TIDEWATER COMMUNITY COLLEGE
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No. 3202 Rev.: 0

Policy and Procedures **Date: December 23, 2009**

Subject: Energy Conservation

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Appendix A: Portable Space Heater Requirements

1. Purpose

This policy establishes guidelines and practices designed to foster energy conservation, sustainability, and environmental stewardship.

2. Policy

TCC facilities shall, to the extent possible, be designed, constructed, renovated, operated, and maintained in accordance with the latest energy efficiency standards and State and Federal energy conservation rules, including Governor's Executive Order 82 (2009) ("Greening of State Government"). In the interest of conserving energy, the following specific standards have been adopted and are applicable to all TCC facilities and occupants:

- Interior lights must be turned off when rooms are unoccupied. Lights designated to provide emergency egress lighting may remain illuminated.
- Computers must be powered down when not in use.
- Room environmental condition targets for occupied facilities are 68°F in the winter (heating) and 74°F in the summer (cooling).

- In TCC facilities that have programmable heating and air conditioning capabilities, during unoccupied periods, the temperature shall be allowed to cool down to 60°F in the winter and warm up to 85°F in the summer. This excludes areas with special environmental needs.
- Use of portable space heaters is discouraged due to safety and energy concerns. If there is a valid need for using a space heater in a specific office area, the need must be certified by the respective member of the President's Executive Staff and the device must be approved by the directors of Facilities Management & Services and Safety & Security.
- Unless otherwise exempted, all new or renovated facilities shall meet the Department of General Services (DGS), Division of Engineering and Buildings "Virginia Energy Conservation and Environmental Standards" for energy performance. In addition, all such buildings shall conform to LEED™ silver or Green Globes two-globe standards.
- When TCC is to lease space or build a new building in a metropolitan area where public transportation is available, it shall seek to lease or build within a quarter mile of a transit or commuter rail stop. When leasing or building facilities, the college also shall seek locations that are pedestrian and bicycle accessible.
- When TCC is purchasing a vehicle, a fuel-efficient, low-emission model shall be selected if such a model is available with the required performance capabilities. In addition, when TCC employees lease vehicles for college business, they shall request compact, fuel-efficient, and low-emission vehicles whenever feasible.
- TCC shall purchase or lease ENERGY STAR rated appliances and equipment for all classifications for which an ENERGY STAR designation is available.
- Beginning July 1, 2010, TCC shall procure only diesel fuel containing, at a minimum, two percent, by volume, biodiesel fuel or green diesel fuel, as defined in the *Code of Virginia* (§ 45.1-394). This requirement shall only apply to procurement of diesel fuel for use in on-road internal combustion engines and #2 fuel burned in a boiler, furnace, or stove for heating, and shall not apply if the cost of such procurement exceeds the cost of unblended diesel fuel by 5 percent or more.

3. Responsibilities

The Vice President for Administration shall develop and promulgate procedures to implement the policy delineated above.

The Director of Facilities Management and Services is designated TCC's Agency Energy Manager and shall provide management support to the college's energy-savings activities. The Director shall hold the Certified Energy Manager® certification awarded by the Association of Energy Engineers or shall achieve such certification

within one year of initial appointment. The Agency Energy Manager shall develop, implement, and monitor programs to effect energy consumption reductions across the college. The results of those programs shall be reported periodically to the President and Executive Staff.

4. Procedures

The following procedures are intended to reduce the amount of energy consumed in the course of the college's normal operations.

4.1. Lighting

Conservation of energy associated with lighting in TCC facilities can be achieved by:

- turning lights off in unoccupied spaces;
- installing occupancy sensors to de-energize room lighting after a period of 15 minutes or less of non-use in all suites, meeting rooms, classrooms/laboratories, and other spaces used sporadically;
- discontinuing use of incandescent lighting wherever more efficient lighting is possible, such as when compact fluorescent or light emitting diode (LED) bulbs can be used;
- maximizing use of natural light and turning off all non-essential lighting whenever possible;
- utilizing task lighting in lieu of overhead lighting when appropriate; and
- turning off exterior building architectural lighting between 11:00 p.m. and 6:00 a.m.

Actions taken to achieve energy conservation may not compromise the security of TCC's facilities or safety of persons at those facilities.

4.2. Interior Environment

TCC's buildings will be operated in a manner that conserves energy while providing an environment that is conducive to conducting the college's mission. To that end, room thermostats in conditioned, occupied spaces will be set to 68°F in the winter (heating) and 74°F in the summer (cooling). In a typical office or academic setting, the temperature will be maintained within 1.5 degrees on either side of the set point. For example, room temperatures in the winter would be allowed to decrease to 66.5°F before the system begins supplying heated air to the space, and that supply would continue until the temperature reaches 69.5°F. Then the cycle would begin again.

Where feasible, the college's Agency Energy Manager will program building heating and air conditioning systems to conduct night and weekend set-backs, allowing spaces to cool to 60°F in the winter and warm to 85°F in the summer, during unoccupied periods. This excludes areas with special environmental

needs. Building heating and cooling plans will be approved by the Vice President for Administration and, where appropriate, by the respective campus provost.

Energy efficiency should be considered when scheduling classrooms during periods of low utilization. For example, classes that meet on Friday afternoon or evening or on weekends should be consolidated into as few buildings as feasible to allow building heating and air conditioning system run times to be reduced, resulting in energy savings.

Portable electric space heaters may be used only in offices and only when necessitated by an employee's medical condition or an inability to maintain adequate heating of an office space. The requirements for use of a space heater are delineated in Appendix A.

4.3. Computers and Other Equipment

Across the college, more than 4,600 computers are in use in offices, labs, and classrooms. They represent significant energy utilization if they are not configured and operated efficiently. In addition, there are numerous other pieces of powered equipment, such as copiers, printers, calculators, shredders, and so on.

Computers, peripherals, and other powered equipment in offices will be turned off at the end of each working day. In computer labs, they will be turned off prior to the labs' closing times. In addition, computer power management software will be used to minimize the operation and consumption of electricity when computers are not in use for more than 30 minutes.

Only ENERGY STAR rated computers, peripherals, and other powered office equipment will be purchased for TCC. Additionally, computers will have Liquid Crystal Display (LCD) monitors/screens (or best performing equivalent) set to turn off after a period of 15 minutes of disuse, except in those cases where specific instructional or office mission requirements demand otherwise.

4.4. Appliances

Personal appliances (such as coffee makers, refrigerators, microwaves, etc.) not only add to the college's energy utilization but may also cause circuits to be loaded beyond their designed capacity. Such appliances may only be used if approved by the respective member of the President's Executive Staff. And only Underwriters Laboratories ("UL") approved devices may be used. If an ENERGY STAR rated model of the appliance is available, it must be used.

The quantities of college-provided appliances shall be reduced through consolidation to central locations, such as break rooms, for shared use whenever possible.

All appliances purchased with college funds are required to be ENERGY STAR labeled unless specifically approved by the responsible budget executive.

Exceptions are authorized if there are no ENERGY STAR rated appliances manufactured that meet the user's needs.

All appliances shall be turned off when not in use, unless it is detrimental to do so (for example a refrigerator or freezer).

5. Definitions

Energy. The primary utilities supplied to the college (electricity, natural gas, propane, fuel oil, etc.) and the secondary utilities derived from their use (steam, chilled water, hot water, etc.).

Energy Management. Activities that foster energy conservation, sustainability, or environmental stewardship.

Energy Star. A program of the US Environmental Protection Agency including rating of appliances and equipment for energy efficiency.

LEED™. A building rating system developed by the US Green Building Council, Leadership in Energy and Environmental Design; a voluntary, consensus-based national standard for developing high-performance, sustainable buildings with three versions of rating systems: LEED-NC (New Construction), LEED-EB (Existing Buildings), and LEED-CI (Commercial Interiors).

6. References

Governor's Executive Order 82 (2009): Greening of State Government

Code of Virginia (§ 45.1-394)

Virginia Energy Conservation and Environmental Standards

7. Review Periodicity and Responsibility

The Vice President for Administration shall review this policy annually at the anniversary of its approval and, if necessary, recommend revisions.

8. Effective Date and Approval

This policy is effective upon its approval by the College President on December 23, 2009.

Policy Approved:	Procedure Developed:
Deborah M. DiCroce President	Franklin T. Dunn Vice President for Administration

9. Review and Revision History

This is the first version of this policy.

APPENDIX A

TIDEWATER COMMUNITY COLLEGE POLICY

ENERGY CONSERVATION

PORTABLE SPACE HEATER REQUIREMENTS

All users of portable space heaters are required to register their heater for review & approval prior to use. These requirements apply to existing use and new use of portable space heaters.

Portable space heaters are a potential source of fire and injury if not used properly. The requirements listed below, applicable code requirements, and manufacturer's recommendations must be followed to maintain a safe environment.

A. APPROVAL. Portable space heaters shall only be permitted in office areas – i.e., not in classrooms/laboratories, closets, restrooms, breakrooms/kitchens, etc. – and only with the approval of the responsible member of the President's Executive Staff and after the following conditions are met. Before use, any portable space heater shall be inspected for the following.

1. All heaters must be Underwriters Listed ("UL") approved for their intended use.
2. Each heater shall be inspected by Facilities Management & Services staff to insure that the amperage draw will not overload the electrical circuit intended to power the heater.
3. Each heater shall be a standard 110/120 voltage rated and have no more than 1500 watts capacity.
4. Only electric, fan-driven heaters may be used. Fuel-powered (e.g., propane, kerosene, etc.) space heaters are not permitted. Space heaters with heated metal coils are not permitted. A guard or screen must cover the heating element.
5. Heaters shall not have worn or damaged electrical cords, and the plugs shall be in good condition.
6. Heaters must have a thermostat to automatically shut down the unit when the desired temperature is achieved.
7. Heaters must have a tip-over automatic shut down feature.
8. Each heater shall be approved using the Portable Heater Request and Approval Form for use in the specific space in which it is used.

B. USE.

1. Heaters shall be plugged directly into an electrical outlet. The use of any extension cord, surge protector, or outlet extender is strictly prohibited. Electric cords must be kept out of foot traffic paths to prevent tripping.
2. Heaters must be monitored when in operation and shall be turned off and unplugged when not in use, whenever the space is not occupied, and at the end of each business day.

3. Each heater shall be inspected at least weekly by the user to insure that it is in good working order. A record of this inspection shall be maintained by the user on the form provided below.
4. Annually, each heater shall be inspected by Facilities Management & Services staff in the space in which it is approved to be used. The inspection shall be documented on the form provided below.
5. Heaters may only be located on the floor. Heaters shall not be located on filing cabinets, tables, desks, or equipment. Nothing shall be placed on top of a heater.
6. Heaters must be kept at least 3 feet (36 inches) from all combustible materials (e.g., file cabinets, desks, trash cans, paper boxes, etc.).
7. Heaters must be placed at least 6 feet (72 inches) from any water source.
8. Heaters must not be placed under desks or in other enclosed areas. The heater must be in plain sight and clearly visible.
9. Portable electric space heaters shall not have worn or damaged electrical cords, and the plugs shall be in good condition.
10. Heaters need to be monitored daily. Heaters with missing guards, control knobs, feet, frayed power cords, etc. must be taken out of service and unplugged immediately and the Director of Safety & Security notified that the heater is no longer in use.
11. Any heater being used improperly shall be turned off, unplugged, and reported to the Director of Safety & Security.

C. PROHIBITIONS.

1. The use of any portable heater that is fueled by kerosene, propane, etc. or that produces an open flame is prohibited.
2. The use of any portable heater for permanent heating is prohibited.
3. Portable heaters shall not be placed underneath desks, in any means of egress (i.e., exit path), or any high traffic area.

To seek approval to use and register a portable space heater, the form on the following page must be submitted. A copy of the approved form will be maintained with the portable space heater at all times.

PORTABLE SPACE HEATER
REQUEST AND APPROVAL FORM

Requestor Name:		E-Mail:	
Campus/District: ☐ Chesapeake ☐ Norfolk ☐ Portsmouth ☐ Virginia Beach ☐ District			
Department:		Phone Number:	
Building:		Room Number*:	
** This is the room where the portable space heater will be used.*			
Specifications for Proposed Portable Space Heater: *(to be completed by requestor and confirmed by F&M staff)*			
Manufacturer/Model #			
1. Is it electric with standard 110/120 volt power and maximum of 150 watts?		☐ Yes	☐ No
2. Is it approved by Underwriters Laboratory (UL)?		☐ Yes	☐ No
3. Is it equipped with a safety shutoff switch that automatically turns off if tipped over?		☐ Yes	☐ No
4. Is it equipped with an operational thermostat that automatically turns it off when set temperature is reached?		☐ Yes	☐ No
5. Is it in good operating condition, i.e., no missing guards, control knobs, feet, frayed power cords, damaged plugs, etc.?		☐ Yes	☐ No
6. Is the location proposed for it appropriate, i.e., clearly visible, on floor, no nearby combustible materials or water sources, electrical receptacle available, power cord not in foot traffic pathway, etc.?		☐ Yes	☐ No
7. The need for this heater is:	☐ Medical	☐ Inadequate Heating	
I have read and understand the usage requirements set forth in the Policy on Energy Conservation and agree to abide by the requirements set forth therein. Signature of Requestor:		Date:	
I certify that the need for the requested heater is legitimate. Signature of Executive Staff Member:		Date:	
Approvals			
Director, Facilities Management & Services Approval:	☐ Yes	☐ No – reason(s) for disapproval:	
Signature:		Date:	
Director, Safety & Security Approval:	☐ Yes	☐ No – reason(s) for disapproval:	
Signature:		Date:	

Original: Requestor – to be maintained with the approved space heater
Copies: Executive Staff Member
Director of Facilities Management & Services
Director of Safety & Security

PORTABLE SPACE HEATER
EMPLOYEE SAFETY CHECKLIST

Employees utilizing a portable electric space heater shall physically inspect it and its work location on at least a weekly basis for compliance with the TCC's Policy on Energy Conservation. Any space heater found to be in non-compliance with college policy shall be made compliant for location or if damaged, immediately removed from service. To assist with compliance, the following safety checklist is provided:

All checklist questions must have a "**Yes**" answer for compliance with the TCC's Policy on Energy Conservation. A "**No**" answer to any of the following questions shall require the space heater to be immediately relocated for location compliance, or removed from service for its repair or replacement.

Employee Safety Checklist:	**Yes**	**No**
Does the heater bear a listing label from Underwriters Laboratory (UL), which indicates that the model has been evaluated and found to operate in a safe manner when the manufacturer's instructions are followed?		
Has the heater and its cord been inspected to ensure that it is operating in a safe manner and showing no signs of wear or damage?		
If the heater has been found to be operating in an unsafe manner or with a worn or damaged cord, has it been immediately turned off, unplugged, and the condition reported to Facilities Management & Services for investigation, and repair or replacement?		
Does the heater contain a built-in circuit to shut the appliance off if accidentally tipped over?		
Does the heater have a low center of gravity to minimize the potential for tipping over?		
Is the heater plugged directly into an electrical outlet, without the use of an extension cord or any type of multiplex outlet adapter?		
Has the heater been placed in a well-ventilated space for heat to escape and for air to circulate around it?		
Has the heater been placed at least three (3) feet away from all combustible materials (e.g. furniture, paper, curtains, clothing, etc.)?		
Has the heater been placed at least six (6) feet away from all water sources?		
Has the heater not been located under desks, in the means of egress (e.g. doorways, paths of travel, corridors, etc.) or in any high traffic area?		
Has the heater been turned off and left unplugged if unattended, even for a short period of time?		
Has the heater been turned off and left unplugged at the end of the working day?		

Employee: _____ Heater Location: _____

Signature: _____ Date: _____

This safety checklist shall be completed at least weekly and the most recent copy maintained with the heater.

PORTABLE SPACE HEATER

FACILITIES MANAGEMENT & SERVICES SAFETY CHECKLIST

Portable electric space heaters are not intended to provide supplemental heat in an office area unless the office area has been inspected and evaluated by Facilities Management & Services staff for permanent solutions to the heating problem. Mechanical or engineering solutions are the preferred method of addressing an office area heating need.

Portable electric space heaters shall be physically inspected by Facilities Management & Services staff for compliance with electrical safety standards and with TCC's Policy on Energy Conservation before being released for service.

Portable electric space heaters found to be in non-compliance with electrical safety standards and/or TCC's Policy on Energy Conservation shall be immediately removed from service and tagged non-compliant. To assist with compliance, the following safety checklist is provided.

All checklist questions must have a "**Yes**" answer for compliance with TCC's Policy on Energy Conservation. A "**No**" answer to any of the following questions shall prevent the Facilities Management & Services staff from releasing the space heater for service.

Safety Checklist:	**Yes**	**No**
Has the responsible member of the President's Executive Staff certified that the need for this portable electrical space heater is legitimate?		
Will electrical circuit for room permit the use of a portable electrical space heater?		
Does the heater bear a listing label from UL (Underwriters Laboratory) for its intended use?		
Has the heater and its cord been inspected and checked for signs of wear and/or damage?		
Does the heater have a low center of gravity to minimize its potential for tipping over?		
Does the heater contain a built-in circuit to shut the appliance off if accidentally tipped over?		
Has the employee requesting the use of the portable electric space heater in his/her work area signed the Portable Space Heater Request and Approval Form stating that s/he has read, reviewed, and fully understands the college policy, and agreed to comply with it?		
Has a Safety & Security approved tag/label been attached to the unit with the building and room number in which the unit will be used?*		

** For the initial inspection, this item will be checked after use of the device has been approved. Thereafter, it will be part of the annual inspection.*

Employee Using Heater: _____

Heater Location: Building: _____ Room: _____

Facilities Staff Conducting Inspection:

Name: _____

Signature: _____ Date: _____

This safety checklist shall be completed upon initial request to use a space heater and at least annually thereafter. The current checklist will be maintained in the Facilities Management & Services office for the location at which the heater is being used.