

<b>ERIE COUNTY DIV. OF FIRE SAFETY – TRAINING GUIDELINES</b>				
<b>SOG#</b>	<b>SUPERSEDES</b>	<b>CREATED</b>	<b>LAST UPDATED</b>	<b>REVISION#</b>
1006	---	03/01/02	4/15/26	1
<b>SECTION</b>		<b>AREA</b>		
Training		Live Fire Training Evolutions		

**1006.01 Purpose:**

- To ensure the safety of all personnel during live fire training exercises by establishing standardized procedures in compliance with OSHA 1910.156 regulations and NFPA 1403 – Standard of Live Fire Training
- The Erie County Department of Homeland Security & Emergency Services recognizes the critical importance of live fire training in preparing the firefighters of Erie County for real-life emergencies. This policy ensures that all live fire training conducted by the Fire Instructors of the Division of Fire Safety is safe, effective, and aligns with industry’s best practices
- Ensure the safety of all participants, including trainees, instructors, and observers, while providing a structural framework for conducting live fire training
- Enhance the operational readiness of the firefighters within Erie County through realistic and controlled live fire scenarios
- In the event of conflicting information in this document, the current NFPA 1403 standard shall take precedence until the conflict can be resolved and this policy updated

**1006.02 Scope:**

- This policy applies to all live fire training exercises conducted under the jurisdiction of the Erie County Department of Homeland Security & Emergency Services – Division of Fire Safety on all Erie County properties. This includes, but is not limited to, structure, vehicles and oil pit fires
- Procedures, responsibilities, safety measures, and operational guidelines for live fire training are encompassed within this document
- Any New York State Fire Instructor conducting live fire training on Erie County property for the purpose of delivering New York State courses, shall follow the New York State Live Fire Training Policy
- Any Buffalo Firefighter Instructor conducting live fire training on Erie County property for the purpose of Buffalo Fire Department training shall follow the Buffalo Fire Department Live Fire Training Policy

**1006.03 Definitions:**

- *Live Fire Training*: Training that involves the use of actual fire to simulate firefighting conditions
- *NFPA 1403*: The National Fire Protection Association’s standard establishes the minimum requirements for conducting live fire training evolutions safely
- *OSHA 1910.156*: The federal regulation governing fire brigades, which sets safety standards for employer-organized fire teams
- *OSHA 1910.134*: The Respiratory Protection standard requiring employers to protect employees from harmful airborne contaminants
- *PPE*: Personal Protective Equipment

**1006.04 Instructor Education:**

- All Erie County, New York State and Buffalo Fire Department Instructors utilizing facilities owned by Erie County are required to comply with the training requirements outlined in their respective job descriptions and conditions of employment

**1006.05 Procedure:**

**Instructor Assignments**

- When a fire department requests use of an Erie County Training Facility, the Division of Fire Safety shall place five (5) instructor slots on the calendar
  - Lead Instructor
  - Safety Officer
  - Ignition Officer
  - Two (2) supportive roles
- For a live burn evolution to occur, at least three (3) Erie County Instructors must be assigned to the shift. Erie County Instructors must fill the roles of Lead, Safety, and Ignition. They two (2) supportive roles can be filled by fire department personnel if Erie County Instructors are unavailable
- A lead instructor shall be assigned to all live fire trainings
- A Safety Officer shall be assigned prior to the start of any live fire training evolutions
- An Ignition officer shall be assigned prior to the start of any live fire training evolution

**Pre-Live Fire Briefing**

- A mandatory pre-training briefing shall be conducted to review objectives, safety measures, and individual roles
- All participants must be equipped with appropriate personal protective equipment (PPE)
- A plan shall be in place and discussed to obtain Emergency Medical Services (EMS) in the event they are needed.

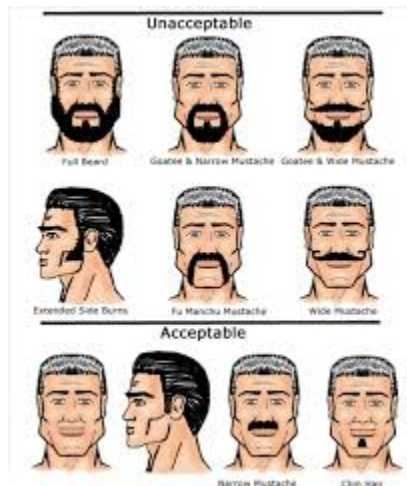
### **Execution of Training**

- Instructors shall maintain constant supervision and ensure compliance with safety protocols
- Only Erie County, New York State Fire Instructors, and Buffalo Fire Instructors may ignite and control live fires
- Effective communication shall be maintained throughout the training evolution
- Any unsafe conditions must be immediately addressed, and the training evolution paused if necessary
- A safety 1 ¾” hose line shall always be in place and connected to a separate water source than the hose used for training evolutions
- As per NFPA and NYS regulations, hydrants used for live fire training shall have a minimum of 120gpm of flow.
- A FAST/RIC team shall be in place while firefighters occupy the structure and live fire training is on going
  - A minimum of 2 firefighters must be identified for each evolution
- Ignition Officers must ensure fuel loads are at an appropriate level for live fire evolutions (in accordance with NFPA 1403) so that temperatures stay within an appropriate range and damage is not caused to the structure

### **Safety Guidelines**

- The training facility must be inspected and prepared in compliance with NFPA 1403 standards
- A walk-thru of the structure must be completed prior to the beginning of training with all instructors and participants
  - The evacuation procedures and tones must be sounded while individuals are inside the structure per NFPA 1403 guidelines
- All firefighters participating in live fire evolutions and entering an IDLH environment shall have a valid OSHA fit test and physical provided to them by their home department

- The home agency will need to provide appropriate documentation if requested by Erie County
- All participants and instructors shall wear PPE when conducting training which includes but is not limited to: helmet, fire-rated gloves, turnout gear, boots, hood, and SCBA
  - While inside the structure and a burn room has active fire, all firefighters and instructors shall wear a hood and full SCBA and be on air
  - All participants who wish to enter a structure with a burn room that has active fire shall be clean shaven in accordance with both OSHA (29 CFR 1910.134(g)(1)(i)) and NFPA
  - 29CFR 1910.134(g)(1)(i)(A) – The employer shall not permit respirators with tight-fitting facepieces to be worn by employees who have facial hair that comes between the sealing of the facepiece and the face or that interferes with valve function
  - 29CFR 1910.134(g)(1)(i)(B) – The employer shall not permit respirators with tight-fitting facepieces to be worn by employees who have any condition that interferes with the face-to-facepiece seal or valve function
  - Not Permitted: Any hair – beard, goatee, stubble, mustache – touching or crossing the seal line (note: Someone who states, “I passed my fit test with this hair”, does not override this requirement)



- Clear identification of emergency evacuation routes must be communicated to all participants
- There shall be **NO** simulated MAYDAY calls during Live Fire Training Evolutions
  - MAYDAYs may be practiced when utilizing smoke machines to simulate live fire
- There shall be **NO** “live” victims during Live Fire Training Evolutions

- Dummies may be used for search and rescue operations
- There shall be **NO** more than one (1) live fire active at a given time
  - Multiple burn rooms may be used during the scheduled training day; however, only one per evolution is permitted
- Instructors shall investigate and respond to all active PASS alarms to determine if an actual emergency exists
- The Lead Instructor and Safety Officer must be aware of the current weather conditions and stop all training if lightning is within ten miles
  - Instructors shall observe the heat index and know the guidelines for training in cold and hot weather conditions
  - Instructors shall have the authority to stop training if safety issues arise and have the awareness for a Go-No-Go pause
    - No Live Fire Training Evolutions shall be conducted with temperatures below 32 degrees
    - No Live Fire Training evolutions shall be conducted with sustained winds over 40mph
    - The Lead Instructor and Safety Officer shall determine the Heat Index, then, if applicable:
    - Add 10-degrees Fahrenheit for skills requiring the use of structural firefighter personal protective clothing or fully encapsulated chemical protective clothing, then, if applicable,
    - Add 10-degrees Fahrenheit for skills conducted in direct sunlight (outdoor activities such as car fires or oil pits)
    - If skills are conducted using structural firefighters or fully encapsulated chemical protective clothing and in direct sunlight, then 20-degree Fahrenheit shall be added
      - Example Heat Index of 90 + 10 for PPE + 10 for direct sunlight (20-degrees broken down) = Total Effective Heat Stress of 110

<b>Effective Heat Stress Index ° F</b>	<b>Threat Category</b>	<b>Injury Threat</b>
Below 60	None	Little to no danger under normal circumstances
60 to 79	Low	Fatigue possible
80 to 89	Elevated	Fatigue is possible if exposure is prolonged and there is physical activity
90 to 104	Moderate	Heat cramps and heat exhaustion are possible if exposure is prolonged, and there is physical activity

105 to 129	High	Heat cramps, heat exhaustion, and heat stroke are likely possible if exposure is prolonged and there is physical activity. No Live Fire Training.
130 and above	Extreme	HEAT STROKE IMMINENT – NO TRAINING

<b>Effective Heat Stress Index ° F</b>	<b>Work/Rest Ratio (Minutes Work/Minutes Rest)</b>	<b>Fluid Intake per Hour</b>	<b>Special Actions</b>
60 to 79	40/20	24 Ounces	None
80 to 89	30/30	32 Ounces	None
90 to 104	30/30	32 Ounces	Active Cooling, if available
105 to 129	20/40	32 Ounces	All Live Fire Evolutions and evolutions requiring Fully Encapsulated Chemical Protective Clothing are Cancelled

### **Post-Training Evaluation**

- A post-training evaluation review shall be conducted to evaluate the effectiveness of the exercise and identify areas for improvement
- All incidents, injuries, or unsafe conditions shall be documented and reported

### **1006.06 Responsibilities**

#### **Instructor-In-Charge**

- Coordinate with the fire department who have scheduled the training facilities, to develop and implement a training plan
- Ensure compliance with NFPA 1403 standards for live fire training
- Supervise all aspects of live fire training
- Conduct pre-training and post training briefings
- Shall coordinate with the other scheduled instructors prior to the arrival of the fire departments to assign job duties (safety, ignition, support)
- Ensures appropriate water sources are in place for water supply to the attack and backup lines
- Ensures a FAST/RIC team is in place for each evolution
- Is tasked with inspecting the live burn structure prior to and post training
  - Must report any and all damages to Erie County Fire Safety command staff

### **Safety Officer**

- Tasked with the prevention of unsafe acts and the elimination of unsafe conditions
- Must coordinate with the Instructor-In-Charge to determine safe weather conditions for training
- Must ensure all firefighters and instructors are in compliance with the facial hair requirements within this policy
- Must act on all reported injuries, and investigate appropriately
- Must investigate all PASS alarm activations
- May rotate assignments with other instructors
  - Provided communication occurs with all individuals to clearly identify everyone's role prior to a new training evolution beginning
- Tasked with inspecting PPE of individuals who will enter an IDLH environment prior to the start of training.

### **Ignition Officer**

- Builds fires only using a maximum of two wood pallets and one bale of hay per burn evolution
  - No more than 150lbs of fuel load shall be used per evaluation
    - A single pallet = 50lbs of fuel load
    - A single bale of hay = 50lbs of fuel load
- Use tepee, flat, or vertical lays for construction
- Coordinate with the Instructor-In-Charge before lighting the fire
- Must rotate assignments with other instructors every evolution per NFPA 1403
  - Communication must occur with all individuals to clearly identify everyone's role prior to a new training evolution beginning
- During the ignition process, a second instructor must be present. No one enters a structure (IDLH) environment alone

### **Support Instructors**

- Shall accompany each team through the live burn scenario
- Shall give a PAR status to the Instructor-In-Charge before entering and exiting the building
- If time permits, give a summary of how the scenario went to the crew that conducted the training evolution

- Will participate in post-training briefing
- May rotate assignments with other instructors
  - Provided communication occurs with all individuals to clearly identify everyone's role prior to a new training evolution beginning

### **Participants**

- Shall follow all directions and instructions from the fire instructors
- Shall be clean-shaven to enter a structure that requires the use of an SCBA
- Adhere to all safety guidelines and procedures
- Participate actively in briefings and post-training evolutions
- Report any unsafe conditions or injuries immediately to their group instructor

### **1006.07 Compliance and Accountability**

- The Erie County Department of Homeland Security and Emergency Services, Division of Fire Safety, shall enforce this policy rigorously to ensure compliance with OSHA 1910.156 and NFPA 1403. Violations of this policy may result in firefighters being prohibited from attending future training on county property