## FIRE SAFETY REPORT FOR STATE SCHOOLS AND COLLEGES

**DISTRICT & ADDRESS:** New Hampton Community School District

710 West Main Street, New Hampton, Iowa 50659

SCHOOL LOCATION: Middle School & Elementary School GRADES: 5-8 & PK-4

206 West Main Street, New Hampton, Iowa 50659

# **OF STUDENTS:** 286 (Middle School) + 434 (Elementary School)

BUILDING CODE: 19-4662-0209 (Middle School); 19-4662-0418 (Elementary School)

**DATE:** 03/08/2017 **COUNTY:** Chickasaw **TELEPHONE:** (641) 394-2259 Middle School; (641) 394-5858 Elementary School

**SUPERINTENDENT:** Jay Jurrens

**E-MAIL ADDRESS:** j\_jurrens@new-hampton.k12.ia.us

**PRESIDENT OF BOARD:** Joe Rosonke

**E-MAIL ADDRESS:** joe\_rosonke@new-hampton.k12.ia.us

**CONSTRUCTION:** Type I (MS) & Type V (Elem.) # **OF STORIES:** 2 story NC & 3 story WF

PREVIOUS ORDERS COMPLIED WITH: 12/15/2014

#### **COMPLY AS FOLLOWS:**

#### Fire and Tornado Drills in Public Schools - lowa Code §100.31:

It shall be the duty of the state fire marshal and the fire marshal's designated subordinates to require all private and public school officials and teachers to conduct not less than four fire drills and not less than four tornado drills in all school buildings during each school year when school is in session; and to require the officials and teachers of all schools to keep all doors and exits of their respective rooms and buildings unlocked when occupied during school hours or when such areas are being used by the public at other times. Not less than two drills of each type shall be conducted between July 1 and December 31 of each year and not less than two drills of each type shall be conducted between January 1 and June 30 of each year.

 Reminder to ensure not less than four fire drills and not less than four tornado drills are conducted in all school buildings during each school year when school is in session for the time frames specified above.

New Hampton Community School District - Middle & Elementary Schools

### Emergency Preparedness Requirements - Group E Occupancies - 2015 International Fire Code - 403.5.1:

First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

 Reminder to conduct an emergency evacuation drill within 10 days of the beginning of classes for the school year.

### Emergency Evacuation Drills - Record Keeping - 2015 International Fire Code - 405.5:

Records shall be maintained of required emergency evacuation drills and include the following information:

- 1. Identity of the person conducting the drill.
- 2. Date and time of the drill.
- 3. Notification method used.
- 4. Staff members on duty and participating.
- 5. Number of occupants evacuated.
- 6. Special conditions simulated.
- 7. Problems encountered.
- 8. Weather conditions when occupants were evacuated.
- 9. Time required to accomplish complete evacuation.
- Document and maintain all of the required information for emergency drills (fire and tornado).

### Emergency and Standby Power Systems - Emergency Lighting Equipment - 2015 International Fire Code - 604.6-604.6.2.1:

604.6.1 Activation test. An activation test of the emergency lighting equipment shall be completed monthly. The activation test shall ensure the emergency lighting activates automatically upon normal electrical disconnect and stays sufficiently illuminated for not less than 30 seconds.

604.6.2 Power test. For battery-powered emergency lighting, a power test of the emergency lighting equipment shall be completed annually. The power test shall operate the emergency lighting for not less than 90 minutes and shall remain sufficiently illuminated for the duration of the test.

604.6.1.1 Activation test record. & 604.6.2.1 Power test record. Records of tests shall be maintained. The record shall include the location of the emergency lighting tested, whether the unit passed or failed, the date of the test and the person completing the test.

 Test each emergency lighting fixture annually for 90 minutes, in addition to the monthly testing for 30 seconds that is already being completed. Maintain written records of monthly and annual test results.

New Hampton Community School District - Middle & Elementary Schools

#### Electrical - Abatement of Electrical Hazards - 2015 International Fire Code - 605.1:

Identified electrical hazards shall be abated. Identified hazardous electrical conditions in permanent wiring shall be brought to the attention of the responsible code official. Electrical wiring, devices, appliances and other equipment that is modified or damaged and constitutes an electrical shock or fire hazard shall not be used.

• The electrical outlets below the drinking fountains in the Cafeteria and in the Elementary 2<sup>nd</sup> Floor hallway by the Men's Restroom did not have ground-fault circuit-interrupter protection (GFCI). Install outlets with GFCI protection at these locations.

#### **Electrical - Unapproved Conditions - 2015 International Fire Code - 605.6:**

Open junction boxes and open-wiring splices shall be prohibited. Approved covers shall be provided for all switch and electrical outlet boxes.

 Provide a plug for the knockout missing from the junction box on the wall in the hallway by the Band Room Storage.

#### **Door Operation - 2015 International Fire Code - 703.2.3:**

Swinging fire doors shall close from the full-open position and latch automatically. The door closer shall exert enough force to close and latch the door from any partially open position.

 The west leaf of the stairwell doors across from Classroom 304 failed to close and positive latch upon test. Repair these doors to close and latch from any open position.

#### Combustible Decorative Materials - General - 2015 International Fire Code - 807.2:

The following requirements shall apply to all occupancies:

- 1. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.
- 2. Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.
  - The upholstered furniture and pillows throughout the Classrooms shall meet
    the flammability requirements of NFPA 701. Provide documentation showing
    compliance to this standard or for any flame-retardant coating used to treat
    this furniture. Document and maintain the dates treatment was applied,
    descriptions of the furniture treated, and the chemical used.
  - Furniture including but not limited to in the following locations must comply with the standard: the blue chair and maroon rocking chair in Room 308, the leather chair in the Special Education Room across from Room 317, three couches in Room 217, the green rocking chair in Room 22, and two couches in Room 28.

New Hampton Community School District - Middle & Elementary Schools

#### Artwork in Corridors - Group E - 2015 International Fire Code - 807.5.2.2:

Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area.

• Reminder to limit combustible decorations and materials to no more than 20% of the wall area in corridors.

#### Artwork in Classrooms - Group E - 2015 International Fire Code - 807.5.2.3:

Artwork and teaching materials shall be limited on the walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.

 Reminder to limit combustible decorations and materials within classrooms to no more than 50% of the specific wall area to which it is attached.

### Fire Alarm and Detection Systems - Power Supply - 2015 International Fire Code - 907.6.2:

The primary and secondary power supply for the fire alarm system shall be provided in accordance with NFPA 72.

NFPA 72 National Fire Alarm And Signaling Code, 2013 Edition, 10.6.5.2-10.6.5.2.5 Circuit Identification and Accessibility. The location of the branch circuit disconnecting means shall be permanently identified at the control unit. System circuit disconnecting means shall be permanently identified as to its purpose in accordance with the following:

- (1) "FIRE ALARM" for fire alarm systems
- (2) "EMERGENCY COMMUNICATIONS" for emergency communications systems
- (3) "FIRE ALARM/ECS" for combination fire alarm and emergency communications systems

For fire alarm and/or signaling systems, the circuit disconnection means shall have a red marking. The red marking shall not damage the overcurrent protective devices or obscure the manufacturer's markings. The circuit disconnecting means shall be accessible only to authorized personnel.

10.6.5.4 Circuit Breaker Lock. Where a circuit breaker is the disconnecting means, a listed breaker locking device shall be installed.

- Write the location (i.e. the electrical panel, its location, and breaker number) of the fire alarm breaker in the main fire alarm control unit.
- The dedicated fire alarm circuit breaker was not mechanically protected.
   Protect the fire alarm breaker with an approved breaker locking device.

New Hampton Community School District - Middle & Elementary Schools

#### Fire Alarm Testing - 2015 International Fire Code - 907.8.2:

Testing shall be performed in accordance with the schedules in NFPA 72 or more frequently where required by the fire code official. Records of testing shall be maintained.

- NFPA 72 National Fire Alarm And Signaling Code, 2013 Edition, 14.3.1 & 14.4.3.2:
- 14.3.1 Unless otherwise permitted by 14.3.2, visual inspections shall be performed in accordance with the schedules in Tab le 14.3.1 or more often if required by the authority having jurisdiction.
- 14.4.3.2 Systems and associated equipment shall be tested according to Table 14.4.3.2
- 14.4.4 Unless otherwise permitted by other sections of this Code, testing shall be performed in accordance with the schedules in Table 14.4.3.2 or more often if required by the authority having jurisdiction.

#### Visual Inspection - Semiannual

- 2. Control Equipment:
  - (a) Fire alarm systems monitored for alarm, supervisory, and trouble signals
    - (5) Trouble signals
- 5. In-building fire emergency voice/alarm communications equipment
- 9. Batteries
  - (b) Nickel-cadmium
  - (d) Sealed lead-acid
- 11. Remote annunciators
- 14. Transient suppressors
- 17. Initiating devices
  - (a) Air sampling
  - *(b) Duct detectors*
  - (c) Electromechanical releasing devices
  - (d) Fire extinguishing system(s) or suppression system(s) switches
  - (e) Manual fire alarm boxes
  - (f) Heat detectors
  - (i) Smoke detectors (excluding one- and two-family dwellings)
  - (j) Projected beam smoke detectors
- 19. Combination systems
  - (a) Fire extinguisher electronic monitoring device/systems
  - (b) Carbon monoxide detectors/systems
- 20. Fire alarm control interface and emergency control function interface
- 21. Guard's tour equipment
- 22. Notification appliances
  - (a) Audible appliances
  - (b) Audible textual notification appliances
  - (c) Visible appliances
    - (1) General
    - (2) Candela rating
- 23. Exit marking audible notification appliances

New Hampton Community School District - Middle & Elementary Schools

#### Testing - Semiannual

- 9. Battery tests
  - (a) Lead-acid type
    - (4) Load voltage test
    - (5) Specific gravity
  - (b) Nickel-cadmium type
    - (4) Load voltage test
  - (c) Sealed lead-acid type
    - (4) Load voltage test
- 17. Initiating devices
  - (f) Radiant energy fire detectors
  - (k) Mechanical, electrosonic, or pressure-type waterflow device
- NFPA 72 requires semiannual visual inspections of fire alarm system components and testing of fire alarm control unit batteries. An annual fire alarm inspection schedule is currently being followed for the facility. Schedule semiannual fire alarm inspections/testing with an approved fire alarm contractor and maintain inspection documentation for review by this office.

#### Smoke Detector Sensitivity - 2015 International Fire Code - 907.8.3:

Smoke detector sensitivity shall be checked within one year after installation and every alternate year thereafter.

 Verify with an approved fire alarm contractor that smoke detector sensitivity testing is being conducted every two years. If it is not, schedule this inspection. Maintain the testing documentation for further review by this office.

### Doors - Bolt Locks & Unlatching - 2015 International Fire Code - 1010.1.9.4 & 1010.1.9.5:

1010.1.9.4 Bolt locks. Manually operated flush bolts or surface bolts are not permitted.

1010.1.9.5 Unlatching. The unlatching of any door or leaf shall not require more than one operation.

 The deadbolt locks that are installed independently from the door handles/knobs on several Classroom doors throughout the buildings are not permitted. Remove these bolt locks from all doors in the path of egress.

New Hampton Community School District - Middle & Elementary Schools

# Sprinkler Systems - General - NFPA 25 Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems (2014 Edition) - 5.1.1 & 13.1.1:

These chapters shall provide the minimum requirements for the routine inspection, testing, and maintenance of sprinkler systems and valves, valve components, and trim. Tables 5.1.1.2 and 13.1.1.2 shall be used to determine the minimum required frequencies for inspection, testing, and maintenance.

#### Quarterly Inspection and Tests

- 5.2.4 Gauges. Gauges on wet pipe and deluge sprinkler systems shall be inspected quarterly to ensure that they are in good condition and that normal water supply pressure is being maintained. Gauges on dry and preaction systems shall be inspected weekly to ensure that normal air or nitrogen and water pressures are being maintained. Where air pressure supervision is connected to a constantly attended location, gauges shall be inspected monthly.
- 5.2.5 Waterflow Alarm and Supervisory Signal Initiating Device. Waterflow alarm and supervisory signal initiating devices shall be inspected quarterly to verify that they are free of physical damage. [This includes waterflow alarm devices, valve supervisory signal devices, and supervisory signal devices (except valve supervisory switches).]
- 5.2.6 Hydraulic Design Information Sign. The hydraulic design information sign shall be inspected quarterly to verify that it is provided, attached securely to the sprinkler riser, and is legible.
- 13.3.2.1.2 Valve Supervisory Signal Initiating Device. Control valve supervisory alarm devices shall be inspected quarterly to verify that they are free of physical damage. 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) Post indicator valves (PIVs) are provided with correct wrenches
- (5) Free from external leaks
- (6) Provided with applicable identification
- 13.5.1 Inspection and Testing of Sprinkler Pressure-Reducing Valves. All valves shall be inspected quarterly to verify that the valves are in the following condition:
- (1) In the open position
- (2) Not leaking
- (3) Maintaining downstream pressures in accordance with the design criteria
- (4) In good condition, with handwheels installed and unbroken
- 13.7 Fire Department Connections. Fire department connections shall be inspected quarterly to verify the following:
- (1) The fire department connections are visible and accessible.
- (2) Couplings or swivels are not damaged and rotate smoothly.
- (3) Plugs or caps are in place and undamaged.
- (4) Gaskets are in place and in good condition.
- (5) Identification signs are in place.
- (6) The check valve is not leaking.

New Hampton Community School District - Middle & Elementary Schools

- (7) The automatic drain valve is in place and operating properly.
- (8) The fire department connection clapper(s) is in place and operating properly.
- (9) Interior of the connection is inspected for obstructions.
- 5.3.3 Waterflow Alarm Devices. Mechanical waterflow alarm devices including, but not limited to, water motor gongs, shall be tested quarterly. Testing waterflow alarm devices on wet pipe systems shall be accomplished by opening the inspector's test connection. Where freezing weather conditions or other circumstances prohibit use of the inspector's test connection, the bypass connection shall be permitted to be used. Testing waterflow alarm devices on dry pipe, preaction, or deluge systems shall be accomplished by using the bypass connection.
- Documentation could not be provided for quarterly sprinkler inspections and testing as required by NFPA 25. Quarterly sprinkler system inspections and testing may be completed by a licensed contractor or done in-house by personnel trained by a licensed contractor. Maintain documentation of quarterly inspections and testing.

**Fire Alarm System:** Hawkeye Alarm & Signal Company – 12/27/2016 (Sensitivity – No documentation)

**Sprinkler System:** Blackhawk Automatic Sprinklers, Inc. – 06/08/2016 Annual (Internal inspection – 08/02/2013)

**Hood System:** Superior Fire Protection Equipment – 08/03/2016 & 12/23/2016

**Fire Extinguishers:** Hawkeye Fire & Safety Company – 08/2016 (Monthly inspections – Documented)

Documented)

**Emergency Lights:** 30-second monthly test – Documented; 90-minute annual test – See above **Emergency Drills:** Fire – 03/09/2016, 04/08/2016, 09/28/2016, & 10/06/2016; Tornado – 04/19/2016, 05/09/2016, 11/09/2016, & 01/17/2017

Provide a written plan of correction, including how each deficiency will be corrected and its expected completion date, to Christina Smith at <a href="mailto:smith@dps.state.ia.us">smith@dps.state.ia.us</a>. The plan of correction may also be returned by mail to 4425 South Washington Avenue, Mason City, IA 50401.

The plan of correction shall be returned within 30 calendar days from receipt of report.

If you have any questions, please contact me at 641-530-7596.

INSPECTOR: Christina Smith

SUPERVISOR: Acting Special Agent in Charge Dan Wood