

## Agenda - Final

## Public Safety & Governance

Councilmember Scotty Johnson, Chair Vice Mayor Jan-Michele Kearney, Vice Chair Councilmember Mark Jeffreys Councilmember Anna Albi						
Tues	day, January 9, 2	024	9:30 AM	Council Chambers, Room 300		
			AGENDA			
1.	<u>202400018</u>	<b>REPORT,</b> dated 1/4/2024, submitted Sheryl M. M. Long, City Manager, regarding CFD's Preparedness to Treat Electric Vehicle (EV) Fires. (Reference Document #202301910).				
	<u>Sponsors:</u>	City Manager				
	<u>Attachments:</u>	<u>Report</u>				
2.	<u>202400045</u>	<b>ORDINANCE (EMERGENCY),</b> submitted by Vice Mayor Kearney, from Emily Smart Woerner, City Solicitor, <b>MODIFYING</b> the provisions of Chapter 765, "Special Events," by AMENDING Section 765-3, "Definitions," of the Cincinnati Municipal Code for the purpose of revising the times during which the Cincinnati Music Festival and Festival513 are held.				
	<u>Sponsors:</u>	Kearney				
	<u>Attachments:</u>	<u>Transmittal</u>				
		Ordinance				

ADJOURNMENT



January 4, 2024

To:	Mayor and Members of City Council	202400018
From:	Sheryl M.M. Long, City Manager	
Subject:	CFD's Preparedness to Treat Electric Vehicle (EV) Fire	28

#### Reference Document #202301910

The Public Safety and Governance Committee, at its session on October 3, 2023, referred to the following item for review and report:

**MOTION**, submitted by Vice Mayor Kearney, **WE MOVE** that the Administration provide a report within 60 days on our Cincinnati Fire Department's preparedness to treat electric vehicle fires. The report should include whether we can transport sufficient amounts of water and what alternative treatments we have, as well as what we need to acquire. (STATEMENT ATTACHED).

The Cincinnati Fire Department (CFD) received reference document #202301910 on October 3, 2023, requesting that we provide a report regarding our preparedness to fight electric vehicle (EV) and hybrid electric vehicle (HEV) fires as well as our ability to transport the large amounts of water needed to extinguish these fires. Additionally, we recognize the need for specialized equipment for these types of fires and are in the process of testing, examining, and procuring this equipment.

#### **Challenges Faced with Electric Vehicle Fires**

All fires are dangerous, however fires involving lithium-ion batteries can be extremely dangerous, particularly those in electric and hybrid electric vehicles. When vehicles with lithium-ion batteries catch fire, they burn hotter, faster and require extraordinary amounts of water to reach final extinguishment.

The CFD has established procedures for securing water sources at structure fires from multiple hydrants and would do the same for any EV fire. Accessing adequate water could become a major challenge depending on where the vehicle is located at the time of the fire. On a highway or undeveloped roadway, the CFD may have to let the vehicle burn and simply seek to protect and limit exposures. If copious amounts of water are not readily available, this would be the likely course of action to mitigate the hazard.

#### **Current Response**

CFD fire engines carry 500 gallons of water. The department has three apparatus that carry larger quantities of water for airport operations consisting of Tanker 18 (1250 gallons), ARFF 18 (1585 gallons), and ARFF 218 (3000 gallons). With approval from Lunken airport, these resources could be used where there is no water source available.

According to the Cincinnati Fire Prevention Code, hydrants for firefighting purposes shall be located anywhere from 300 – 500 feet from the structure. On our fire engines we carry 1200 feet of 5" supply hose to connect hydrants to pumpers, ensuring an uninterrupted supply of water in areas serviced by hydrants. If extended distances are required, an additional fire engine can be added to relay water. In short, the CFD has procedures and sufficient hydrants throughout the city to establish water supplies to provide copious amounts of water for EV fires.

### Future Planning and Education

In addition to extinguishing EV fires with water, the CFD is in the process of purchasing EV fire blankets that will be carried on both of our Heavy Rescue units if an EV fire is in an area not easily accessed by a fire engine (e.g., in a parking garage). These will assist in containing the fire and will help to extinguish the materials that do require oxygen to burn (interior finishing products of the vehicle). Studies have shown that these blankets can be draped over a burning electric vehicle, thereby reducing the amount of oxygen available for combustion which in turn helps extinguish the fire.

There are various resources that recommend actions in response to EV vehicle fires, like submerging the vehicle, burying the vehicle, or even letting it burn and focus on protecting exposures. While these are all things to consider, the surrounding environment and conditions will determine if any of these are viable courses of action for extinguishment.

The CFD will continue to research the development of technologies regarding EV fires. There are several nozzles designed to penetrate battery compartments and flood them with water. However, they are currently very costly and there is opposing research regarding their effectiveness. CFD will continue to evaluate best practices, so we can be best prepared to fight these types of fires. An EV fire class is being offered by the county to the CFD on December 12, 2023, in which we will be sending members.

If beneficial, the Cincinnati Fire Department is committed to further explaining these new procedures and technology to any requesting body, including Council's Public Safety and Governance Committee.

cc: Frank C. McKinley, Fire Chief Virginia Tallent, Assistant City Manager



Date: January 4, 2024

To: Vice Mayor Jan-Michele Lemon Kearney

From: Emily Smart Woerner, City Solicitor

Subject: Emergency Ordinance – Amending Ordinance 0102-2022

Transmitted herewith is an ordinance captioned as follows:

**MODIFYING** the provisions of Chapter 765, "Special Events," by **AMENDING** Section 765-3, "Definitions," of the Cincinnati Municipal Code for the purpose of revising the times during which the Cincinnati Music Festival and Festival513 are held.

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ESW/AKS(dmm) Attachment 394641

#### **EMERGENCY**

# City of Cincinnati

2024

AKS FESN

An Ordinance No. MODIFYING the provisions of Chapter 765, "Special Events," by AMENDING Section 765-3, "Definitions," of the Cincinnati Municipal Code for the purpose of revising the times during which the Cincinnati Music Festival and Festival513 are held.

WHEREAS, historical special events, established in Chapter 765 of the Cincinnati Municipal Code, recur annually and celebrate the culture, history, and traditions of Cincinnati, and in the event of a conflict with other requested special events, historical special events take precedence; and

WHEREAS, Ordinance No. 102-2022 added the Cincinnati Music Festival and Festival513 to the list of recognized historical special events, based on their legacy and traditions; and

WHEREAS, Ordinance No. 102-2022 indicated that the Cincinnati Music Festival and Festival513 both occur the third weekend in July; and

WHEREAS, the Cincinnati Music Festival and Festival 513 occur either the third or fourth weekend in July depending on the Cincinnati Bengals' schedule; and

WHEREAS, Council desires to amend Cincinnati Municipal Code Section 765-3 to clarify that these events can occur on either the third or fourth weekend in July; now, therefore,

BE IT ORDAINED by the Council of the City of Cincinnati, State of Ohio:

Section 1. That Section 765-3, "Definitions," of Chapter 765, "Special Events," of the

Cincinnati Municipal Code is amended as follows:

#### Sec. 765-3. Definitions.

For the purpose of this chapter, the words and phrases defined in the sections below shall have the meanings therein respectively ascribed to them, without limiting the generalities of the words, unless a different meaning is clearly indicated by the context.

(a) "Special event" shall mean a planned temporary aggregation of attractions, including a parade, march, or procession, public entertainment, food and beverage service facilities, sales of souvenirs or other merchandise, or similar attractions, that is (i) conducted on the public right-of-way or (ii) conducted primarily outdoors on property open to the public other than the public right-of-way and which includes one or more of the following conditions:

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- (1) The sale of liquor, wine, or beer;
- (2) Expected attendance of 3,000 or more people; or
- (3) Requires special city services, including, but not limited to, any of the following: street closures; provisions of barricades, garbage cans, stages, or special parking restriction signs; special electrical services; or special police protection.

"Special event" does not include a parade for which a permit is required under Cincinnati Municipal Code ("CMC") Chapter 510, "Assemblages and Parades," or a neighborhood block party for which a permit is required under CMC <u>\$section</u> 506-91, "Street Fetes."

"Special event" does not include any event authorized by ordinance which begins on or before January 1, 2013.

- (b) "City manager" shall mean the city manager or his or her designee.
- (c) "Chief of police" shall mean the chief of police or his or her designee.
- (d) "Sponsor of the event" or "sponsor" means the entity that pays a substantial portion of the costs involved in staging the event or receives a substantial portion of the financial proceeds.
- (e) "Historical event" shall mean an annually recurring special event which celebrates the culture, history, and traditions of Cincinnati and shall refer to the following list of events (which typically occur on or near the date noted):
  - (1) Taste of Cincinnati Memorial Day weekend;
  - (2) Oktoberfest third weekend in September;
  - (3) Riverfest Labor Day weekend;
  - (4) Flying Pig Marathon first weekend in May;
  - (5) Heart Mini-Marathon middle of March;
  - (6) Findlay Market Opening Day Parade the opening day baseball game;
  - (7) St. Patrick's Day Parade March 17th or the weekend before or after;
  - (8) Black Family Reunion third weekend in August;

- (9) Juneteenth June 19th or the weekend before or after;
- (10) Cincinnati Pride Parade fourth weekend in June:-
- (11) Cincinnati Music Festival third or fourth weekend in July:
- (12) Festival513 third <u>or fourth</u> weekend in July.

In the event of a conflict with another special event, a historical event takes precedence.

- (f) "Recurring special event" shall mean a special event that takes place during more than one non-consecutive calendar days but that is hosted by the same sponsors, at the same location, for the same purpose, with the same event name, for the same or similar hours of operation or activity. A recurring special event takes place for multiple, separate periods of time throughout a portion of the calendar year but remains substantially the same event.
- (g) "Neighborhood organizations" shall mean City of Cincinnati-recognized Community Councils, Neighborhood Business Associations, and Community Development Corporations.

Section 2. That this ordinance shall be an emergency measure necessary for the

preservation of the public peace, health, safety, and general welfare and shall, subject to the terms

of Article II, Section 6 of the Charter, be effective immediately. The reason for the emergency is

the immediate need to allow sufficient time for necessary City planning and preparation for the

events.

Passed:\_\_\_\_\_, 2024

Aftab Pureval, Mayor

Attest:\_

Clerk

Additions are underlined. Deletions are struck through.