

Liberty University

Policy for Open Burn and Open Flame Operations



PURPOSE & SCOPE

Purpose

Liberty University (afterwards LU throughout) is committed to providing a safe and healthful work environment for everyone who works or visits our campus. In pursuit of this endeavor, LU has established this policy to protect life and property by reducing the risks posed to university buildings, property, and occupants from the use and operation of an open burn or open flame.

Scope

All LU Employees must follow LU's established safe-work practices at all times. As such, employees must abide by the policies contained within this document. This document describes the types of burning, the controls that reduces the potential for injury and fire and the requirements of applying for a permit to utilize the types of devices or burning as described below.

POLICY

Organizations, groups, and individuals sponsoring activities that will be utilizing open burning or open flame activities shall comply with the rules, regulations and procedures as outlined in this policy, as well as all applicable federal, state, and local laws, rules, and regulations.

DEFINITIONS OF TERMS IN STATEMENT:

Open Burning: Defined as any open/exposed flame, whether indoors or outdoors, that could cause a fire or burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. Examples include but are not limited to candles, incense, bonfires, campfires, fire pits, leaf burning, artwork involving flames, and use of flames units for athletic events as well as pyrotechnics of any kind. Pyrotechnics are not covered in this policy but can be found in the Policy for Fireworks Display Outside and Inside Use of Pyrotechnics Before a Proximate Audience found on the [EHS](#) website under Policies, Programs & SOP's.

Open Flame and Open Flame Devices: For the purpose of this policy, Open Flame and Open Flame Devices shall include but are not limited to candles, tiki torches, oil lanterns, and flames units. (Note: Users of cutting torches and welding equipment must satisfy requirements outlined under separate fire code regulations. For information on these regulations, contact the Environmental Health & Safety department).

University Facility: Any defined space of the University, including a room, lab, series of labs, building, or controlled outdoor area.

University Property: Land or buildings that the University owns or leases. University property also includes premises the University uses for activities of its offices, departments, personnel, or students.

POLICY STATEMENT:

1. Open Burning:

Unless otherwise permitted under this policy, a person shall not kindle or maintain or authorize to be kindled or maintained any open burning unless it is: (1) approved by the Environmental Health and Safety (EHS) office; and (2) may also require approval of the Lynchburg City Fire Marshal; and (3) must be conducted in accordance with the Virginia Statewide Fire Prevention Code, Statewide burning laws, and applicable local City and County codes and regulations.

2. **Open Flame and Open Flame Devices:**

Unless otherwise permitted under this policy a person shall not use an Open Flame or Open Flame Device unless it is: (1) approved by EHS; and (2) conducted in accordance with the Virginia Statewide Fire Prevention Code. A person shall not use an Open Flame or Open Flame Device in any place where flammable, combustible, or explosive material is utilized or stored. Open Burn and Open Flame Device use and operation in any University Facility or on University Property must be operated and managed in accordance with this policy.

Note: Personnel using flames units for athletic events must comply with Appendix A found on pages 6-9.

Requests for Permission:

A request must be made to the Environmental Health & Safety Department for the purpose of an Open Burn and Open Flame Device use and operation whether indoors or outdoors. The request is made by submitting the Open Burning Permit Application; Appendix B on pages 10-12 or on the [EHS website](#) under Forms. The application must be submitted at least fifteen (15) working days in advance of the event or operation. EHS will review the request to ensure the Open Burn and Open Flame Device is used in accordance with and meets the requirements of (1) the manufacturer if applicable; (2) the Virginia Statewide Fire Prevention Code; (3) Statewide Burning Laws; (4) EHS procedures. Each request will be reviewed to ensure the safety of the University's faculty, staff, students, and visitors, and for stewardship of the University's facilities and property. EHS shall notify the requesting party of the approval or denial of a request for permission granted under this section permitting an Open Burn or use of an Open Flame or Open Flame Device and define what protocols or procedures are to be followed. EHS shall concurrently notify Liberty University Police Department (LUPD) of any approval or denial under this section and confirm receipt by LUPD.

3. **Persons Lawfully in Charge:**

In addition to University personnel responsible for the management or supervision of University property and activities, the fire code representative from EHS (or designee) or University law enforcement officers are lawfully in charge of University Property and Facilities for purposes of: forbidding entry upon University Property or into a University Facility or prohibiting remaining upon University Property or within a University Facility while conducting Open Burning or while in possession of an Open Flame or Open Flame Device; and ordering any fire which is deemed as non-compliant with this policy or which creates a hazard or nuisance to be extinguished.

4. **Exemptions:**

The following are exempted from the requirements of this policy:

- a. Outdoor cooking operations where propane and charcoal are used in a safe manner. Ashes, cinders, and coals shall be disposed of in an approved manner. Contact EHS for disposal guidelines.
- b. Indoor and outdoor use of Sterno, for the purpose of warming foods. Such use should be maintained and operated in an approved manner. Contact EHS for operating guidelines.
- c. Laboratory flame producing equipment.
- d. Gas fed fire pits installed by the university for use at sporting events or outside of student residences.

5. **Enforcement**

Failure to comply with the requirements of this policy may result in disciplinary action up to and including termination or expulsion in accordance with relevant University policies and may result in prosecution in accordance with state and federal law. This includes complying with the applicable adopted version of the Virginia Statewide Fire Prevention Code along with the associated legal proceedings to correct or abate such alleged violation.

Questions about this policy should be directed to [Environmental Health & Safety](mailto:lusafety@liberty.edu) at lusafety@liberty.edu.

PROCEDURES:

Academic Division: All requests for the use and operation of an Open Burn or an Open Flame Device must be submitted to EHS at least 15 working days prior to the proposed activity. Review of proposals of a routine nature (i.e., similar to previously approved activities) may be expedited at the discretion of EHS. Requests may be submitted by completing the Open Burn Permit Application located on the EHS website under forms and then emailing completed form to lusafety@liberty.edu. Additional requirements may apply at the discretion of the fire code representative or designee from EHS.

Related Information:

Fire Extinguisher training is available through the Environmental Health and Safety Department.

APPENDIX A

Liberty University Flame Effect Plan **Standard Operating Procedures**

This SOP is intended to explain the operating procedures for the flame effect usage in accordance with NFPA 160 (Standard for the use of Flame Effects before an Audience) 2016 edition.

All manufactures guidelines will be adhered to at all times.

This plan is intended to explain the guidelines for the flame effect usage & to provide an approval document for the City of Lynchburg to use in accordance with NFPA 160 (Standard for the use of Flame Effects before an Audience) 2016 edition.

The requirements for approval by the local AHJ are listed in chapter 5 of NFPA 160. This document references parts of this standard & it uses the section numbers to supply the necessary information.

- 5.3.1 The equipment that Liberty University is using, is supplied by Sigma Services
<http://www.sigmaservices.com>

It is designed & constructed for specific use as a public display special effects device & complies with NFPA 160 for its design & construction.

The flame units at Williams Stadium are mounted on brick & concrete archways approximately 18ft above the ground.

The flame units at East Campus are mounted in a steel framed wheeled cart for easy positioning. They stand about 5 ft tall from the ground level.

All manufactures guidelines will be adhered to at all times.

INDEX

SECTION A Use for Home Football games at Williams Stadium.

SECTION B Use for Home Field Hockey & Men's and Women's Lacrosse games at the East Campus Athletic fields.

SECTION A

Use for Home Football games at Williams Stadium.

5.3.1.2 Liberty University (1971 University Blvd, Lynchburg VA, 24515) is the owner of the devices & will be used at Athletic events.

2) & 3) The units will be used at all home football games during the Football season at Williams Stadium.

4) Design Criteria: - Outdoor flame effects

a) Location

Weather – if the weather conditions during the time that the flame effect system is being operated are deemed to hazardous i.e., winds, or gusts in excess of 20 mph, then the operator will not press the FIRE button. The flags at the tops of the goal posts are a good indicator of wind speeds & direction, & operator shall have experience in judging whether the situation is safe to fire the flames. An accurate forecast should be received prior to the game commencing either from the internet (https://forecast.weather.gov/MapClick.php?lat=37.35426000000007&lon=-79.22570999999994#.XV_06-hKiUk) or a phone call to a local meteorological office such as the regional airport.

Intrusion (security) – There will be a safety perimeter around the flame units & the operator will be situated with clear visibility of the areas. If persons or objects get within the safety perimeter, then the operator will not operate the flame units. It is suggested from the manufacturer and other users of flame effect units, that the safety radius around the flame burner be greater than or at least equal to the desired height of the flame. Thirty feet is a good distance to use outdoors with a 30 ft flame.

Egress – There is plenty of space to evacuate persons from the stadium, & the effect units will not be placed in areas where it could obstruct any egress or cause trip hazards.

Clearance to combustibles – The units will be placed at the top of the archways on either side of the Liberty Football Center. These are constructed of brick & concrete. The surrounding area will not have any combustible materials near to the units during operation.

Fire Protection – The following fire suppression equipment will be available during all performances per NFPA 160, two pressurized water, Class 2-A, extinguishers and two Class 10-BC extinguishers. The extinguishers shall be placed so that at least one each is located on opposing sides of the performance where flame effects are used.

SECTION B

Use for Home Field Hockey & Men's and Women's Lacrosse games at the

East Campus Athletic fields.

5.3.1.2 Liberty University (1971 University Blvd, Lynchburg VA, 24515) is the owner of the devices & will be used at Athletic events.

2) & 3) The units will be used at all home Field Hockey, Men's & Women's Lacrosse games during the athletic season at the Campus East Athletic fields.

4) Design Criteria: - Outdoor flame effects

a) Location

Weather – if the weather conditions during the time that the flame effect system is being operated are deemed to hazardous i.e., winds, or gusts in excess of 20 mph, then the operator will not press the FIRE button. The flags at the tops of the flag posts are a good indicator of wind speeds & direction, & operator shall have experience in judging whether the situation is safe to fire the flames. An accurate forecast should be received prior to the game commencing either from the internet (https://forecast.weather.gov/MapClick.php?lat=37.35426000000007&lon=-79.22570999999994#.XV_06-hKiUk) or a phone call to a local meteorological office such as the regional airport.

Intrusion (security) – There will be a physical safety perimeter around the flame units & the operator will be situated with clear visibility of the areas. If persons or objects get within the safety perimeter, then the operator will not operate the flame units.

It is suggested from the manufacturer and other users of flame effect units, that the safety radius around the flame burner be greater than or at least equal to the desired height of the flame. Thirty feet is a good distance to use outdoors with a 30 ft flame.

Egress – There is plenty of space to evacuate persons from the athletic fields, & the effect units will not be placed in areas where it could obstruct any egress or cause trip hazards.

Clearance to combustibles – The units will be placed on the maintenance access road at the rear of the athletic fields on either side & behind the scoreboard, at the end of each field being used. The surrounding area will not have any combustible materials near to the units during operation.

Fire Protection – The following fire suppression equipment will be available during all performances per NFPA 160, two pressurized water, Class 2-A, extinguishers and two Class 10-BC extinguishers. The extinguishers shall be placed so that at least one each is located on opposing sides of the performance where flame effects are used.

Operational Instructions for Dragonfly Units at East Campus

1. Ensure all valves are closed before moving cart
2. Position carts where required & layout the control cables to the main operating position, avoid causing trip hazards or damage to the cables by vehicles driving over them
3. Place control boxes in position & connect to electrical power source with extension cord
4. Make sure the E-Stop button is DOWN (off) before connecting any cables
5. Keep the control box ignition keys with the operator at all times
6. Plug in control cables to the appropriate socket & tighten securing ring on plug
7. Position Water (silver) Fire extinguishers between the operators position & the flame carts but not closer than 10ft to the carts
8. Position the ABC (red) fire extinguisher at the operator's position
9. Check for flammable items close to effect area
10. Open the main valve on the propane tank & sniff / listen for leaks
11. Open the valve on the regulator assembly as well as the FILL & PILOT Valves on the accumulator tank
12. Open the Pilot light valve on the burner unit
13. Insert key in E-Stop button & release it by turning key to right. The button will pop up.
14. Check for gas flow by listening for a slight hiss of propane filling the accumulator tank
15. Check for leaks before proceeding
16. Test pilot light by turning ON the ARM switch, on the control box. The pilot light should burn cleanly & steadily.
17. Open main burner valve on accumulator tank slowly to release pressure to burner head
18. Turn ARM switch ON, to light pilot, then after ensuring the wind isn't too strong & there is nobody in the safety perimeter, operate the FIRE switch for a quick (1 second) burst.
19. Whenever you leave the operating position & the control units, ALWAYS remove the ignition key & Press the E-STOP button
20. When the units are finished with, close all the valves including the propane tank valve & do a test burn to burn off all residual propane in the hoses.

21. CAUTION – the burner head will be extremely HOT after use, allow it to cool before handling or placing in storage.
22. Remove the propane tanks from the regulator assembly & store them outside in the metal tank cages provided at the East Athletic Fields by Men's Lacrosse.

Appendix B

OPEN BURNING PERMIT APPLICATION

Approval in accordance with the requirements of the [Statewide Fire Prevention Code \(Sec.307.2.1\)](#), and the [City of Lynchburg Virginia Burning Guidelines \(Permit Needed\)](#) and written permission from the Environmental Protection Agency (if required) before the ignition of any opening burning upon Liberty University property.

Note that open burning on LU properties within Campbell County may not require a permit but does require notification to the county fire marshal as well as notification to the emergency communications center for the city of Lynchburg. This notification is done by the LU Environmental Health & Safety Department. The following are a list of those types of activities requiring an Open Burn Permit:

- Recognized range or wildlife management practices
- Prevention to control disease or pests
- Providing heat for outdoor workers
- Bonfires
- Indoor ceremonies and/or activities involving open flames and/or candles/incense. etc.

The following Information is required:

Section A: Contact Information

Applicant (permit requestor): _____

Applicant Title: _____

Applicant Department or Organization: _____

Applicant Phone Number: _____

Applicant Email Address: _____

Event Services Coordinator (if applicable): _____

Event Services Coordinator Phone Number: _____

Event Services Coordinator Email: _____

Fire Control (Grounds) Point of Contact (if applicable): _____

Fire Control Contact Mobile Number: _____

Prohibited: Offensive or objectionable burning due to smoke or odor emissions when atmospheric conditions or local circumstances make such fire hazardous. The Fire Official reserves the right to order the extinguishments of any open burning that creates or adds to a hazardous or objectionable situation.

Section B: Permit Information

Permit Start Date/Time:		Permit End Date/Time:	
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Type of Permit Requested:

- Bonfire Campfire Candles Temporary Fire Pit
- Torches Other....

Event Name: _____

Event Location (Building & Room if applicable): _____

Nature and quantity of material to be burned? _____

Section C: Additional Information

Include any additional details not captured in the above application (map, number of attendees, etc.):

Applicant: _____ (Signature) _____ (Date)

Section D: Fire Safety Preparedness (to be completed by EHS)

Is on-site fire-extinguishing equipment provided?	<input type="checkbox"/> YES <input type="checkbox"/> NO
What type of fire-extinguishing equipment?	
Are personnel trained on fire-extinguishing equipment?	<input type="checkbox"/> YES <input type="checkbox"/> NO
How many fire control personnel will be required for activity?	
Has arrangements been made for fire control personnel?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Will activity require monitoring by EHS Staff? If yes, how many staff?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Will barricades be needed:	<input type="checkbox"/> YES <input type="checkbox"/> NO
Has arrangements been made for barricades?	<input type="checkbox"/> YES <input type="checkbox"/> NO

EHS Department Only:	
EHS Fire Safety Representative:	_____
	(Signature)

	(Date)
<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
If disapproved give reason:	