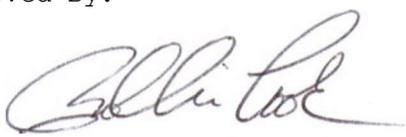


 <p>State of Connecticut Department of Correction</p> <p>ADMINISTRATIVE DIRECTIVE</p>	Directive Number 5.3	Effective Date 5/3/2019	Page 1 of 6
	Supersedes Life and Fire Safety, dated 06/28/2018		
Approved By:  Commissioner Rollin Cook	Title Life and Fire Safety		

1. **Policy.** The Department of Correction shall promote a safe working and living environment by utilizing proactive and reactive measures that support life and fire safety and the safe handling of caustic, flammable, toxic materials and radon.
2. **Authority and Reference.**
 - a. Connecticut General Statutes, Sections 18-81, and 29-292.
 - b. National Fire Protection Association (NFPA) Life Safety Code 101, 2012 Edition, Chapter 23.
 - c. National Fire Protection Association (NFPA) Emergency Standby Power 110, 2010 Edition, Connecticut Fire Safety Code.
 - d. Code of Federal Regulations, Section 1910.157, Portable Fire Extinguishers.
 - e. American National Safety Institute (ANSI), 1998 Edition, Section A17.1-1998.
 - f. American Society of Mechanical Engineers (ASME), 1996 Edition, 1997 and 1998 Supplements, Section A17.1.
 - g. Connecticut Office of the State Fire Marshal, Connecticut Fire Safety Code (2016).
 - h. Connecticut Office of the State Fire Marshal, Connecticut Fire Prevention Code (2015).
 - i. Administrative Directive 7.1, Key and Tool Control.
3. **Definitions.** For the purposes stated herein the following definitions apply:
 - a. **Caustic Materials.** Substances that can destroy or eat away by chemical reaction (e.g., lye, caustic soda, sulfuric acid, etc.).
 - b. **Confined Space.** An area which is: large enough and so configured that an employee can bodily enter and perform assigned work; has limited or restricted means for entry or exit (e.g., tanks, vessels, silos, storage bins, hoppers, vaults, pits, trenches, etc.); and, is not designed for continuous employee occupancy.
 - c. **Flame Retardant.** A diverse group of chemicals which are added to manufactured materials, such as plastics and textiles, and surface finishes and coatings which are intended to prevent or slow the further development of ignition.
 - d. **Flammable Materials.** Liquids with a flash point below 100 degrees Fahrenheit.
 - e. **Permit-Required Confined Space (Permit Space).** A confined space that has one or more of the following characteristics:
 - i. contains or has a potential to contain a hazardous atmosphere;
 - ii. contains a material that has the potential for engulfing an entrant;
 - iii. has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or,
 - iv. contains any other recognized serious safety or health hazard.
 - f. **Toxic Materials.** Substances that through chemical reaction or mixture can produce possible injury or harm to the body by entering through the skin, digestive tract, or respiratory tract (e.g., zinc chromate paint, ammonia, chlorine, antifreeze, herbicides, pesticides, radon, etc.).
4. **General Guidelines.** Each correctional facility shall develop procedures, in consultation with the Facilities Management and Engineering Services Unit, which promote safe working and living conditions regarding fire safety and flammable, toxic and caustic materials. The procedures shall include, at a minimum, provisions for the following:
 - a. Adequate fire protection service;
 - b. A system of fire inspection and testing of equipment at least monthly;
 - c. An annual inspection by State or Department fire officials or other qualified personnel;
 - d. Availability of extinguishers at appropriate locations throughout the facility;

Directive Number 5.3	Effective Date 5/3/2019	Page 2 of 6
Title Life and Fire safety		

- e. Monthly inspection of the facility by the Correctional Maintenance Supervisor for compliance with safety and fire prevention standards;
 - f. Weekly fire and safety inspection of the facility by a qualified Department employee;
 - g. Separate containers designed for combustible refuse, flammable liquids and rags soaked with flammable liquids. All containers shall be emptied daily;
 - h. Secured storage, inaccessible to inmates and unauthorized personnel, for all flammable, toxic and caustic materials;
 - i. Procedures for inventory and distribution of flammable, toxic and caustic materials. Inmates shall not be allowed to possess such items unless under the close supervision of qualified employee;
 - j. Appropriate training of staff and inmates regarding life and fire safety, to include use of equipment as appropriate, and flammable, toxic and caustic materials;
 - k. Primary and secondary fire evacuation routes prominently posted in each building of every facility and updated annually; and,
 - l. Detection of radon.
5. Fire Safety. At a minimum, the following shall be included in the facility's fire safety procedures:
- a. Facility Inspection.
 - i. A monthly inspection of the facility by the Correctional Maintenance Supervisor for compliance with safety and fire prevention standards.
 - ii. A weekly fire and safety inspection of the facility by a qualified Department employee.
 - iii. Annual review of the facility's policy involving fire and safety inspections.
 - b. Fire Prevention.
 - i. Portable fire extinguishers and fire alarms shall be installed throughout the facility. Fire extinguishers shall be properly identified for quick access.
 - ii. Regular staff inspections shall be conducted to check for any area or situation where the potential for a fire problem might be lessened (e.g., excess of papers or magazines in an inmate's cell, overloaded electrical plugs, covered or blocked cell doors, etc.).
 - iii. Each Unit Administrator shall have in effect a plan for the protection of all persons in the event of fire and for their evacuation to areas of refuge and for evacuation from the facility. All supervisory personnel shall be provided a written copy of the fire protection/evacuation plan.
 - iv. Staff shall be trained in fire emergency and evacuation procedures and the proper use of portable fire extinguisher and other manual fire suppression equipment that may be utilized. With respect to new staff, such training shall be provided promptly upon commencement of duty. With respect to existing staff, refresher training shall be provided at least annually.
 - v. At a minimum, fire drills shall be performed monthly on each shift and all persons' subject to the drill shall participate. It will be the Shift Commander's responsibility to schedule and ensure that fire drills are conducted. Drills shall be conducted at unannounced times and under varying conditions to simulate the unusual conditions that occur in the case of a fire. Each fire drill shall be documented utilizing CN 5301, Fire Drill Report. The original CN 5301, Fire Drill Report shall be forwarded to the Deputy Warden of Operations for filing. Fire alarm pull stations shall be rotated for each drill.
 - vi. Books, clothing, and other combustible personal property allowed in inmate sleeping rooms should be stored in a fire resistant container.
 - vii. Heat producing appliances, such as toasters and hot plates, shall be prohibited and the overall use of electrical power within a sleeping room shall be controlled by facility administration.
 - viii. Wastebaskets and other waste containers shall be of noncombustible materials.

Directive Number 5.3	Effective Date 5/3/2019	Page 3 of 6
Title Life and Fire safety		

- ix. Smoking and use of matches or lighters by inmates shall be prohibited. Staff shall smoke in designated outside areas only.
 - x. Portable space heating devices shall be prohibited in a correctional facility. Portable space heating devices may be used in a business environment.
- c. Means of Egress Reliability.
- i. Every required exit, exit access, or exit discharge shall be continuously maintained free of all obstructions or impediments to full instant use.
 - ii. No furnishings, decorations, or other objects shall be so placed as to obstruct exits, access thereto, egress therefrom or visibility thereof.
 - iii. Mirrors shall not be placed on exit doors. Mirrors shall not be placed in or adjacent to any exit in such a manner as to confuse the direction of exit.
 - iv. There shall be no obstruction by railings, barriers, or gates that divide the open space into sections appurtenant to individual rooms or other uses.
 - v. The minimum width of any way of exit access shall in no case be less than 28 inches. Where a single way of exit access leads to an exit, its capacity in terms of width shall be at least equal to the required capacity of the exit to which it leads. Where more than one way of exit access leads to an exit, each shall have a width adequate for the number of persons it must accommodate.
 - vi. A door designed to normally be kept closed as a means of egress shall be a self-closing door and shall not be secured in the open position at any time.
 - vii. If evacuation is necessary, the facility shall obtain prior authorization from a qualified fire safety official to re-enter the affected area.
 - viii. Correctional facilities or those portions of facilities housing inmates shall provide 24-hour staffing. Staff must be within three (3) floors or 300 feet (91 meters) horizontal distance of the access door for each inmate housing area. Staff at each facility shall have the ability to start release of locks necessary for emergency evacuation or rescue and initiate other necessary emergency actions within two minutes of an alarm.
 - ix. Provisions shall be made so that inmates in Use Conditions III, IV, and V are readily able to notify staff of an emergency.
- d. Equipment Inspection, Maintenance and Testing. Continuous maintenance and testing shall be conducted, as required by the State Fire Marshal, National Fire Protection Association Standards and the manufacturer, for each device, equipment, system, condition, arrangement, level of protection, decorative accessory or appliance, and feature relating to fire safety. Complete and satisfactory tests shall be made of all devices, and all test results shall be made available to the office of the State Fire Marshal and to the Department's Facilities Management and Engineering Services Unit.
- i. Automatic Sprinkler Systems. Automatic sprinkler systems shall be continuously maintained in reliable operating condition at all times. Inspection shall be by a qualified employee or inspector a minimum of four times per year at regular intervals. Testing for all circuit interfaces and water flow actuated devices shall be subject to the authority having jurisdiction. For sprinkler water flow alarm tests, an actual water flow through the use of a test connection, shall be the method employed for testing the reliability of the sprinkler alarm unit as a whole. When a required automatic sprinkler system is out of service for more than four (4) hours within a 24-hour period, the District Plant Facility Engineer II shall notify the local fire chief, and the Director of Facilities Management and Engineering Services or designee, who shall contact the State Fire Marshal and the insurance carrier. The building shall be evacuated, or an approved fire watch shall be provided for all portions left unprotected by the sprinkler system shutdown until the sprinkler system has been returned to service.
 - ii. Fire Detection and Alarm Systems. A visual inspection shall be made of all automatic fire detectors, at least semi-annually, to ensure each detector remains in good physical condition and that there are no changes that would

Directive Number 5.3	Effective Date 5/3/2019	Page 4 of 6
Title Life and Fire safety		

affect detector performance (e.g., building modifications, occupancy hazards and/or environmental effects). Testing for fire detection and alarm systems shall be:

1. monthly for all automatic fire detection systems (including circuit interfaces) or other systems and devices not covered in this subsection;
 2. semi-annually for gate valve supervisory switches, manual fire alarm boxes, combination guard tour and fire alarm boxes, tank water level devices, building and tank water supervisory devices and other sprinkler system supervisory devices, (for restorable heat detectors, one or more detectors on each initial signal circuit shall be tested at least semi-annually and different detectors shall be selected for each test); and,
 3. Annually for all smoke detectors, alarm indicating appliances, annunciator central control units and emergency voice/alarm communication systems.
 - a. Fire detection and alarm systems shall be restored to service as promptly as possible after each test or alarm and shall be kept in normal condition for operation. Equipment requiring rewinding or replenishing shall be rewound or replenished as promptly as possible after each test or alarm.
- iii. Smoke Control System. Periodic testing shall be conducted, by qualified personnel, on all items in the smoke control system (e.g., initiating devices, fans, dampers, controls, doors and windows), as follows:
1. Dedicated Systems shall be tested semi-annually; and,
 2. Non-dedicated Systems shall be tested annually.
- iv. Exit and Emergency Lighting. In accordance with Sections 14.13 of the Connecticut Fire Prevention Code, a functional test shall be conducted on every required emergency lighting system at 30-day intervals for a minimum of 30 seconds. An annual test shall be conducted for 1½ hour duration. Equipment shall be fully operational for the duration of the test. Written records of testing shall be kept by the facility for inspection by the authority having jurisdiction.
- v. Standby Generators. Testing and maintenance of each generator used to provide standby power shall be in accordance with NFPA Emergency Standby Power 110 (Standard for Emergency and Standby Power Systems).
- vi. Elevators. Elevators shall be subject to routine and periodic inspections and tests as specified in American National Safety Institute (ANSI)/American Society of Mechanical Engineers (ASME) A17.1 (Safety Code for Elevators and Escalators), Part X. All elevators equipped with firefighting service shall be subject to a monthly operation with a written record of the findings made and kept on the premises as required by ASME/ANSI A17.1 (Safety Code for Elevators and Escalators), Rule 1206.7.
- vii. Smoke Proof Enclosures and Pressurized Stairs. Before mechanical equipment is accepted by the State Fire Marshal, it shall be tested to confirm that such equipment is operating in compliance with NFPA. All operating parts of the system shall be tested semi-annually by approved personnel and a log shall be kept of the results.
- viii. Portable Extinguishers and Other Fire Fighting Equipment. In accordance with Section 23.3.5.4 of the Connecticut Fire Safety Code (2016 edition) and section 13.6 of the Connecticut Fire Prevention Code (2015 editions), a staff member shall be properly trained prior to use of any portable extinguisher and/or any other firefighting equipment.
- ix. Centrifugal Fire Pump. In accordance with NFPA 25, Section 8.3.1, each centrifugal fire pump, shall have a flow test conducted by personnel trained in the operation of the pump, annually to determine its ability to attain satisfactory performance at shutoff, rated and peak loads. All alarms shall operate satisfactorily. All values in the suction shall be checked to ensure that they are fully open. The pressure relief valve, if installed, shall be verified by actual test to be correctly adjusted and set to relieve at the

Directive Number 5.3	Effective Date 5/3/2019	Page 5 of 6
Title Life and Fire safety		

appropriate pressure. Any significant reduction in the operation characteristics of the fire pump assembly shall be reported and repairs made immediately. The fire pump unit shall be operated weekly and at least one start shall be accomplished by reducing the water pressure. This may be done with a test drain on the sensing line or with flow from the fire protection system. Qualified operating personnel shall be in attendance during the weekly pump operation. The satisfactory performance of the pump driver, controller and alarms shall be observed and noted.

- x. Smoke-Grease Cleaning and Extinguishing System Maintenance. In accordance with NFPA 96, chapter 11 (2011 edition) for cleaning and NFPA 12, 13, 17 and 17(a) for extinguishing hoods, grease removal devices, fans, ducts and other appurtenances shall be cleaned at annual intervals prior to surfaces becoming heavily contaminated with grease or oily sludge. System should be inspected daily to weekly to determine residues of grease, etc. An inspection and servicing of the fire extinguishing system shall be made at least every six (6) months by certified licensed personnel. All actuation components shall be checked for proper operation during the inspection in accordance with the manufacturer's listed procedures. Fusible links and automatic sprinkler heads shall be replaced at least annually or more frequently if necessary to ensure proper operation of the system. Other detection devices shall be serviced or replaced in accordance with manufacturer's recommendations. An exception is when automatic dry bulb-type sprinklers or spray nozzles are used and annual examination shows a buildup of grease or other material on the sprinkler or spray nozzles.
- e. Furnishings, Contents, Decorations and Treated Finishes.
 - i. Draperies, curtains, and other similar loosely hanging furnishings and decorations shall be flame resistant.
 - ii. Furnishings or decorations that are combustible are prohibited unless flame retardant.
 - iii. Fire retardant coatings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.

6. Caustic, Flammable and Toxic Materials.

- a. Each facility, in consultation with the Facilities Management and Engineering Services Unit, shall develop a plan for the storage and handling of flammable liquids or gases, along with caustic and toxic materials. The plan shall promote the use of the least hazardous materials and shall be in accordance with the following standards:
 - i. NFPA 30, Flammable and Combustible Liquids Code (Section 29-320 of the Connecticut General Statutes, titled "Regulations Concerning Flammable or Combustible Liquids");
 - ii. NFPA 54, National Fuel Gas Code (Section 29-329 of the Connecticut General Statutes, titled "Regulations concerning installation and operation of gas equipment and piping. Variations or exemptions"); and,
 - iii. NFPA 58, Standard for the Storage and Handling of Liquefied Petroleum Gases (Section 29-331 of the Connecticut General Statutes, titled "Regulations concerning liquefied petroleum gas and liquefied natural gas").

7. Radon Detection.

- a. Each correctional facility shall be tested at least once every five (5) years in compliance with a detection testing cycle that shall be developed by the Director of Facilities Management and Engineering Services.
 - i. Each correctional facility shall be tested within five (5) years from the revision date on this Administrative Directive.
 - ii. Radon detection within facilities shall be conducted during the period ranging from November 1 through March 31.
- b. Testing shall occur within all facility areas identified by the Engineering Unit in consultation with the licensed radon detection company conducting the facility test and shall include the inmate housing areas.

