



**Loudoun County Fire and Rescue  
Fire Marshal's Office**

23675 Belmont Ridge Road, Suite 150  
Ashburn, Virginia 20148  
Phone 703-737-8600 Fax 703-737-8595



July 7, 2023

Micah Joel Kiger, Deputy Chief / Chief Fire Marshal  
Loudoun County Fire and Rescue Fire Marshal's Office  
23675 Belmont Ridge Road, Suite 150  
Ashburn, Virginia, 20148

Re: Cold Spark Pyrotechnic Devices

To whom it may concern,

The Loudoun County Fire and Rescue Fire Marshal's Office ("LCFR-FMO") has received questions regarding "Cold Spark Machines" and the ability to use these devices *within* inhabited buildings. While "many [cold spark machine] manufacturers and distributors are marketing and purporting that these devices are un-regulated and do not require permits or licenses for their use"<sup>1</sup>, the usage of these devices *within* inhabited buildings in Loudoun County is prohibited.

According to NFPA-1126 Standard for the Use of Pyrotechnics Before a Proximate Audience (2021), cold spark machines are considered *Pyrotechnic Effect Simulation Equipment*<sup>2</sup> that uses *Pyrotechnic Material (Pyrotechnic Special Effects Material)*<sup>3</sup>. In Loudoun County, indoor pyrotechnics are prohibited per Section 3308.3.1 of the Loudoun County Fire Prevention Code, which states "Fireworks or other pyrotechnic effects shall not be approved for use in an inhabited building"<sup>4</sup>. While we recognize that this prohibition is not popular, the LCFR-FMO seeks to ensure continued fire and life safety for our communities through effective fire prevention education and appropriate fire code enforcement.

Questions related to Cold Spark Pyrotechnic Devices (Cold Spark Machines) can be directed to the LCFR-FMO by calling (703)737-8600, email at [dutyfm@loudoun.gov](mailto:dutyfm@loudoun.gov), or by visiting our online resources at [Code Enforcement | Loudoun County, VA - Official Website](https://www.loudoun.gov/code-enforcement).

Regards,

A handwritten signature in black ink, appearing to read "Micah Kiger".

Micah Joel Kiger, Deputy Chief / Chief Fire Marshal

<sup>1</sup> Clarification on the use of Pyrotechnic Simulation Equipment "Cold Spark Machines", American Pyrotechnics Association (APA), n.d.

<sup>2</sup> Chapter 3 – Definitions, 3.3 General Definitions, Section 3.3.41\*Pyrotechnic Effect Simulation Equipment, National Fire Protection Association, NFPA-1126 Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 ed.

<sup>3</sup> Chapter 3 – Definitions, 3.3 General Definitions, Section 3.3.42\*Pyrotechnic Material (Pyrotechnic Special Effects Material, National Fire Protection Association, NFPA-1126 Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 ed.

<sup>4</sup> Chapter 33 - Explosives and Fireworks, Section 3308.3.1, Loudoun County Fire Prevention Code, 2011 ed.