

Office of the State Fire Commissioner



Pennsylvania State Fire Academy

**Structural Burn/Live Fire
(SBS) Policy
No. 2006 - 02**

February 24, 2006



**LIVE FIRE SUPPRESSION
AND
NON-SUPPRESSION DRILL PROCEDURES
FOR ACQUIRED STRUCTURES AND FIXED
STRUCTURAL FIRE TRAINING BUILDINGS
AND OTHER OPEN BURNING COURSES**



PURPOSE: This policy is designed to create a safe instructional environment during fire suppression and non-suppression training evolutions involving live fires for acquired structures and fixed structural fire training buildings as well as other courses involving live fire.. It consists of the steps to follow in setting up such a drill, preparing the training site, and running the evolution. These procedures shall be followed on all live fire drills, as well as smoke drills using live fire.

I. PERSONNEL QUALIFICATIONS AND RESPONSIBILITIES: The Qualifications and responsibilities for personnel who are to be conducting the training evolution are listed below. These qualifications were designed to insure that individuals with the appropriate training and experience are in charge of the drill ground. * Note - if Live Fire is being used as part of the Interior Firefighter (ELIF) course, ALL Instructors of record must be Delmar accredited*

A. LEAD INSTRUCTOR shall be:

1. Accredited by the Pennsylvania State Fire Academy as a Suppression SBS Instructor.
2. Approved as Lead Instructor by the State Fire Academy Fire Service Education Specialist-Field Supervisor and ETA if applicable
3. Responsible for insuring a productive, safe learning environment during live fire burn evolutions, and for full compliance with these guidelines. He/she shall also be responsible to select Assistant Instructors in accordance with Section I, item B, C, D and E of this document and shall utilize an Incident Command System (ICS).
4. Responsible for making the decision to ignite the training fire in coordination with the Safety Officer.

B. ASSISTANT INSTRUCTORS shall be:

1. Accredited by the Pennsylvania State Fire Academy as a Suppression SBS Instructor.
2. Chosen by the Lead Instructor, subject to the approval of the State Fire Academy Fire Service Education Specialist- Field Supervisor and ETA if applicable.
3. Responsible to:
 - a. Perform all functions assigned to him/her by the Lead Instructor.
 - b. Assure that at no time any individual is alone in the burn room area
4. **Only Suppression Instructors approved by the PA State Fire Academy will direct and supervise the students involved in the live fire activities.**

C. SAFETY OFFICER shall be:

1. Accredited by the Pennsylvania State Fire Academy as a Suppression SBS Instructor.
2. Approved by the State Fire Academy Fire Service Education Specialist– Field Supervisor and ETA if applicable

3. Responsible to:
 - a. Appoint any Assistant Safety Officer (subject to the approval of the State Fire Academy Fire Service Education Specialist–Field Supervisor.) The qualifications for Assistant Safety Officers shall be the same as those for the Safety Officer.
 - b. Ensure that the Lead Instructor has complied with all the standards of this policy.
 - c. Observe and record all unsafe acts, and/or conditions on the drill ground including if the conditions are:
 - (1) Minor in nature, he/she shall inform the Lead Instructor to correct them.
 - (2) Serious in nature, he/she may use his/her discretion. His/her discretionary power allows the safety officer to stop a drill from continuing, with proper notification to the Lead Instructor.
 - d. Intervene to stop a potential accident or dangerous situation whenever an unsafe situation arises. ***In such instance, the safety officer shall become the senior ranking individual on the drill ground, regardless of his/her rank!***
 - e. Conduct a search of the structure to ensure that no unauthorized persons, animals, or objects are in the building immediately prior to ignition
 - f. Assure that at no time any individual is alone in the burn room area.
4. Assist the Lead Instructor in providing for the safety of all persons on the scene (including instructors, students, and bystanders) from incidents likely to cause personal injury, and/or equipment damage.
5. Be accountable to the State Fire Academy Fire Service Education Specialist-Field Supervisor for exercising his /her authority to intervene in the evolution.
6. Determine upon arrival at a live fire drill if the weather creates a potential menace. If it does, he/she will have the authority to cancel the drill in accordance with Section VI.

D. IGNITION OFFICER shall:

1. Be accredited by the Pennsylvania State Fire Academy as a Suppression SBS Instructor.
2. Be chosen by the Lead Instructor subject to the approval of the State Fire Academy Fire Service Education Specialist- Field Supervisor and ETA if applicable
3. Control the materials being burned.
4. Wear full protective clothing, including self-contained breathing apparatus (SCBA) when performing this control function.
5. Be accompanied by a charged hose line when he/she is igniting any fire.
6. Be in the presence of and under the direct supervision of the Safety Officer when igniting the initial fire
7. Be responsible for adding all materials to the fire sets for repetitive fires

E. RAPID INTERVENTION TEAM (RIT) OFFICER shall be:

1. Accredited by the Pennsylvania State Fire Academy as a Suppression SBS Instructor.
2. Chosen by the Lead Instructor subject to the approval of the State Fire Academy Fire Service Education Specialist- Field Supervisor and ETA if applicable
3. In charge of a team of no less than six (6) individuals, two (2) of which shall staff the Safety/Backup line and four (4) to serve as the RIT. Students MAY be utilized for this function.

* Duties/Suggested training level/Minimum equipment for RIT is found in *Appendix E*.

F. SUPPORT PERSONEL shall:

1. Include but not limited to; apparatus operators, rehab, traffic control and EMS standby. They shall not be a student nor counted as an Instructor.
2. Be trained and competent in their duties as assigned.
3. Wear PPE appropriate for their duties.

II. POLICIES AND PROCEDURES FOR LIVE FIRE DRILLS AT ACQUIRED STRUCTURES:

A. Prior to the drill:

1. The Lead Instructor (instructor of record) and Safety Officer will inspect the structure to determine if **live fire training** can be safely conducted and it is suitable for the drill. The Lead Instructor must obtain a release of liability letter from the property owner and applicable Burn Permit(s) from the municipality in which the drill(s) are being conducted. These letters must release all personnel and all agencies involved from any claim for loss resulting from the programs activities, and that all insurance coverage has been canceled. The Lead Instructor is responsible to submit the Application for Open Burning Exception for Firefighting Instruction (*Appendix A*) and the Request for Burn Drill (*Appendix B*) to the PA State Fire Academy Field Supervisor responsible for the county where the live drills are being conducted. These applications must be submitted at least forty-five (45) days before the anticipated drill. A copy of these forms must be present on the drill ground during **live fire training** drills.
2. After inspecting the structure, the Lead Instructor shall fill out the Live Fire Checklist (*Appendix C*) as each step occurs and it must be present at the drill site.
3. The Fire Service Education Specialist-Field Supervisor shall answer the Lead Instructor's request in writing at least ten (10) days prior to the drill. This letter will contain the approval/ disapproval of the requested drill, and the approval/disapproval of the requested instructors.
4. The Lead Instructor is responsible to notify all personnel (i.e., Assistant Instructors, Safety Officer, Ignition Officer, RIT Officer, Students) of the drill, and the time and location of where to report.
5. The Lead Instructor is responsible to obtain all necessary equipment needed for the drill (i.e., hand tools, SCBA's, fire apparatus, etc.).

B. At the drill site:

1. To insure that all personnel are familiar with what is expected of them during the drill, there will be two briefings:
 - a. Instructors' Briefing - **ALL** instructors as well as the Safety Officer, Ignition Officer and RIT Officer will meet at the structure one and one half (1-1/2) hours prior to the drill and duty assignments will be made. All instructors plus the safety officer will complete a walk through to familiarize themselves with the structure(s).
 - b. Students' Briefing - **ALL** students will meet at the structure site one (1) hour prior to the start so students can be informed as to what is expected of them. Instructors, Safety Officer, RIT Officer and Ignition Officer will be introduced. Protective clothing and gear will be inspected. Students who have never been in the structure will be walked through so they can be familiarized with the layout. Students will be assigned into teams (squads).
 - c. Smoke Only - Instructors will meet one (1) hour prior to the start of the drill, and students will report one-half (1/2) hour early for assignments.
2. There are three classifications of hose lines:
 - a. Attack lines - are those hose lines used to suppress a fire, actively.
 - b. Back-up lines - are those being used for supporting the attack line crews.

c. Safety Lines - are those kept outside the structure, but at the ready in case of emergency.

The number and size of attack and back-up lines used is at the discretion of the Lead instructor. Any attack or back-up line will be capable of delivering a minimum of 95 gpm. **There shall be one instructor with each hose line being actively used inside the structure during the drill, regardless of the number of students.** There will be one instructor for each five students actively participating in the drill. Students on break do not need to have an instructor assigned to them.

Safety lines are always required. The Safety line will be part of RIT as defined in Section I.E.3. The line shall be a length adequate to access and attack in a fire anywhere in the structure. The safety line is only to be used if there is a perceived emergency in the structure.

3. The water supply for an individual live fire training evolution shall be assessed based on the extent of the evolutions, size and structure of the building and contents to be involved, method of attack to be employed, protection of exposures, and reserves for potential unexpected problems.

The minimum water supply and delivery rates for the live fire training evolutions shall meet the criteria established in NFPA 1142, *Standard on Water Supplies for Suburban and Rural Fire Fighting*, published by the National Fire Protection Association (NFPA).

A minimum reserve water supply of at least 50 percent of the total fire load demand shall be available to handle exposure protection or unforeseen situations. The safety line shall be on a separate water source. This may be a second pumper either using its water tank as a source, or hooked up and prepared to draft from a natural water source or a hydrant from a different supply source. In any case, the safety lines will be on a separate water source than the backup or attack lines.

4. **The danger zone** will be the immediate area around the structure. The danger zone will be determined by multiplying the building height times 1.5, that distance will then be measured outward from the base of the structure and instituted/enforced by the Safety Officer. **NO** civilians or any other persons not members of the class wearing appropriate protective clothing will be allowed to enter the danger zone. (NOTE: it may be necessary to rope off the area, and/or patrol the boundaries of the danger zone to keep civilians out during house burns.)
5. **There must be an ambulance (BLS minimum) with medically trained staff present at all times during the drill.** The personnel staffing the ambulance will NOT be permitted to participate in the drill. The ambulance shall be located near the danger zone, and all personnel involved in the drill must be aware of its location.
6. A personnel accountability system shall be established for all drill participants (instructors and students) which will allow the lead instructor or other observers to, at any given point during the evolution, determine the name and approximate location (i.e. interior, exterior, Rehab, etc.) of each participant. A recognized emergency "evacuation" signal must be identified to all participants in the drill.

C. Protective Clothing: Each participant shall be equipped with full protective clothing and self-contained breathing apparatus (SCBA). All participants shall be inspected by the safety officer prior to entry into a live fire training evolution to ensure that the protective clothing, SCBA, and a personal alert safety system (PASS) device are being properly worn and are in serviceable condition.

Prior to participating in any activity in Structural Burn Session courses, a visual inspection of all protective clothing used by ALL personnel participating in the drill activity will be completed. Inspection of protective clothing will be the responsibility of the Lead Instructor and will involve inspection of protective clothing worn by students, instructors and safety personnel. The PA State Fire Academy "Personal Protective Equipment Inspection List" (*Appendix D*) shall be used and filled out completely for ALL personnel participating in the drills.

In addition to the inspection of protective clothing, ALL personnel shall wear a long sleeve shirt and long pants or long sleeve coveralls under their protective clothing while participating in live structural burn activities.

- Protective coats, protective trousers, helmets, gloves, and footwear shall meet the requirements of NFPA 1711, *Standard on Protective Ensemble for Structural Fire Fighting*, (when purchased).

- Personal alarm devices shall meet the requirements of NFPA 1982, *Standard on Personal Alert Safety Systems (PASS)* (when purchased).
- Self-contained breathing apparatus, SCBA, shall meet the requirements of NFPA 1981, *Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services*, including low air alarm, positive pressure regulator, and functional PASS alarm (when purchased).
- Where station or work uniforms are worn by any participant, the station or work uniform shall meet the requirements of NFPA 1975, *Standard on Station/Work Uniforms for Fire and Emergency Services* (when purchased).

All students, instructors, safety personnel, and other personnel shall properly wear all protective clothing and equipment whenever these persons are involved in any evolution or fire suppression operation during the live training evolution.

All students, instructors, safety personnel, and other personnel participating in any evolution or operation of fire suppression during the live fire training evolution shall breathe from an SCBA air supply whenever one or more of the following conditions exist:

- (a) Operating in an atmosphere that is oxygen deficient or contaminated by products of combustion, or both.
- (b) Operating in an atmosphere that is suspected of being oxygen deficient or contaminated by products of combustion, or both.
- (c) Operating in any atmosphere that may become oxygen deficient or contaminated, or both.
- (d) Operating below ground level.

D. During the evolutions: The fuels that are utilized in live fire training evolutions shall have known burning characteristics of such a nature to be controllable as possible. Unidentified materials, such as debris found in or around the structure, which may burn in unanticipated ways, react violently, or create environmental/health hazards, shall not be used.

1. ONLY CLASS "A" MATERIALS WILL BE USED IN THE FIRE: Pressure treated wood, rubber and plastic materials shall not be used.
2. **No Flammable/Combustible** liquids shall be used on any fire.
3. Only one fire at a time shall be permitted within an acquired structure
4. Proper fire fighting practices and procedures will be followed at all times.
5. Fires will be of a reasonably small size. That is to say that the fire should not be of a size that is uncontrollable when personnel are inside or about to enter the structure. **No more** than four (4) pallets of average size or comparable amount of Class A material shall be used per fire.
6. **All PA State Fire Academy and Fixed Site Policies will take precedent and be followed at fixed structural burn buildings.**

NOTE: These general guidelines will be followed on every live fire drill to insure the safety of all personnel. Every effort should be taken by the instructional staff to approximate a controllable and organized structural fire attack with the maximum attention to the safety of all the participants of the drill.

III. POLICIES AND PROCEDURES FOR LIVE FIRE DRILLS AT FIXED FACILITIES

A. Prior to the drill:

1. The Lead Instructor shall contact the management of the fixed facility to ensure that appropriate DEP or County Dept of Health regulations/permitting process have been met for the scheduled drill.

2. The Lead Instructor (instructor of record) shall notify the State Fire Academy Fire Service Education Specialist-Field Supervisor of plans to have a **Live Fire Fighting or Live Fire Search And Rescue/SCBA** drill at the fixed facility. **This request will be made in writing at least forty-five (45) days prior to the drill.** (Appendix B)
3. The Fire Service Education Specialist-Field Supervisor shall answer the Lead Instructor's request in writing at least ten (10) days prior to the drill. This letter will contain the approval/ disapproval of the requested drill, and the approval/disapproval of the requested instructors.
4. The Lead Instructor is responsible to notify all personnel (i.e., Assistant Instructors, Safety Officer, Ignition Officer, RIT Officer, Students) of the drill, and the time and location of where to report.
5. The Lead Instructor is responsible to obtain all necessary equipment needed for the drill (i.e., tools, SCBA's, fire apparatus, etc.).

B. At the drill site:

1. To insure that all personnel are familiar with what is expected of them during the drill, there will be two briefings:
 - b. Instructors' Briefing - **ALL** instructors as well as the Safety Officer, Ignition Officer and RIT Officer will meet at the burn structure prior to the drill and duty assignments will be made. All instructors plus the safety officer, Ignition Officer and RIT Officer will complete a walk through to familiarize themselves with the structure(s).
 - b. Students' Briefing - **ALL** students will meet at the structure site prior to the start so students can be informed as to what is expected of them. Instructors, Safety Officer, Ignition Officer and RIT Officer will be introduced. Protective clothing and gear will be inspected. Students who have never been in the structure will be walked through so they can be familiarized with the layout. Students will be assigned into teams (squads).
 - c. Smoke Only - Instructors will meet one (1) hour prior to the start of the drill, and students will report one-half (1/2) hour early for assignments.
2. There are three classifications of hose lines.
 - a. Attack lines - are those hose lines used to suppress a fire, actively.
 - b. Back-up lines - are those being used for supporting the attack line crews.
 - c. Safety Lines - are those kept outside the structure, but at the ready in case of emergency.

The number and size of attack and back-up lines used is at the discretion of the Lead instructor. Any attack or back-up line will be capable of delivering a minimum of 95 gpm. **There shall be one instructor with each hose line being actively used inside the structure during the drill, regardless of the number of students.** There will be one instructor for each five students actively participating in the drill. Students on break do not need to have an instructor assigned to them.

Safety lines are always required. The Safety line will be part of RIT as defined in Section I.E.3. The line shall be a length adequate to access and attack in a fire anywhere in the structure. The safety line is only to be used if there is a perceived emergency in the structure.

3. The water supply for an individual live fire training evolution shall be assessed based on the extent of the evolutions, size and structure of the building and contents to be involved, method of attack to be employed, protection of exposures, and reserves for potential unexpected problems.

The minimum water supply and delivery rates for the live fire training evolutions shall meet the criteria established in NFPA 1142, *Standard on Water Supplies for Suburban and Rural Fire Fighting*, published by the National Fire Protection Association (NFPA).

A minimum reserve water supply of at least 50 percent of the total fire load demand shall be available to handle exposure protection or unforeseen situations. The safety line shall be on a separate water source. This may be a second pumper either using its water tank as a source, or hooked up and prepared to draft

from a natural water source or a hydrant from a different supply source. In any case, the safety lines will be on a separate water source than the backup or attack lines.

Exception: A single source shall be sufficient at a training center facility where the water system has been engineered to provide adequate volume for the evolutions conducted and a backup power source or backup pumps, or both, are in place to ensure an uninterrupted supply in the event of a power failure or malfunction.

4. **The danger zone** will be the immediate area around the structure. The danger zone will be determined by written policy determined by the management of the fixed facility and shall be enforced by the Safety Officer. NO civilians or any other persons not members of the class wearing appropriate protective clothing will be allowed to enter the danger zone. (NOTE: it may be necessary to rope off the area, and/or patrol the boundaries of the danger zone to keep civilians out during house burns.)
5. **There must be medically trained staff present at all times during the drill.** The EMS personnel will NOT be permitted to participate in the drill. If an ambulance is on scene shall be located near the danger zone, and all personnel involved in the drill must be aware of its location. (When the cost of a BLS ambulance stand-by is cost prohibitive, a fixed facility may have on site solely dedicated to the live fire and/or smoke training class a minimum of one certified EMT with appropriate medial equipment and supplies as prescribed by the PA DOH that an EMT may use.)
6. A personnel accountability system shall be established for all drill participants (instructors and students) which will allow the lead instructor or other observers to, at any given point during the evolution, determine the name and approximate location (i.e. interior, exterior, Rehab, etc.) of each participant. A recognized emergency "evacuation" signal must be identified to all participants in the drill.

C. Protective Clothing: Each participant shall be equipped with full protective clothing and self-contained breathing apparatus (SCBA). All participants shall be inspected by the safety officer prior to entry into a live fire training evolution to ensure that the protective clothing, SCBA, and a personal alert safety system (PASS) device are being properly worn and are in serviceable condition.

Prior to participating in any activity in Structural Burn Session courses, a visual inspection of all protective clothing used by ALL personnel participating in the drill activity will be completed. Inspection of protective clothing will be the responsibility of the Lead Instructor and will involve inspection of protective clothing worn by students, instructors and safety personnel. The PA State Fire Academy "Personal Protective Equipment Inspection List" (*Appendix D*) shall be used and filled out completely for ALL personnel participating in the drills.

In addition to the inspection of protective clothing, ALL personnel shall wear a long sleeve shirt and long pants or long sleeve coveralls under their protective clothing while participating in live structural burn activities.

- Protective coats, protective trousers, helmets, gloves, and footwear shall meet the requirements of NFPA 1971, *Standard on Protective Ensemble for Structural Fire Fighting*, (when purchased).
- Personal alarm devices shall meet the requirements of NFPA 1982, *Standard on Personal Alert Safety Systems (PASS)* (when purchased).
- Self-contained breathing apparatus, SCBA, shall meet the requirements of NFPA 1981, *Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services*, including low air alarm, positive pressure regulator, and functional PASS alarm (when purchased).
- Where station or work uniforms are worn by any participant, the station or work uniform shall meet the requirements of NFPA 1975, *Standard on Station/Work Uniforms for Fire and Emergency Services* (when purchased).

All students, instructors, safety personnel, and other personnel shall properly wear all protective clothing and equipment whenever these persons are involved in any evolution or fire suppression operation during the live training evolution.

All students, instructors, safety personnel, and other personnel participating in any evolution or operation of fire suppression during the live fire training evolution shall breathe from an SCBA air supply whenever one or more of the following conditions exist:

- (a) Operating in an atmosphere that is oxygen deficient or contaminated by products of combustion, or both.
- (b) Operating in an atmosphere that is suspected of being oxygen deficient or contaminated by products of combustion, or both.
- (c) Operating in any atmosphere that may become oxygen deficient or contaminated, or both.
- (d) Operating below ground level.

D. During the evolutions: The fuels that are utilized in live fire training evolutions shall have known burning characteristics of such a nature to be controllable as possible. Unidentified materials, such as debris found in or around the structure, which may burn in unanticipated ways, react violently, or create environmental/health hazards, shall not be used.

1. ONLY CLASS "A" MATERIALS WILL BE USED IN THE FIRE: Pressure treated wood, rubber and plastic materials shall not be used.
2. **No Flammable/Combustible** liquids shall be used on any fire.
3. No more one fire per floor at a time shall be permitted within a fixed facility
 - a. For initial fires, there shall be an Ignition Officer for each fire floor.
 - b. The Safety Officer shall supervise the ignition of each initial fire
 - c. Subsequent fires shall be fueled and/or reignited by the Ignition Officer supervised by an Assistant Instructor assigned to that floor.
4. Proper fire fighting practices and procedures will be followed at all times.
5. Fires will be of a reasonably small size. That is to say that the fire should not be of a size that is uncontrollable when personnel are inside or about to enter the structure. **No more** than four (4) wooden pallets of average size or comparable amount of Class A material shall be used per fire.
6. **All PA State Fire Academy and Fixed Site Policies will take precedent and be followed at fixed structural burn buildings.**

NOTE: These general guidelines will be followed on every live fire drill to insure the safety of all personnel. Every effort should be taken by the instructional staff to approximate a controllable and organized structural fire attack with the maximum attention to the safety of all the participants of the drill.

IV. VEHICLE FIRES, FIRE EXTINGUISHER FIRES, ETC.

Any course utilizing "Live Fire" shall adhere to other Commonwealth Agency regulations i.e.: Crimes Code Title 18 regarding destruction of vehicles as well as D.E.P. regulations for open burning. See *Appendix E* for more information.

V. NON LIVE-FIRE COURSES

Any course utilizing "Live Smoke" shall require a minimum of three (3) instructors, one (1) of which shall be Suppression level. The remaining two (2) instructors shall be approved by the State Fire Academy Field Education Specialist-Field Supervisor. "Live Smoke" shall be defined as; smoke generated from within the structure by use of combustion of any materials to cause smoke to be generated. The Lead Instructor shall utilize the same request form used for SBS courses. A staffed charged hoseline shall be available whenever students are in the drill building.

VI. WEATHER

RESPONSIBILITY: It will be the responsibility of the LEAD INSTRUCTOR to insure that the guidelines set forth in this procedure are followed.

PROCEDURE: Health and Safety Professionals have identified four areas that affect an individual's ability to work in hostile environment. These include:

Acclimatization: For the purposes of live fire training acclimatization will never occur. This generally deals with those individual who work in a given area subjected to the same environmental factors for an continuous period of time. Physical fitness is considered a subset of acclimatization.

Environmental Conditions: Cold and heat stressors use different variables in determining whether conditions are acceptable. Heat Index relies on Temperature and Relative Humidity while wind chill relies on temperature and wind speed. In order to determine these values sophisticated monitoring equipment along with complex calculations are required. Interior burn building conditions will not factor into determining acceptable environmental conditions.

Protective Clothing: While protective clothing is design to protect from a hostile environment, it also hinders that body's natural cooling ability.

Workload: Workload can be placed into one of three categories, which are Light, Medium, or Heavy. An example of light work would be a member who is assigned to the Rapid Intervention Team. A medium workload is an instructor who is working in a given area within the building but not actively working. A heavy workload is most likely to be experienced by a hose team that is carrying out suppression activities.

A. Pre-incident activities

1. The lead instructor will gather the weather forecast for inclusion in the morning briefing and to insure that the area is established accordingly.
2. In the event that it is necessary to establish a rehab area, the lead instructor shall:
 - a. Brief all instructors and students/candidates on the signs and symptoms of Heat-Related Disorders.
 - b. Encourage all participants to report any signs and symptoms that affect not only them but also anyone who is involved in the program.
 - c. Review of the chart shown in *Appendix F* is not necessary if an appropriate visual aid has been posted.

B. Incident Activities

1. Monitoring
 - a. All instructors will be expected to monitor both students and instructors for heat-related disorders.
 - b. Should extra EMS personnel be available, they will monitor the health and welfare of all involved from warm zone.
 - c. In the event that a student exhibits signs of a heat related disorder, the lead instructor/designee will direct the student to EMS. A refusal will result in immediate removal from the program.
 - d. In the event that an instructor exhibits signs of a heat related disorder, the lead instructor/designee in consultation with the Safety Officer shall direct the instructor to EMS for evaluation.
2. Removal from the Program
 - a. A candidate may be removed from the program for the following reasons:
 1. The candidate voluntarily removes themselves
 2. The Lead Instructor and Safety Officer on the advice of the Rehab Officer or highest ranking EMS person shall remove an individual from the program if allowing him or her to continue would pose an unnecessary risk to the participant or crew.
 3. Where a visit to Rehab has resulted in longer than anticipated stays on more than two occurrences.

3. Discontinuing a program.

- a. The lead instructor will continually monitor weather conditions for any unexpected changes that may result in additional thermal stressors (i.e. changes in humidity levels)
- b. The instructional staff should continually monitor the students for signs of heat disorders. Due to varied levels physical fitness some candidates will show signs of fatigue much sooner than someone who is more physically fit. Using the least, or most, physically fit individuals as the slide-rule is a dangerous practice.
- c. If three or more people either remove themselves or are removed.
- d. If the Lead Instructor and the Safety Officer after discussion with the Rehab Officer feel that continuing the program would place students and instructors at an undue risk.

C. Post-incident Activities

1. The lead instructor will insure that incident reports are completed for all individuals that exhibited signs or symptoms of heat disorders.
2. Conduct a post incident review with instructors/students. This review should include:
 - a. The need to continue hydrating.
 - b. The use of alcohol should be avoided

VII. REHAB

SUMMARY: To ensure that the physical and mental condition of students and instructors operating at a training exercise do not deteriorate to a point that affects the safety of each member or that jeopardize the safety and integrity of the operation. This procedure shall apply to all SBS courses.

A. Location - shall be determined by the Lead instructor in consultation with the EMS officer or senior medic on scene. The following conditions should be considered when establishing a rehab sector:

1. Upwind of the incident
2. Free from exhaust fumes
3. Shaded area
4. Minimal noise
5. As close to the incident as possible without interfering with scene operations
6. Ingress and egress for transporting units is provided
7. Away from crowds and traffic
8. Near air refill area
9. Shelter from inclement weather
10. Near Incident command post
11. The rehab area shall be considered a "No Smoking" area.

B. Chain of Command

1. The Lead Instructor (IC) shall have the overall responsibility to ensure that a rehab sector is implemented in accordance with the rehab SOG. The lead instructor shall work in a unified command structure with the EMS incident commander and Safety Officer to ensure the safety and rehab compliance of all student and instructors. The IC will serve as the primary point of contact for the Safety Officer in the chain of command reporting process.
2. The Safety Officer: shall work in a unified command structure with the Incident commander and EMS officer to ensure the safety and rehab compliance of all student and instructors. The Safety Officer shall be the primary point of contact for the EMS officer in the chain of command reporting process.
3. EMS Officer shall:
 - a. be filled by the highest trained medic or EMS supervisor
 - b. determine the location of the Rehab area after consulting with the Incident Command and Safety Officer
 - c. be responsible for overall EMS operations
 - d. direct Rehab personnel from the Rehab area to the location of injured students and instructors

- e. ensure fire personnel are sent to the rehab area with escorts
- f. determine which units will be used for transport
- g. request and assign additional units as needed
- h. be a liaison with outside EMS agencies for transport and supplemental staffing

NOTE: Unforeseen situations leading to a large number of patients may require additional EMS resources and officer assignments to fulfill the situational needs. In this type of situation all class operations will cease until the situation is mitigated and restored to a normal operational status.

Additional EMS assignments include:

Staging – Responsible for coordination of additional units and personnel

Transportation – Responsible for assigning units to transport patients and personnel.

Logistics – Responsible for procurement and storage of supplies. (i.e. water, food, ice, bathrooms, lodging, etc.)

4. Rehab Officer shall:

- a. Be filled by the next highest ranking medical person available.
- b. Monitor the mental capacity, vital signs, and general well-being of all students and instructors as the report to the rehab sector
- c. Provide hydration, nourishment and supplemental interventions for recovery
- d. Decide when students and instructors may return to duty
- e. Notify the EMS Officer when a patient needs transported
- f. Ensure the rehab crew is standing by with a stretcher, backboard, collars, oxygen, and monitor, to treat injured students or instructors
- g. Ensure proper documentation of all events in the Rehab area

C. Implementation and Flow Pattern

1. Candidates shall report to the Rehab area when

- a. After each interior evolution utilizing SCBA
- b. Prolonged exterior operation involving physical exertion
- c. Operations in extreme heat and cold weather temperatures
- d. Experiencing physical complaints of chest pain, difficulty breathing, dizziness, or fainting
- e. They have sustained an injury
- f. They may report to Rehab anytime they feel the need for rest or reconditioning
- g. Anytime a officer orders them to do so

* It is essential that rehab accountability be established and maintained during the training evolution. This will ensure that students and Instructors are care for appropriately. Therefore, students and Instructors shall notify the incident command officer before proceeding to the Rehab area. Injured or ill firefighters must have an escort to the Rehab area. Students and Instructors must stay in the rehab area until released. Upon release, Students and Instructors will reported to the Incident Command Post area for re-assignment.

D. Equipment – recommended:

- 1. BP cuffs and stethoscopes (at least three)
- 2. Oxygen cylinders, masks
- 3. Cardiac monitor, trauma bag, drug box, BLS/ALS bags
- 4. Spinal Immobilization equipment
- 5. Water and Cups
- 6. Cold towels and fan (hot weather)
- 7. Blankets
- 8. Ground tarps
- 9. Trash bags
- 10. Food (soups, stews, fruits nutrition bars)
- 11. Other – Awnings, smoke ejectors, heaters, dry clothing, lights, traffic cones, and fire line tape

E. Medical Evaluation and Management

1. Students/Instructors/Staff reporting to the Rehab area shall remove as much of their bunker gear as indicated by the ambient temperature.
2. Vital signs, time, and number of air cylinders used should be recorded.
3. Students/Instructors/staff exhibiting signs and symptoms of heat stress shall have their temperature taken.
4. Normal values for vital signs are variable.
5. Blood pressure is not considered a warning sign unless it is abnormally high or low.
6. Pulse and respiration rates are better indicators of an individual's response to exercise.
7. Specifically, watch how quickly these values return to a normal range.

F. Hydration

A critical factor in the prevention of heat injury is the maintenance of water and electrolytes. Water is the fluid of choice for re-hydration. Water is more readily absorbed than fluids containing sugar. Liberal amounts of water are encouraged since thirst is not a reliable indicator of fluid status. Avoid coffee, alcohol, and carbonated beverages, these can interfere with the body's water conservation mechanism.

G. Nourishment

Food should be provided at the scene of extended training periods. A cup of soup or stew is highly recommended because it is digested much faster than sandwiches and fast-food products. In addition, foods such as apples, oranges, bananas and nutrition bars provide supplemental forms of energy replacement. Fatty and/or salty foods should be avoided.

H. Recovery

1. Students and Instructors in the rehab area should maintain a high level of hydration.
2. Patients should not be moved from a hot environment directly into an air-conditioned area because the body's cooling system can shut down in response to the external cooling. An air-conditioned environment is acceptable after a cool-down period at the ambient temperature.
3. While oxygen is available in the rehab area, it does NOT speed recovery. Oxygen should be administered only if a medical condition warrants its use. Any Students or Instructor needing oxygen should be encouraged to seek transport to the hospital

I. Criteria for Returning to Duty

- A. The minimum amount of time a Candidate or Instructor should stay in the Rehab area is ten minutes.
 1. Vital signs should be repeated before a firefighter is released.
 2. The decision to release is based on subjective means. First the Students or Instructor must express a desire to return to work. The decision to keep a Students or Instructor is based more on what he/she has reported than on what you find by assessing. Students or Instructors who have experienced any of the following symptoms shall not be permitted to return to training:
 - a. Vomiting
 - b. Severe headache unrelieved by rest
 - c. Sweating inconsistent with the ambient temperature
 - d. Muscle cramping of any major muscle group
 - e. Those maintaining a pulse rate of greater than 110

Students/Instructors/Staff who have sustained minor soft tissue injuries may return to limited duty if the injury has been treated. They should return after the event is concluded for further evaluation and transport, if indicated.

Students/Instructors/Staff who wish to return to the training evolution against medical advice must have approval from the Lead Instructor and Safety Officer. The EMS IC will notify the Safety and Lead instructor of the situation and also advise the student's home chief that he must assume responsibility for the student. Instructors continuing in the training evolution will be at the approval of the Safety and Lead instructors.

J. Documentation - The following Information shall be maintained on all Students/Instructors/Staff at each rehab visit:

1. Name
2. Time of each assessment
3. Vitals (pulse, temperature, respiration, skin color, blood pressure)
4. Cardiac monitoring as necessary
5. Complications
6. Treatment
7. Release to duty information
8. Refused treatment and transport forms
9. Transport information

VIII. ENFORCEMENT

Failure to adhere to any or all of this policy may result in discipline up to and including suspension or revocation of Instructor credentials.

IX. Delegation of Program Management

The Pennsylvania State Fire Commissioner delegate's ongoing management and implementation of this policy to authorized staff of the program involved unless or until withdrawn. Specific responsibilities are placed upon the PA State Fire Academy Administrator, the Fire Academy Curriculum Specialist, the Fire Education Specialists and the staff of the PA State Fire Academy.

X. Authority

Title 35 Health and Safety as amended.

XI. Supersedes

This Office of the State Fire Commissioner SBS Policy #2006 - 02 supersedes and rescinds any and all other policies related to SBS/Live Fire Training of the Office of the State Fire Commissioner.

XII. Duration of Instructor Policy

This Incident/Accident Reporting Policy shall remain in effect until superseded or suspended.

XIII. Effective Date

February 24, 2006

Timothy L. Dunkle

Timothy L. Dunkle, Administrator, PSFA
Office of the State Fire Commissioner

Appendix A



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Instructions for Completing, Submitting, and Processing the Application For Open Burning Exception For Fire Fighting Instruction

(In cooperation with the Office of the State Fire Commissioner/Pennsylvania State Fire Academy)

This Application provides the Department of Environmental Protection (DEP), Bureau of Air Quality with the necessary information to review and approve requests for open burning exceptions for the purpose of fire fighting instruction by emergency service organizations in accordance with Departmental regulations found at 25 Pa. Code §129.14(c)(2):

(c) Exceptions. The requirements of subsections (a) and (b) do not apply where the open burning operations result from:

... (2) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.

The Department must be notified in writing of the training being conducted, whether it is at an "acquired" structure, a permanent fire fighting structure or site, or some other form of fire fighting instruction involving open fire.

Any questions about this application or the open burning exception for the purpose of fire fighting instruction should be directed to the DEP Air Quality Program Office for the county in which the training is scheduled to take place:

Counties: Bucks, Chester, Delaware, Montgomery, please contact:

DEP Air Quality Program Office 484-250-5920
2 East Main Street FAX: 484-250-5921
Norristown, PA 19401-4915

Counties: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming, please contact:

DEP Air Quality Program Office 570-826-2511
2 Public Square FAX: 570-826-2357
Wilkes-Barre PA 18711-0790

Counties: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York, please contact:

DEP Air Quality Program Office 717-705-4702
909 Elmerton Avenue FAX: 717-705-4830
Harrisburg PA 17110

Counties: Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union, please contact:

DEP Air Quality Program Office 570-327-3745
208 West Third Street St., Suite 101 FAX: 570-327-3420
Williamsport PA 17701

Counties: Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland, please contact:

DEP Air Quality Program Office 412-442-4161
400 Waterfront Drive FAX: 412-442-4194
Pittsburgh PA 15222

Counties: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren, please contact:

DEP Air Quality Program Office 814-332-6940
230 Chestnut Street FAX: 814-332-6117
Meadville PA 16335-3481

A. Submission and Approval Process for use of an Acquired Structure for Fire Fighting Training: Emergency service organizations may use “acquired” structures for the purpose of developing competency and proficiency in fire suppression and structural rescue skills if they file this form and receive approval from the Office of the State Fire Commissioner (OSFC)/Pennsylvania State Fire Academy (PSFA) and from the DEP. The completion, submittal, and approval of this entire Application is required when using an acquired structure. This will help insure:

- that the demolition of the acquired structure by setting a fire is for the sole purpose of fire fighting training.
- that the training being conducted is a registered PA State Fire Academy course.
- that the instructors are approved by the PA State Fire Academy and are trained and competent in fire suppression and structural fire rescue training.
- that the reporting requirements of the Asbestos NESHAP regulation are met for the demolition of a subject facility by intentional burning.
- that the environment of the Commonwealth is protected.

An emergency service organization wishing to conduct fire fighting training in an acquired structure shall do the following:

1. Complete and submit a “*Local Level Course Application*” to an Educational Training Agency that services the county where the acquired structure is located. This application is available by calling the PSFA at 1-800-459-4096 (outside PA 717-248-1115) and requesting the application. It may also be downloaded from the Office of the State Fire Commissioner’s website (<http://www.osfc.state.pa.us>). This application should be submitted to an Educational Training Agency servicing the county in which the training will occur **at least 45 days before the anticipated training date(s).**
2. Complete and submit the entire **DEP Application for Open Burning Exception for Fire Fighting Instruction** to the PSFA Field Supervisor responsible for the county where the acquired structure is located (see list below). To insure timely processing of the request and to avoid a possible delay of the scheduled training, the application shall be submitted to the appropriate PSFA Field Supervisor **at least 45 days before the anticipated training date(s).** This is necessary to provide sufficient time for OSFC/PSFA and DEP staff to review the application, conduct the site inspection, and for the emergency service organization to receive written responses from PSFA and DEP.

Eastern PSFA Region Counties: Berks, Bradford, Bucks, Carbon, Chester, Columbia, Delaware, Lackawanna, Lehigh, Luzerne, Monroe, Montgomery, Northampton, Philadelphia, Pike, Schuylkill, Susquehanna, Wayne, Wyoming

Robert Bechtel robbechtel@state.pa.us
PSFA
1150 Riverside Drive
Lewistown, PA 17044-1979

1-800-459-4096 Extension 102
Outside PA – 717-248-1115
FAX: 717-248-3580

Central PSFA Region Counties: Adams, Bedford, Blair, Cambria, Centre, Clinton, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Lycoming, Mifflin, Montour, Northumberland, Perry, Potter, Snyder, Somerset, Sullivan, Tioga, Union, York

Gary Rickenbach grickenbac@state.pa.us
PSFA
1150 Riverside Drive
Lewistown, PA 17044-1979

1-800-459-4096 Extension 103
Outside PA – 717-248-1115
FAX: 717-248-3580

Western PSFA Region Counties: Allegheny, Armstrong, Beaver, Butler, Cameron, Clarion, Clearfield, Crawford, Elk, Erie, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, McKean, Mercer, Venango, Warren, Washington, Westmoreland

William Ruth wruth@state.pa.us
PEMA Western Area Office
276 Stomer Road
Indiana, PA 15701

724-357-0103/800 972-7362
FAX: 724-357-2992

The PSFA Field Supervisor will review the submitted DEP Application for Open Burning Exception for Fire Fighting Instruction for the Course Title or type of training to occur and the Lead Instructor. If the Lead Instructor is approved to teach this type of instruction and the course is duly registered, the PSFA Field Supervisor will approve the application.

The PSFA Field Supervisor will forward the application to the appropriate DEP Air Quality Program Office.

- 3. Complete and submit the **Asbestos Abatement and Demolition/Renovation Notification Form** (DEP Form 2700-FM-AQ0021) to DEP with a copy to the U.S. EPA at the following addresses. It is recommended that this be done at the same time as the form in item 1 is submitted to the PSFA Field Supervisor. **Please write "Fire Fighting Training" in box 1 on the Asbestos Abatement and Demolition/Renovation Notification Form.**

DEP Regular Mail	DEP Overnight/Express Mail/Hand Delivery	U.S. EPA
Asbestos Notification DEP Bureau of Air Quality PO Box 8468 Harrisburg PA 17105-8468	Asbestos Notification DEP Bureau of Air Quality 400 Market Street – 12 th floor Harrisburg PA 17101	Asbestos NESHAP Coordinator (3WC32) U.S. EPA Region III 1650 Arch Street Philadelphia PA 19103

The DEP Air Quality Program staff will review the DEP Application for Open Burning Exception for Fire Fighting Instruction and the Asbestos Notification Form, make a site visit if appropriate, and if everything is correct, issue a letter approving the application.

- B. Training in or at a Permanent Fire Fighting Structure or Site:** The administrator of a permanent fire fighting structure or site shall provide notice, in writing, of the burn schedule to the DEP Air Quality Program Office for the county in which the site is located (see list above) prior to the start of the training season. The written notice shall include the dates of the burn days and type of burns to be conducted for the season. The administrator of a permanent fire fighting facility may use this form if desired to fulfill the requirements to provide notice to the DEP Air Quality Program by completing items 1 through 4f and attaching a complete list of burn days and types of burns. The DEP Air Quality Program Office shall be notified in writing of changes to the schedule at least ten (10) business days before the training will take place.
- C. Submission and Approval Process for other forms of Fire Fighting Training involving open fire:** Emergency service organizations conducting other forms of training using open fire for the purpose of developing competency and proficiency in fire suppression shall complete items 1 through 4 of the DEP Application for Open Burning Exception for Fire Fighting Instruction and submit the application to the DEP Air Quality Program Office for the county in which the training is scheduled to take place (see list above) at least ten (10) business days before the planned training. The DEP Air Quality Program staff will review the application and notify the applicant in writing of their decision.
- D. Fire Extinguisher Training:** Fire extinguisher training requires only a phone call to the appropriate DEP Air Quality Program Office at least ten (10) business days before the training, no written notice.

Instructions for Completing the DEP Application for Open Burning Exception for Fire Fighting Instruction: All information placed on the Application **must be typed or printed except for signatures.**

1. Applicant Information – The name of the person applying for the exception must be printed on the first line. Your daytime telephone number, your title, the organization you represent, and your address and zip code must be entered on the appropriate lines. The Applicant **must** sign the application on the second line.
2. If other organizations will be participating in the fire fighting training, they must be listed on the application.
3. The name of the person who will have overall control of the fire fighting training must be listed, including their daytime telephone number, address, and zip code. If this is the same person as in 1, you may put “same”.
4. Site Information – The following information **must** be listed in the appropriate spaces on the Application.
 - a. The street address and town of the site where the fire fighting training will take place.
 - b. Clear and concise directions to the fire fighting training site.
 - c. The date(s) and time(s) that the training will be conducted.
 - d. What type of structure is to be burned? If other, please describe.
 - e. The distance to the nearest neighboring structure and the neighboring structure’s type.
 - f. The name of and distance to the nearest stream or body of water.
 - g. The name of the owner of the structure to be burned, their daytime telephone number, address, and zip code. The owner **must** sign and date the Application where indicated.
5. Asbestos Abatement Information –
 - a. Has the original Asbestos Abatement and Demolition/Renovation Notification Form (DEP Form 2700-FM-AQ0021) been submitted to DEP, with a copy to the U.S. EPA? If so, on what date was it submitted?
 - b. If **not**, the original signed Asbestos Abatement and Demolition/Renovation Notification Form **must** be submitted to DEP, with a copy to the U.S. EPA, for each and every acquired structure, *at least 10 working days* prior to the date of the fire fighting training. However, to insure timely processing of the Application for Open Burning Exception and to avoid a possible delay of the scheduled training, the Department recommends that the Asbestos Abatement Form be submitted to DEP at the same time as the DEP Application for Open Burning Exception for Fire Fighting Training is submitted to the PSFA Field Supervisor. *Please write “Fire Fighting Training” in box 1 of the Asbestos Abatement Form.*

Notice: An Asbestos Abatement and Demolition/Renovation Notification Form must be submitted for each and every structure acquired or used for fire fighting training, regardless of type of structure. A certified building inspector trained in asbestos inspection must inspect the structure. Blocks 10, 25, and 26 of the Asbestos Abatement and Demolition/Renovation Notification Form must be completed and signed.
 - c. A written statement signed by the owner or operator of the structure must be attached to the Application for Open Burning Exception for Fire Fighting Instruction form. This statement must either identify what asbestos-containing material (floor tile, roofing, etc.) is present and state that all asbestos-containing material will be removed and properly disposed of before the fire fighting training takes place, or state that there is no asbestos-containing material in or on the structure.
6. State Fire Academy Information – The following information is required for review and approval of the Application by the OSFC/PSFA Field Supervisor.
 - a. The Fire Chief must sign and date the Application for Open Burning Exception.
 - b. Print the name of the Lead Instructor and his/her daytime telephone number. If the organization is not sure who will be the Lead Instructor, they should contact an Educational Training Agency supporting their county and request a Lead Instructor. This will require that the PA State Fire Academy’s “Local Level Course Application” be submitted to an Educational Training Agency before filing the Application for Open Burning Exception (see Step 1 under Part A. Submission and Approval Process for use of an Acquired Structure).
 - c. Indicate if all notifications have been made to the local or state police, neighbors, 911 center, and utilities.
 - d. List the combustible materials and quantities to be used to ignite the training fires.
 - e. List the type of training or the PSFA course title of the class being conducted, e.g. Pa Essentials of Fire Fighting – Module I or Structural Burn Session, and justification for the training.



2700-PM-AQ0002 Rev 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

APPLICATION FOR OPEN BURNING EXCEPTION FOR FIRE FIGHTING INSTRUCTION

Please see the attached instructions for completing, submitting, and processing the Application for Open Burning Exception for Fire Fighting Instruction for assistance in filling out this form. You may either mail or fax the Application to the appropriate office. Always confirm receipt of faxes.

1. Name of Applicant (Print): Phone No:
Applicant's Signature: Title:
Representing: (Name of Training School, VFD, etc.)
Mailing Address: Zip Code:

2. Name of other participating parties:

3. Name of person in charge: Phone No.
Mailing address: Zip code:

4. a. Street address and town of site:
b. Directions to site (from nearest major crossroads):

c. Date(s) and time(s) of training:

d. Type of structure to be burned: Commercial Industrial Institutional/Residential Public Other

If other, please describe:

e. The distance from proposed burning site to nearest neighboring structure is feet.

Nearest structure is: Residential Commercial Industrial Institutional Public

f. The name of and distance to nearest stream or body of water:

g. Name of owner of structure/burn site: Phone No:

Mailing address of owner: Zip code:

Owner's signature: Date:

5. A completed, original, signed Asbestos Abatement and Demolition/Renovation Notification Form (DEP Form 2700-FM-AQ0021) must be submitted to DEP, with a copy to the U.S. EPA, for each and every acquired structure (including residential structures) to be used in the fire fighting training a minimum of ten working days prior to the scheduled date of the fire fighting training. However, to insure timely processing of the Application for Open Burning Exception for Fire Fighting Instruction and to avoid a possible delay in the scheduled training, the Department recommends that the Asbestos Notification Form be submitted to DEP at the same time as the Application for Open Burning Exception for Fire Fighting Instruction is submitted to the PSFA Field Supervisor. Please write the words "Fire Fighting Training" in box 1 of the Asbestos Abatement Form to assist in proper processing of the form. A certified building inspector trained in asbestos inspection must inspect the structure.

5. a. Has a completed, original, signed Asbestos Abatement and Demolition/Renovation Notification Form been submitted to DEP, with a copy to the U.S. EPA? Yes No If yes, Date Submitted: _____

b. If an Asbestos Abatement Form for the acquired structure has **not** been submitted, submit the completed, original, signed Asbestos Abatement Form to DEP and the copy to U.S. EPA at these addresses:

DEP Regular Mail	DEP Overnight/Express Mail/Hand Delivery	U.S. EPA
Asbestos Notification DEP Bureau of Air Quality PO Box 8468 Harrisburg PA 17105-8468	Asbestos Notification DEP Bureau of Air Quality 400 Market Street – 12 th Harrisburg PA 17101	Asbestos NESHAP Coordinator (3WC32) U.S. EPA Region III Arch Street Philadelphia PA 19103

c. **A written statement signed by the owner or operator of the structure that identifies the asbestos-containing material (or lack thereof) and a guarantee of its removal and proper disposal must be attached to this form.**

6. This fire fighting training activity must be part of the PSFA local level training program.

a. Responsible Fire Chief's signature: _____ Date: _____

b. Name of Lead Certified Instructor (Print): _____ Telephone No.: _____

c. Local/state police notified? Yes No Neighbors notified? Yes No
911 Center notified? Yes No Utilities notified? Yes No

d. Note all combustible materials and quantities to be used during the training. List the number of fires to be set using each type of combustible for each fire fighting training exercise:

e. Specific type of training to be conducted (or PSFA Course Title) and justification for training:

It shall be understood that at the time and point the fire fighting training is concluded, all fires must be completely extinguished. It shall be the building owner's responsibility to properly demolish and dispose of the remains.

This open burning exception is valid only for the dates specified on the application.

FOR OSFC USE ONLY	
<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
PA State Fire Academy Representative Signature: _____ Date: _____	

The open burning exception is not valid without approval by the DEP. See 25 Pa. Code §129.14(c)(2).

FOR DEP USE ONLY	
<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
Reviewed by: _____	Date: _____

Appendix B



SUBJECT: Request for Live Fire/Smoke Drill
TO: _____, Field Supervisor
FROM: _____, Local Level Instructor
DATE: _____

I request permission to conduct a LIVE FIRE TRAINING/LIVE SMOKE (Not SBS) drill at
_____ on _____
(location) (county) (date)
at _____ until _____
(starting time) (approximate end time)

I request to have the following Suppression Level Instructors assigned as:

<u>NAME</u>	<u>POSITION</u>
_____	Lead Instructor
_____	Safety Officer
_____	RIT Officer
_____	Ignition Officer
_____	Asst. Instructor
_____	Asst. Instructor
_____	Asst. Instructor

There will be approximately _____ students at the drill. We are planning on using _____ hose lines.

Educational Training Agency _____

Lead Instructor Signature _____

Appendix C

Live Fire Check List

- | | <u>DATE/INITIAL</u> |
|---|---------------------|
| I. SITE INSPECTION | |
| A. Building is structurally stable | _____ |
| B. Utilities Disconnected | _____ |
| C. Exposures will be in no danger | _____ |
| D. Water supply will be adequate | _____ |
| E. Effects of smoke on surrounding area | _____ |
| F. Floor plan is sketched for briefings | _____ |
| II. PRIOR TO BURN | |
| A. Site inspection completed | _____ |
| B. Owner/Occupant release signed and notarized | _____ |
| C. Municipal Burning Permit/DEP approval | _____ |
| D. Authorization from State Fire Academy Field Supervisor | _____ |
| III. SELECTION OF INSTRUCTORS | |
| A. Assistant Instructors/Safety Officer appointed | _____ |
| IV. NOTIFICATIONS | |
| A. Dispatcher | _____ |
| B. Police (if necessary) | _____ |
| C. Students | _____ |
| D. Instructors | _____ |
| E. Safety Officer | _____ |
| V. BRIEFINGS | |
| A. Instructors | _____ |
| B. Students | _____ |
| VI. DRILL PREPARATION | |
| A. Hose lines (Attack, Backup, Safety) | _____ |
| B. Danger Zone marked | _____ |
| C. Ambulance and Apparatus placed | _____ |
| D. P.P.E. Inspection list completed (Appendix D) | _____ |
| E. Personnel accountability system in place | _____ |

Lead Instructor: _____ Date: _____
Signature and Print

Safety Officer: _____ Date: _____
Signature and Print

Appendix D

**Pennsylvania State Fire Academy
Personal Protective Equipment – Inspection List**

Inspection Instructions

This inspection checklist should be used for routine inspection of structural fire fighting clothing.

This list is not a substitute for professional evaluation of the clothing.

To properly inspect the garment you should separate the liner from the shell.

Use the check off list to ensure that all critical areas are reviewed.

If an item is not applicable for the garment, then draw a single line through the item.

The list continues on the rear of this document.

Also provided is a space to record the name of the garment user, the type material and the date and name of the inspector.

Coat Inspection

	Accept	Not Accept
Shell		
• Contamination	<input type="checkbox"/>	<input type="checkbox"/>
• Tears/ Holes/Fraying	<input type="checkbox"/>	<input type="checkbox"/>
• Weakened Material	<input type="checkbox"/>	<input type="checkbox"/>
• Burns/Charring	<input type="checkbox"/>	<input type="checkbox"/>
Hardware		
• Snaps functional	<input type="checkbox"/>	<input type="checkbox"/>
• Zippers/ Closures/ Velcro Working	<input type="checkbox"/>	<input type="checkbox"/>
Liner		
• Thermal Damage Moisture Barrier or Inner Liner	<input type="checkbox"/>	<input type="checkbox"/>
• Moisture Barrier Delaminating	<input type="checkbox"/>	<input type="checkbox"/>
• Tears/Fraying of liners	<input type="checkbox"/>	<input type="checkbox"/>
Trim		
• Thermal Damage	<input type="checkbox"/>	<input type="checkbox"/>
• Torn/Frayed	<input type="checkbox"/>	<input type="checkbox"/>
• Visibility	<input type="checkbox"/>	<input type="checkbox"/>
Fit	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____		

Pants Inspection

	Accept	Not Accept
Shell		
• Contamination	<input type="checkbox"/>	<input type="checkbox"/>
• Tears/ Holes/Fraying	<input type="checkbox"/>	<input type="checkbox"/>
• Weakened Material	<input type="checkbox"/>	<input type="checkbox"/>
• Burns/Charring	<input type="checkbox"/>	<input type="checkbox"/>
Hardware		
• Snaps functional	<input type="checkbox"/>	<input type="checkbox"/>
• Zippers/ Closures/ Velcro Working	<input type="checkbox"/>	<input type="checkbox"/>
Liner		
• Thermal Damage Moisture Barrier or Inner Liner	<input type="checkbox"/>	<input type="checkbox"/>
• Moisture Barrier Delaminating	<input type="checkbox"/>	<input type="checkbox"/>
• Tears/Fraying of liners	<input type="checkbox"/>	<input type="checkbox"/>
Trim		
• Thermal Damage	<input type="checkbox"/>	<input type="checkbox"/>
• Torn/Frayed	<input type="checkbox"/>	<input type="checkbox"/>
• Visibility	<input type="checkbox"/>	<input type="checkbox"/>
Fit	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____		

Helmet Inspection

	Accept	Not Accept
Shell		
• Contamination	<input type="checkbox"/>	<input type="checkbox"/>
• Cracks/ Holes Weakened Material	<input type="checkbox"/>	<input type="checkbox"/>
• Burns/Charring	<input type="checkbox"/>	<input type="checkbox"/>
Hardware		
• Adjustments Functional	<input type="checkbox"/>	<input type="checkbox"/>
Liner		
• Thermal Damage	<input type="checkbox"/>	<input type="checkbox"/>
• Ear Flaps Functional	<input type="checkbox"/>	<input type="checkbox"/>
• Tears/Fraying of liners	<input type="checkbox"/>	<input type="checkbox"/>
Fit	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____		

Glove Inspection

	Accept	Not Accept
Liner		
• Moisture Barrier Delaminating	<input type="checkbox"/>	<input type="checkbox"/>
• Tears/Fraying of liners	<input type="checkbox"/>	<input type="checkbox"/>
Shell		
• Tears/ Holes/Fraying	<input type="checkbox"/>	<input type="checkbox"/>
Fit	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____		

Boot Inspection

	Accept	Not Accept
Shell		
• Contamination	<input type="checkbox"/>	<input type="checkbox"/>
• Tears/ Holes/Fraying	<input type="checkbox"/>	<input type="checkbox"/>
• Weakened Material	<input type="checkbox"/>	<input type="checkbox"/>
• Burns/Charring	<input type="checkbox"/>	<input type="checkbox"/>
Hardware		
• Snaps functional	<input type="checkbox"/>	<input type="checkbox"/>
• Zippers/ Closures/ Velcro Working	<input type="checkbox"/>	<input type="checkbox"/>
Liner		
• Thermal Damage Moisture Barrier or Inner Liner	<input type="checkbox"/>	<input type="checkbox"/>
• Moisture Barrier Delaminating	<input type="checkbox"/>	<input type="checkbox"/>
• Tears/Fraying of liners	<input type="checkbox"/>	<input type="checkbox"/>
Fit	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____		

Hood Inspection

	Accept	Not Accept
• Tears/ Holes/Fraying	<input type="checkbox"/>	<input type="checkbox"/>
Fit	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____		

Additional Comments: _____

Name of User: _____

Serial Numbers: Coat _____ Pants _____ Helmet _____

Inspection Date: _____

Inspected By: _____ (Print)

Inspected By: _____ (Signature)

Appendix E

Vehicle Fires

Title 18, Crimes Code, Section 3301(i),

- A. provides that a person may burn or explode their own vehicle if, at least 48 hours in advance, they file a sworn statement of such planned destruction with the nearest State Police installation.
- B. The written, sworn statement shall certify the following:
 - 1. That the person making the statement is the lawful titleholder of the vehicle.
 - 2. That the vehicle is free of any encumbrances.
 - 3. That there is no insurance covering loss by fire or explosion, or both, on the vehicle.
- C. When any person delivers a written, sworn statement as described above, the receiving member shall:
 - 1. Verify the identity of the presenter and/or maker of the statement.
 - 2. Review the contents of the statement for accuracy and completeness.
 - 3. File the statement, in date order, in the Station's general file, in a separate folder designated for these statements.
- D. The proper filing of this written, sworn statement is a "defense to prosecution" for other specified subsections of the same chapter.

DEP regulations:

Submission and Approval Process for other forms of Fire Fighting Training involving open fire: Emergency service organizations conducting other forms of training using open fire for the purpose of developing competency and proficiency in fire suppression shall complete items 1 through 4 of the DEP Application for Open Burning Exception for Fire Fighting Instruction and submit the application to the DEP Air Quality Program Office for the county in which the training is scheduled to take place (see list above) at least ten (10) business days before the planned training. The DEP Air Quality Program staff will review the application and notify the applicant in writing of their decision.

Fire Extinguisher Training

DEP Regulations:

Fire Extinguisher Training: Fire extinguisher training requires only a phone call to the appropriate DEP Air Quality Program Office at least ten (10) business days before the training, no written notice

Appendix F

Rehab/Weather Concerns:

Review the following chart identifying key problem areas etc

	Symptoms	Signs:
Heat Stroke	Chills, Restlessness, Irritability	Euphoria, Red Face, Disorientation, Hot, Dry Skin, Erratic Behavior, Collapse, Shivering, Unconsciousness, Convulsions, Temperature of 104 or greater
Heat Exhaustion	Fatigue Weakness, Blurred Vision, Dizziness, Headache	High Pulse Rate, Profuse Sweating Low blood Pressure, Insecure gait Pale face, Collapse, Body Temperature
Dehydration	No Early Symptoms Fatigue/Weakness Dry Mouth	Loss of work capacity Increased response time
Heat Syncope	Blurred Vision, Fainting, Normal Temperature	Brief Fainting or near fainting behavior
Heat Cramps	Painful muscle cramps especially in the abdomen	Incapacitating pain in the muscle

Appendix G

I. RIT Duties:

- A. RIT Officer will answer directly to the Incident Commander (IC) and shall remain with the RIT at all times during the evolution
- B. The RIT Officer will verify all tools are in place and all team members are ready (including PPE, SCBA and accountability) for service
- C. **Two** (2) members of the RIT will don SCBA facemasks, and the remaining members will not
- D. RIT shall be in place ready for service prior to any instructor/ignition officer entering the Burn Building Structure to start a fire, and remain in place until every instructor and student has cleared the Burn Structure and PAR is verified

II. Suggested Training:

Rapid Intervention Team Exercises (ZRITE) or
Interior Firefighter (ELIF) (or equivalent) and
Structural Burn Session (SBS) and
Structural Fire Rescue (SFR)

III. Equipment

Tools and equipment (at a minimum-listed) will be kept in the RIT Staging Area with the RIT and will not be used by any other team for any purpose except firefighter rescue, safety or rehab. **NO EXCEPTIONS!**

1. 1 charged 1 ¾" hose line
2. 2 sets of irons
3. 1 bagged rope
4. 1 stokes basket
5. 1 20ft. length of webbing