

North Dakota Department of Health & Human Services Life Safety and Construction Unit 11-2022

Documentation for Review Life Safety Code - Health Care

<u>Policies/Procedures</u>	
Alcohol Based Hand Rub Solutions Emergency Preparedness Fire Emergency Plan Fire Watch and Notification Risk Assessments - In new or remodeled construction Smoking Policy	
Alcohol Based Hand Rub Solutions: The dispensers must be installed in a manner that minimizes leaks and spills that could lead to falls and protects against access by vulnerable populations, such as residents in dementia units. Where dispensers are installed in a corridor, the corridor must be at least 6 feet wide. The maximum individual dispenser fluid capacity is limited to 0.32 gallons in rooms, corridors, and areas open to corridors. The maximum individual dispenser fluid capacity is limited to 0.53 gallons in suites of rooms. The dispensers must be installed at least 4 feet apart. Not more than a total of 10 gallons of solution can be in use in a single smoke compartment outside of a storage cabinet, excluding one individual dispenser per room. Storage of more than 5 gallons of solution in a single smoke compartment must meet the requirements of NFPA 30. The dispensers cannot be installed over or directly adjacent to an ignition source. Dispensers installed directly over carpeted floor surfaces are permitted only in smoke compartments protected by automatic sprinkler systems.	
<u>Emergency Preparedness:</u> The facility must comply with all applicable requirements. The facility must establish and maintain a comprehensive	
<u>Fire Emergency Plan:</u> A written plan must be provided for the protection emergency. The plan must include use of the alarm system, transmission the fire department, response to the alarm, isolation of the fire, evacuation preparation for evacuation, and fire extinguishment.	n of the alarm to the fire department, emergency phone call to
Fire Watch and Notification: Where a fire alarm system is out of service sprinkler system is out of service for more than 10 hours in a 24-hour permust be evacuated or an approved fire watch provided for all areas left to service. The fire watch must be conducted by dedicated personnel and	riod, the Health Department must be notified, and the building unprotected by the shutdown until the system has been returned
Risk Assessments: Risk Assessments shall be conducted on systems following chapters of NFPA 99, <i>Health Care Facilities Code</i> , 2012 edition Electrical Systems; Chapter 9 – Heating, Ventilation, and Air Conditionin Equipment. The records where the facility has documented its risk assess inspectors to be able to understand the appropriate category of systems.	n: Chapter 5 – Gas and Vacuum Systems; Chapter 6 – ng; Chapter 10 – Electrical Equipment; and Chapter 11 – Gas ressments should be kept up to date and available on site for
<u>Smoking Policy:</u> A written smoking policy must be developed and enforcement the building must be taken into consideration when developing conspicuous locations.	
Records	<u>3</u>
Automatic Sprinkler System Inspection & Testing Automatic Sprinkler System Valves & Gauges Battery Pack Exit Signs and Emergency Lighting Cubicle Curtains and Draperies Fire Alarm System Fire Alarm Circuit Location Identified Fire Alarm Devices Smoke Detectors Fire Dampers Fire Door Inspections	Fire Drills – 1 per shift per quarter Floor Finish – New only Furnishings and Mattresses Generator Inspection & Testing Generator 3 Year 4 Hour Load Test Generator (Diesel) 30% Load Testing Generator Transfer Switch Interior Finish Portable Fire Extinguishers Range Hood System Semi-annual & Monthly

<u>Automatic Sprinkler System Inspection & Testing:</u> The automatic fire sprinkler system must be inspected and tested in accordance with NFPA 25. A supply of spare sprinklers must be maintained on the premises (never fewer than six). The stock of spare sprinklers must correspond to all types and temperature ratings installed in the building. A sprinkler wrench must be kept on hand in a cabinet. The clearance between the sprinkler deflector and the top of storage cannot be less than 18 inches. This would include materials placed on shelves in closets, storage rooms, etc.

<u>Automatic Sprinkler System Valves & Gauges:</u> All valves shall be inspected weekly. Valves electrically supervised in accordance with applicable NFPA standards shall be permitted to be inspected monthly.

After any alterations or repairs, an inspection shall be made by the property owner or designated representative to ensure that the system is in service and all valves are in the normal position and electrically supervised.

The valve inspection shall verify that the valves are in the following condition:

- 1) In the normal open or closed position
- 2) Sealed, locked, or supervised
- 3) Accessible
- 4) Provided with correct wrenches
- 5) Free from external leaks
- 6) Provided with applicable identification

Gauges on wet pipe sprinkler systems shall be inspected monthly to ensure that they are in good condition and that normal water supply pressure is being maintained.

Gauges on dry, preaction, and deluge systems shall be inspected weekly to ensure that normal air and water pressures are being maintained. Where air pressure supervision is connected to a constantly attended location, gauges shall be inspected monthly.

Battery Pack Exit Signs and Emergency Lighting: Battery pack exit signs and emergency lighting must to be tested for 30 seconds at least monthly and annually for a 90-minute period. Equipment must be fully operational for the duration of the test. In exit signs with two bulbs, both bulbs must be functional. Battery pack emergency lighting is required at the generator and anesthetizing locations.

<u>Cubicle Curtains and Draperies:</u> Draperies, curtains, decorations, wall hangings, theatre curtains, and other similar furnishings must be flame resistant. Where laundering will remove the flame-retardant application, documentation is required to verify that these materials have been re-treated.

<u>Fire Alarm System:</u> The automatic dialer portion of the fire alarm system must be tested monthly, and a complete fire alarm system test and servicing must be performed on an annual basis. The monthly testing may be done in conjunction with the fire drill. Note that activation of the fire alarm is not required during the drill on the night shift. However, the fire alarm system must still be tested each month. The fire alarm can be tested by activating a manual pull station or smoke detector. Upon activation of the alarm, determine that smoke and fire doors close properly, the fire department notification device functions, smoke dampers close, etc. Annual test documentation must itemize initiation devices and notification devices individually and list device type, address, location, and test results.

<u>Fire Alarm Circuit Location Identified:</u> The location of the dedicated branch circuit disconnecting means shall be permanently identified at the control unit. For fire alarm systems, the circuit disconnecting means shall be identified as "FIRE ALARM CIRCUIT" and shall have a red marking. The circuit disconnecting means shall be accessible only to authorized personnel. The dedicated branch circuit(s) and connections shall be protected against physical damage.

Fire Alarm Devices: Device test results (alarm initiating, supervisory alarm initiating, and notification) shall provide an itemized list with the device type, address, location, and test result as required.

<u>Smoke Detectors</u>: The sensitivity of the smoke detectors must be determined during the first year after installation and every alternate year thereafter. After the second required calibration test, if the detector has remained within its listed and marked sensitivity range, the length of time between calibration tests can be extended, not to exceed 5 years.

<u>Fire Dampers</u>: Fire dampers need to be continuously maintained in a reliable operating condition as required by NFPA 90A. Maintenance for fire dampers is to be performed at least every 4 years (6 years in hospitals). Maintenance of fire dampers includes: fusible links removed; dampers operated to verify that they close fully; latch, if provided, checked; and moving parts lubricated as necessary.

<u>Fire Door Inspections:</u> Fire-rated door assemblies shall be inspected and tested in accordance with NFPA 80, Standard for Fire Doors and Other Opening Protectives.

<u>Fire Drills:</u> Fire exit drills must include the transmission of a fire alarm signal and the simulation of emergency fire conditions, except that the movement of patients or residents to safe areas or to the exterior of the building is not required. Drills must be conducted quarterly on each shift to familiarize staff with signals and emergency actions required under varied conditions. Drills must be held at unexpected times and under varying conditions to simulate an actual fire. When drills are conducted between 9:00 p.m. and 6:00 a.m.,

a coded announcement may be used instead of audible alarms. The purpose of a fire drill is to test the efficiency, knowledge, and response of staff. Its purpose is not to disturb or excite patients or residents. Documentation must include the date and time of the drill.

<u>Floor Finish:</u> All newly installed floor finishes (such as carpet) in corridors and exits must have documentation as to the floor finish rating of the material.

<u>Furnishings and Mattresses:</u> In areas not protected by automatic fire sprinklers, newly introduced upholstered furniture owned by the facility must meet NFPA 261 and ASTM E 1537. In areas not protected by automatic fire sprinklers, newly introduced mattresses owned by the facility must meet Part 1632 of the Code of Federal Regulations 16 and ASTM E 1590.

<u>Generator Inspection & Testing:</u> Generator sets shall be tested 12 times a year, with testing intervals of not less than 20 days nor more than 40 days. Generator sets serving essential electrical systems shall be tested in accordance with NFPA 110, Standard for Emergency and Standby Power Systems. EPSSs, including all appurtenant components, shall be inspected weekly and exercised under load at least monthly.

Generator 3 Year 4 Hour Load Test: Generator sets shall be exercised under load once every 36 months for 4 continuous hours.

Generator (Diesel) 30% Load Testing: Diesel generator sets in service shall be exercised at least once monthly, for a minimum of 30 minutes, using one of the following methods:

- (1) Loading that maintains the minimum exhaust gas temperatures as recommended by the manufacturer.
- (2) Under operating temperature conditions and at not less than 30 percent of the EPS nameplate kW rating.

Diesel-powered EPS installations that do not meet the requirements shall be exercised monthly with the available EPSS load and shall be exercised annually with supplemental loads at not less than 50 percent of the EPS nameplate kW rating for 30 continuous minutes and at not less than 75 percent of the EPS nameplate kW rating for 1 continuous hour for a total test duration of not less than 1.5 continuous hours.

<u>Generator Transfer Switch:</u> Automatic transfer switches must be operated monthly, consisting of electrically operating the transfer switch from the standard position to the alternate position and then a return to the standard position. Maintenance programs for transfer switches include checking of connections, inspection or testing for evidence of overheating and excessive contact erosion, removal of dust and dirt, and replacement of contacts when required. The maintenance procedure and frequency should follow those recommended by the manufacturer. NFPA 110 suggests visual inspection and cleaning annually and recommends an annual maintenance program including one major maintenance and three quarterly inspections. The major maintenance includes a thermographic or temperature scan of the automatic transfer switch.

<u>Interior Finish:</u> Interior finish documentation is required for wall and ceiling materials that are required to have a Class A, Class B, or Class C interior finish rating.

<u>Portable Fire Extinguishers:</u> Monthly and annual maintenance of the portable fire extinguishers must be conducted. The 6-year chemical change for dry chemical fire extinguishers and the 12 year hydrostatic vessel test must be performed. CO₂ portable fire extinguisher vessels must be hydrostatically tested every 5 years.

Range Hood System: The UL 300 kitchen range hood automatic extinguishing system must be serviced and inspected for cleaning every 6 months. On a monthly basis an inspection shall be conducted in accordance with the manufacturer's listed installation and maintenance manual or the owner's manual.

At a minimum, this quick check or inspection shall include verification of the following:

- 1) The extinguishing system is in its proper location.
- 2) The manual actuators are unobstructed.
- 3) The tamper indicators and seals are intact.
- 4) The maintenance tag or certificate is in place.
- 5) No obvious physical damage or condition exists that might prevent operation.
- 6) The pressure gauge, if provided, shall be inspected physically or electronically to ensure it is in the operable range.
- 7) The nozzle blowoff caps, where provided, are intact and undamaged.
- 8) Neither the protected equipment nor the hazard has not been replaced, modified, or relocated.

If any deficiencies are found, appropriate corrective action shall be taken immediately. At least monthly, the date the inspection is performed and the initials of the person performing the inspection shall be recorded. The records shall be retained for the period between the semiannual maintenance inspections.

A K-type fire extinguisher is required in kitchens that are equipped with a UL 300 hood system. A sign must be installed instructing on the use of the extinguisher.