **Chemical Waste Pick-up Request** form
  
11. **Mercury Replacement:** Environmental Health and Safety (EHS) has a volunteer mercury replacement program that will trade mercury-free thermometers in place of your mercury thermometers. Contact EHS at 70515 to find out if you qualify. If mercury needs to be disposed of or has been spilled please contact EHS at 21781.
  
12. **ChemSwap:** ChemSwap is a chemical redistribution program for laboratory chemicals designed for recycling free of charge.. These chemicals must be unopened, in-date chemicals to be considered for ChemSwap. RECYCLE, REDUCE, REUSE the unwanted stock chemicals in your laboratories. Visit the chemswap inventory online at: <http://www.utmb.edu/ehs/EPM/Chemswap.htm> prior to purchasing new stock. By participating in the Program you will help reduce the hazardous waste generated on campus.
  
13. **Fluorescent Lamps:** Silver tip fluorescent lamps contain mercury and are considered hazardous. Follow the guidelines below for disposal:
  - Do not break spent lamps
  - Whenever possible, package spent lamps in the original container
  - Label container “Spent Lamps” and schedule for pick up on-line at: [www.utmb.edu/ehs/epm/epm.html](http://www.utmb.edu/ehs/epm/epm.html) ; click on the **Chemical Waste Pick-up Request** form

## **Transportation**

As the largest employer in Galveston County, UTMB has the responsibility to encourage environmentally friendly commuting whenever possible.

13.01 The use of Metro vans and car pooling should be promoted. Faculty, staff, and students are encouraged to bike, or use public transportation to get around campus. UTMB has a volunteer commuter website. <http://intranet.utmb.edu/commute/>

13.02 Acquisition of new University fleet vehicles should be purchased with the highest fuel efficiency possible. Fleet vehicles should not be left running when in daily use.

## **Resource Conservation Taskforce/Green Teams**

These are UTMB professionals and volunteers who work with or encourage energy conservation, recycling, and environmental responsibility for the benefit of the University.

14.01 Resource Conservation Taskforce members are UTMB professionals in FOAM Utilities and Environmental Health & Safety. They are available for information and education in regard to this policy. They may be reached through the Conservation Initiative Website or by calling 76937

14.02 Green Teams are UTMB employees who support Resource Conservation programs. They will provide information and support of this policy and programs in their work areas. Every UTMB department should encourage and promote Green Team participation throughout their area. More information about Green Teams is available through the Resource Conservation Taskforce.

## **Conclusion**

UTMB is committed to a policy of energy conservation, recycling and environmental responsibility to the maximum extent consistent with the healthcare, education and research missions of the University. This commitment is not new. However, recent world events such as economic, and environmental changes, make it apparent there is much more that can be accomplished as an institution and by each of us on an individual basis.