

# **2023-2024 KERN COUNTY GRAND JURY**



## **THE KERN COUNTY FIRE DEPARTMENT The Effects of Illegal Fireworks**

**Release Date  
February 7, 2024**

# **THE KERN COUNTY FIRE DEPARTMENT**

## **The Effects of Illegal Fireworks**

### **SUMMARY:**

Every July 4<sup>th</sup> holiday, the citizens of Kern County celebrate with cookouts, parades, and fireworks displays. Unfortunately, there are many citizens who dread the holiday. Why? Some suffer from Post Traumatic Stress Disorder (PTSD) or other physical ailments which are triggered by illegal fireworks exploding in their neighborhoods. Others own pets who react fearfully to the unusual activities associated with illegal fireworks and try to run away from the loud noise. And finally, there are the people who use the illegal fireworks and often suffer serious injury with lifelong consequences.

### **PURPOSE OF INQUIRY:**

California Penal Code §925 authorizes the 2023-2024 Kern County Grand Jury (Grand Jury) to investigate the Kern County Fire Department (KCFD) regarding what measures are being taken to lessen the impact of illegal fireworks in Kern County.

### **METHODOLOGY:**

The Grand Jury conducted interviews with the Kern County Fire Chief and the Arson and Appeals Officer. Internet research was also conducted regarding drone usage and illegal fireworks. The Grand Jury reviewed the Kern County Fire Department budgets and procedures.

### **DISCUSSION OF FACTS:**

The Kern County Fire Department was established in 1927 as a cooperative between the State of California and the County of Kern. In 1959, the Kern County Board of Supervisors changed the name from the Kern County Forestry and Fire Department to the Kern County Fire Department. During the next 16 years, fire stations were established in various areas around Kern County including Bakersfield.

Currently, KCFD employs 621 permanent employees including 521 uniformed firefighters. These employees operate 47 fire stations and provide services to approximately 8,000 square miles. Additionally, KCFD has 14 mutual aid agreements with other fire suppression organizations to provide emergency services. The department received praise from fire departments across the United States for its superior training methods, efficient operations and innovative equipment, including the use of tanker-pumpers.

The KCFD recommended budget for the 2023-2024 fiscal year is \$3,976,778. Most of the department's expenditures are for staffing and operating costs. The budget is funded primarily through property taxes, special funding, and various grants (See Appendix A). Other major sources of revenue include charges for services from other municipalities and the State of California for whom the fire department provides fire and emergency services.

The Kern County Health Department reports that the sounds and smells of the exploding fireworks can be a trigger for military veterans and citizens that may suffer from various health issues, such as PTSD, asthma and other respiratory issues. People suffer burns, lacerations, and possible amputation by exploding fireworks. Illegal fireworks are a danger to domesticated and wild animals, personal and commercial property, and the citizens of Kern County. Bad air quality can increase by 4% - 5% which can put children, elderly, and people with breathing issues at risk. Animals are frightened by the loud sounds, and many are found by local animal shelters that try to locate their owners. This puts a strain on the resources for the animal shelters. The harmful air particles produced by the detonation of fireworks are toxic to inhale for all animals, but especially small animals. There is also the potential for animals to ingest the fireworks residue.

Illegal fireworks containing high levels of explosive materials are identified as “dangerous fireworks” by State authorities. The State requires a license for people that handle these explosives for displays. Illegal fireworks consist of skyrocketers, bottle rockets, roman candles, and other fireworks that explode, shoot into the air, or move on the ground in an uncontrollable manner. The KCFD is working with other law enforcement agencies in response to complaints. The Community Emergency Response Team (CERT) is available to assist in taking phone calls and monitoring online complaints regarding illegal fireworks.

Fire departments throughout California are developing plans with other city and county agencies to help minimize the use of illegal fireworks. Destruction of property by illegal fireworks is a misdemeanor but will become a felony if someone intentionally uses illegal fireworks to destroy property. Most of the illegal fireworks in California are transported from Nevada. The use of illegal fireworks poses a major threat resulting in firefighters responding to hundreds of fires and medical emergencies.



Confiscated illegal fireworks by Kern County Fire Department (Photo - [www.bakersfieldnow.com](http://www.bakersfieldnow.com))

Each fiscal year, the State of California seizes over 220,000 pounds of fireworks requiring disposal. California Department of Forestry and Fire Protection (Cal Fire) conducted an interdiction operation along the Nevada border from May to June 2021, and seized nearly 80,000 pounds of illegal fireworks. (See Appendix B)

During the operation, they conducted 932 traffic stops for violations, issued 215 citations for illegal fireworks and arrested 3 individuals. Once confiscated, the fireworks are sent to Cal Fire to be destroyed. The confiscated fireworks are stored in abandoned underground munitions bunkers at the Mojave Air and Space Port. Cal Fire destroys approximately 220,000 pounds of fireworks per year at undisclosed locations in the desert.



Abandoned munitions bunkers used for storage of illegal fireworks. (Photos by Grand Jury)

There are different levels of illegal fireworks smuggling, including organized crime, and individuals bringing large amounts into the State for personal use or to sell on the black market. Some cities monitor online sales to locate illegal fireworks. The strategy involves identifying where fireworks have been traditionally sold online, then sending cease-and-desist letters. The agencies engage with social media platforms to take down listings and collaborate on ways to diminish the number of potential sales. In 2022, the Kern County Fire Department received 13,800 reports of illegal fireworks. They issued 35 citations for illegal fireworks. So far, 31 citations have been issued in 2023.

In Kern County, drones are being utilized to pinpoint the use and location of illegal fireworks. Large drones, measuring 10 feet long with a 16-foot wingspan, are expensive and must have Federal Aviation Administration (FAA) approval to fly. The drone pilot must have extensive training, be FAA-Certified, and a flight plan must be filed. They can cover approximately two square miles at an altitude of 2,500 – 3,000 feet in the air. Drones can pinpoint the location of illegal fireworks usage, but per the office of Kern County Counsel, only a warning letter is initially issued to the violators. There were 31 warning letters sent in 2022. If there is a second violation, a citation is issued. Drones and operators are contracted by the KCFD with an outside firm. The cost of operating one drone is \$10,000 for a six-hour period.



Kern County fire personnel examine a drone used to locate illegal fireworks (Photo - [www.bakersfieldnow.com](http://www.bakersfieldnow.com))

In comparison, the Fresno Fire Department in 2022 had 40% more calls for fires caused by illegal fireworks than 2021. The Fresno Fire Department, with the use of drones, teamed up with the Fresno Police Department to track down and cite people who were igniting illegal fireworks. This was in addition to hundreds of illegal fireworks seized in undercover stings leading up to the July 4<sup>th</sup> holiday. Investigators cited 44 people for illegal fireworks.

Administrative Citations (See Appendix C) are misdemeanors and can be written for any violation involving illegal fireworks, the sale or use of Safe and Sane (legal) fireworks outside of the legal time-period, the modification and/or improper use of Safe and Sane fireworks, and the use of Safe and Sane fireworks within the Wildland-Urban Interface Fire Area where wildfires pose a greater risk. Fines range from \$1,500 - \$2,500 per violation depending on the number of violations issued within a five-year period. Fines may be appealed to the KCFD, but if a citation is upheld, the fine must be paid or will be sent to collection. The KCFD offers a payment plan, if needed. In fiscal year 2022-2023, \$7,500 in fines were collected. Fines collected from illegal fireworks are deposited into the Kern County Fire Trust Fund to be used for the drone program.

## **FINDINGS:**

- F1. Delayed response times to complaints of illegal fireworks in the neighborhood during the July 4<sup>th</sup> holiday causes citizens to become frustrated.
- F2. Since the KCFD informs citizens of the dangers of deep-frying turkeys during the Thanksgiving holiday, and the dangers of having dried Christmas trees in the home during the Christmas holiday, citizens should also be made aware of the dangers of illegal fireworks during the July 4<sup>th</sup> holiday.
- F3. Monitoring social media for sales of illegal fireworks may be a useful resource.
- F4. Drones have proven to be useful in locating illegal fireworks in neighborhoods by flying at high altitudes covering wider areas.

## **COMMENTS:**

The citizens in Kern County enjoy watching fireworks during the July 4<sup>th</sup> holiday. The Kern County Fire Department works with other law enforcement agencies to help curb the use of illegal fireworks, but the problem cannot be eliminated easily. Citizens need to be alert and assist fire departments and law enforcement agencies by reporting any use of illegal fireworks.

## **RECOMMENDATIONS:**

The 2023-2024 Kern County Grand Jury recommends that:

- R1. The KCFD develop a response team to monitor illegal fireworks complaints during the July 4<sup>th</sup> holiday beginning June 1, 2024. (Finding 1)
- R2. The KCFD increase public outreach through Public Service Announcements (e.g., newspaper, radio, social media, billboards) regarding dangers and repercussions of possessing and using illegal fireworks during the July 4<sup>th</sup> holiday beginning June 1, 2024. (Finding 2)
- R3. The KCFD create a task force to search social media for the sale of illegal fireworks beginning June 1, 2024. (Finding 3)
- R4. The Kern County Board of Supervisors initiate a feasibility study to possibly allocate additional funds to the Kern County Fire Department budget for the purchase of drones and training of personnel by June 1, 2024. (Finding 4)

## **NOTES:**

- The Kern County Fire Department and the Kern County Board of Supervisors should post a copy of this report in areas for public viewing.
- Persons wishing to receive an email notification of newly released reports may sign up at: [www.kerncounty.com/government/other-agencies/grand-jury](http://www.kerncounty.com/government/other-agencies/grand-jury)
- Present and past Kern County Grand Jury Final Reports and Responses can be accessed on the Kern County Grand Jury website: [www.kerncounty.com/government/other-agencies/grand-jury](http://www.kerncounty.com/government/other-agencies/grand-jury)

## **RESPONSE DEADLINE:**

- **REQUIRED WITHIN 90 DAYS FROM:**
  - The Kern County Fire Department
  - The Kern County Board of Supervisors

**RESPONSES ARE REQUIRED PURSUANT TO PENAL CODE §§933(c) AND 933.05 TO:**

- **PRESIDING JUDGE**  
**SUPERIOR COURT OF CALIFORNIA**  
**COUNTY OF KERN**  
**1415 TRUXTUN AVENUE, SUITE 212**  
**BAKERSFIELD, CA 93301**
- **FOREPERSON**  
**KERN COUNTY GRAND JURY**  
**1415 TRUXTUN AVENUE, SUITE 600**  
**BAKERSFIELD, CA 93301**

## **APPENDICES:**

- A. Recommended 2023-2024 Kern County Fire Department Budget.
- B. Photos of confiscated fireworks from cities around California.
- C. Copy of Administrative Citation from the Kern County Fire Department.

Reports issued by the Grand Jury do not identify individuals interviewed. Cal. Penal Code §929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Grand Jury.

## Appendix A

### KERN COUNTY FIRE DEPARTMENT RECOMMENDED BUDGET

2023-2024

#### Summary of Expenditures and Revenue

	FY 2021-22		FY 2022-23		FY 2023-24	
<b>Appropriations:</b>	<b>Actual</b>		<b>Adopted Budget</b>	<b>Actual</b>	<b>Department Requested</b>	<b>Recommended</b>
Salaries and Benefits	\$140,002,487		\$141,485,998	\$152,631,126	\$153,897,039	\$159,104,794
Services and Supplies	12,729,714		16,990,932	15,653,153	15,574,819	17,017,319
Other charges	9,903,441		9,789,816	10,093,266	11,559,881	11,559,881
Capital Assets	10,787,489		12,704,017	7,075,120	0	28,501,504
<b>Total Expenditures</b>	<b>\$173,423,131</b>		<b>\$180,970,763</b>	<b>\$185,452,665</b>	<b>\$181,031,739</b>	<b>\$216,183,498</b>
<b>Revenue:</b>						
Taxes	\$113,944,245		\$116,956,019	\$122,726,169	118,241,087	123,472,469
Licenses and Permits	2,654,276		2,500,000	2,975,108	2,500,000	2,500,000
Fines and Forfeitures	48,099		10,000	45,918	10,000	10,000
Use of Money/Property	261,674		133,300	659,510	133,300	133,300
Intergovernmental	1,763,359		1,058,011	3,681,686	400,000	400,000
Charges for Services	47,006,834		42,667,927	57,578,122	47,771,070	47,771,070
Miscellaneous	11,615		2,175,000	18,117	375,000	2,003,763
Other Financing Source						
Sales – Fixed Asset	22,954		121,559	0	0	0
General Fund Contribution	0		0	4,436,248	0	18,146,602
Local Public Safety	8,210,820		9,734,282	9,734,282	10,549,732	10,549,732
State Fire	470,000		602,500	602,500	500,000	2,907,260
Vehicle/ Apparatus Trust	1,400,000		2,550,000	2,550,000	0	3,006,039
Fireworks Violations	0		25,000	25,000	0	0
Fire Department Donations	5,376		0	0	0	0
Fire Hazard Reduction	125,000		37,700	37,700	0	800,000
Fire Helicopter Operations	300,000		300,000	300,000	275,000	1,475,000
County Services EMS	109,438		276,550	153,702	276,500	200,000
American Rescue Plan Act	2,005,519		0	3,214,958	0	6,785,041
<b>Total Revenue</b>	<b>\$178,339,209</b>		<b>\$179,026,290</b>	<b>\$208,860,579</b>	<b>\$181,031,739</b>	<b>\$220,160,276</b>
<b>Net Fund Cost</b>	<b>(\$4,916,078)</b>		<b>\$1,944,473</b>	<b>(\$23,407,914)</b>	<b>0</b>	<b>(\$3,976,778)</b>

## Appendix B



Confiscated fireworks from Gilroy, California (Photo - [www.patch.com](http://www.patch.com))



Confiscated fireworks from Tulare, California (Photo - [www.KGEP.com](http://www.KGEP.com))




Confiscated fireworks from Ventura, California (Photo - [www.fillmoregazette.com](http://www.fillmoregazette.com))



Confiscated fireworks from Pomona, California (Photo - [www.imagesofpomona.blogspot.com](http://www.imagesofpomona.blogspot.com))


# Appendix C

12457



**KERN COUNTY FIRE DEPARTMENT**

**COUNTY ORDINANCE VIOLATION  
ADMINISTRATIVE CITATION**



Date:		Time:	Day of Week: S M T W T F S	
Name, First:		Middle:	Last:	
Date of Birth:	Age:	CDL:	Phone:	
Residence, Address:		City:	State:	Zip Code:
JUVENILES, Parents Name:		Address:	Parent's Phone:	
City:		State:	Zip Code:	

**ORDINANCE VIOLATION:**

Use/Possession of illegal fireworks  
Kern County Ordinance Code 17.32.260

Use/Sale of Safe & Sane fireworks not within prescribed time period  
Kern County Ordinance Code 17.32.270

Social Host Liability  
Kern County Ordinance Code 17.32.055, 17.32.260

Illegal Burning  
Kern County Ordinance Code 17.32.030  
Sec 105.5.1

**ADDRESS OF INFRACTION:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**VIOLATION DESCRIPTION:** \_\_\_\_\_

\_\_\_\_\_

**ADMINISTRATIVE PENALTY FEE:** \$ \_\_\_\_\_. Fees will be paid in the form of personal check, cashier's check, or money order payable to **KERN COUNTY FIRE DEPARTMENT, 5642 Victor Street, Bakersfield, CA 93308**, within 30 days of violation notice. Fees may be mailed or paid in person.

Appeal Process:  
Any person disputing the issuance of an administrative citation may contest the citation by completing a Request For Hearing form and returning it to the address stated on the form within fifteen (15) days from the date of issuance of the administrative citation, together with an advance deposit of the full amount of the penalty. Any administrative citation penalty that has been deposited shall be refunded if it is determined, after a hearing, that the person or entity charged with the violation was not responsible for the violation or that there was no violation as charged in the administrative citation. The time requirement for filing a Request For Hearing form shall be deemed jurisdictional and may not be waived. For information on receiving a form, call (661) 391-3480.

**Violator's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Issuing Officer's Signature:** \_\_\_\_\_ **Badge#** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

WHITE: OFFICE                      YELLOW: VIOLATOR                      PINK: HEARING OFFICER

Kern County Board of Supervisors  
Response to Grand Jury Final Report  
Kern County Fire Department – The effects of Illegal Fireworks

Response to Findings F1-F4:

Kern County agrees with the Grand Jury's findings.

Response to Recommendation:

*R1: The Grand Jury recommends that The Kern County Fire Department develop a response team to monitor illegal fireworks complaints during the July 4<sup>th</sup> holiday beginning June 1, 2024.*

The Department will not implement a new response team, as it has previously implemented an online reporting system to track illegal fireworks complaints that serves the same purpose. Information Technology staff monitor the reporting system and send complaints to investigators in real time. Data is shared by the Kern County Fire Department and the Bakersfield City Fire Department. Historically, the Department activates the County's Emergency Operations Center during the holiday, where County and City staff handle calls from the public to report illegal firework use.

*R2: The Grand Jury recommends that The Kern County Fire Department increase public outreach through Public Service Announcement (e.g., newspaper, radio, social media, billboards) regarding dangers and repercussions of possessing and using illegal fireworks during the July 4<sup>th</sup> holiday beginning June 1, 2024.*

This recommendation will be implemented in part. The Department uses social media in coordination with local radio and television interviews to discuss the dangers of illegal fireworks. The Department does not plan to use billboards, as previous attempts did not provide sufficient return on investment for this purpose. While the Department's informational campaign "You light it, We write it" is active via the Kern County Fire Department website, the Department will make a concerted effort to expand public outreach leading up to the upcoming July 4<sup>th</sup> holiday.

*R3: The Grand Jury recommends that the Kern County Fire Department create a task force to search social media for the sale of illegal fireworks beginning June 1, 2024*

This recommendation has been partially implemented. While the Department will not be creating a new task force, the Department currently coordinates with the Kern County Sheriff's Department, Bakersfield Police Department, Bakersfield Fire Department, Cal Fire, and California's Office of the State Fire Marshal to monitor social media for the sale of illegal fireworks. The Department believes being proactive and stopping the sale of illegal fireworks before the holiday is the most effective way to stop illegal fireworks.

*R4: The Grand Jury recommends that the Board of Supervisors initiate a feasibility study to possibly allocate additional funds to the Kern County Fire Department budget for the purchase of drones and training of personnel by June 1, 2024.*

This recommendation will not be implemented. The Department currently uses drone surveillance during the July 4<sup>th</sup> holiday at a cost to the department of \$20,000 for two nights. The Department has previously researched purchasing a drone and the required equipment, but costs would be in the range of \$1 million dollars, not including staffing/training costs. As technology continues to evolve, the County believes it to be fiscally prudent to continue to contract with private vendors at this time.