PROCEDURE NO. 7037

TITLE: SAFETY PRECAUTIONS

BASED ON POLICY: 7.03 SAFETY AND TRAFFIC CONTROL

OFFICE OF PRIMARY RESPONSIBILITY: VICE PRESIDENT FOR ADMINISTRATIVE SERVICES/PHYSICAL PLANT OPERATIONS AND MAINTENANCE

I. Purpose:

To set forth guidelines to ensure that proper safety precautions are taken in the daily operation of the physical aspects of the college

II. Procedure:

A. The following precautions shall be taken with respect to the storage and handling of flammables:

1. Flammable or combustible liquids stored and used in laboratories and other spaces shall be in containers not larger than one quart, or in safety cans, and kept in storage cabinets when not in use. Storage is limited to that required for maintenance, demonstration, treatment, and laboratory work.

2. Open flames, smoking, and other sources of ignition shall not be permitted in flammable or combustible liquid rooms.

3. Materials which will react with water to produce flammable vapors shall not be stored in the same room with flammable or combustible liquids unless stored in approved safety containers.

4. Storage cabinets may be used, in lieu of storage rooms, to keep more than 10 gallons of Class 1A flammable or combustible liquids inside buildings. No individual container shall exceed five gallons of Class 1C liquid or shall be stored in any one cabinet.

5. Storage room for flammables shall:

   a. Be located to minimize damage in the event of fire

   b. Not be located near exits, stairways, or areas normally used for safe egress of people

   c. Be located on ground level with an exit to the outside
d. Be equipped with vents to provide fire and explosion relief

e. Be non-combustible construction

f. Not be used for storage or other operations which in combination creates a greater fire hazard

g. Be provided with mechanical or natural ventilation

6. Storage cabinets, if used, shall be constructed of at least 18 gauge sheet iron and double walled with one and one-half inch air space. The door shall be kept closed when not in use, labeled “Flammable--Keep Fire Away” and provided with a three point lock. The door sill shall be raised at least two inches above the bottom of the cabinet.

7. Duplicating fluid, gasoline, and other volatile liquids with a flash point of 100 degrees F. or less shall be limited to actual need for local use not to exceed five gallons and shall be kept in approved metal safety cans (self-closing).


9. All combustible materials shall be removed or shielded from welding areas in metal working shops.

10. No flammable or explosive substances or equipment for repairs or alterations shall be introduced in a building of normally low or ordinary hazard classification while the building is occupied unless the condition of use and safeguards provided are such as not to create any additional damage or handicap to egress beyond the normally permissible conditions in the building.

11. Open flame devices and gas lights - no open flame or gas lighting devices shall be used in any place of assembly except where necessary for ceremonial purposes.

B. The following precautions shall be taken with respect to the climate control equipment on the campus:

1. Where possible, above ground fuel storage in excess of 1,000 gallons shall be located a minimum of 50 feet from occupied areas.

2. Oil-fired space heaters shall be properly shielded from combustibles, vented to outside air, and installed in accordance with N.F.P.A., Vol 1, Chapter 5, 1968.
3. No space shall be equipped with any type of heating equipment in which fumes of combustion or fuel may be discharged or can escape into the interior of the building. All spaces containing boilers and similar fired central heat-producing equipment shall be completely enclosed by walls, floor, and ceiling of not less than one hour fire rating. Each furnace or boiler room shall have an out-swinging door opening directly to the exterior. Venting shall be provided in the exterior door for combustion air. A one hour rated fire door shall be provided for openings that open into the interior of the building from a furnace or boiler room and shall swing into the furnace or boiler room.

   a. Equipment used for instruction in home economics rooms, science rooms, various ships, kitchens, and heating of portable buildings are excluded from one hour fire rating provisions.

   b. All ductwork shall be constructed of non-combustible materials, and if external insulation is used, such insulation shall be non-combustible. Where ducts pass through fire walls, automatic dampers shall be installed on both sides of the wall to retain the integrity of the wall.

   c. Heat producing equipment, fuel storage and supply and burned fuel exhaust systems shall be in accordance with nationally recognized safe practices such as specified by N.F.P.A. or the American Gas Association.

4. Pressure relief valves, limit controls, and all safety controls on boilers and hot water systems shall be checked daily and recorded on a log sheet.

C. The following precautions shall be taken with respect to storage of combustible materials:

1. Closets or storage spaces shall not be placed under or over stairs in an exit enclosure. The open space under stairs shall not be used for any purpose. Provisions shall be made to preclude any possibility of such storage.

2. Separate storage space shall be provided for flammable, poisonous or hazardous materials or liquids, and equipment powered by internal combustion engines and their fuels and shall be constructed with walls, floors and ceilings of not less than one hour fire resistive materials and open to the exterior only. These provisions do not apply to completely detached storage facilities.

3. Obsolete furniture, boxes, paper, and other material not worthy of keeping shall be removed from attics, closets, cloak rooms, and basements.
4. Crawl space between ground and the first floor of permanent buildings shall be kept free of any storage or debris and all openings from such areas shall be screened with a suitable material.

D. The following precautions shall be taken with respect to avoiding possible additional hazards:

1. Each space equipped with unprotected gas cocks accessible to students shall have a master control valve available only to the instructor.

2. Each space equipped with electrically powered machinery accessible to students shall have one or more master disconnect switches at convenient locations connected ahead of all power tool outlets.

3. Smoking privileges should be limited to specially designated areas.

4. Outdoor waste burners shall be equipped with an approved spark arrester (3/4 inch wire mesh) and located a minimum of 100 feet from the college buildings.

5. Oil rags, such as those used in maintenance, shop programs, and laboratories shall be stored in approved metal waste cans.

6. In automotive shops, the body and frame repair area requiring welding and cutting shall be adequately separated from engine overhaul and related fuel handling activities.

7. Paper, magazines, boxes, lumber, and other combustible materials as used in art, crafts, journalism, and other educational activities shall be limited in quantity and shall be stored as to minimize the hazard of fire.

HISTORY: Last Reviewed: 1/31/08

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