



# CITY OF SAN MATEO

City Hall  
330 W. 20th Avenue  
San Mateo CA 94403  
[www.cityofsanmateo.org](http://www.cityofsanmateo.org)

## Agenda Report

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**TO:** City Council  
**FROM:** Drew Corbett, City Manager  
**PREPARED BY:** Police Department  
**MEETING DATE:** April 5, 2021  
**SUBJECT:**  
Proposed Fireworks Amendments – Ordinance Introduction

### **RECOMMENDATION:**

Receive a presentation on illegal fireworks activity and enforcement efforts; provide feedback on the use of acoustic detection technology as a tool to identify locations where illegal fireworks are being used; and introduce an Ordinance to add Chapter 10.20 “Fireworks” to the San Mateo Municipal Code related to enforcement of fireworks violations.

### **BACKGROUND:**

The use of illegal fireworks in San Mateo has been an issue over the last several years. Efforts to effectively address this activity are difficult for many reasons including staffing levels, limited enforcement options, inability to identify the actual user or possessor of fireworks (particularly in large group settings), and lack of clarity on allowable action to be taken by the Police Department with respect to seizing fireworks.

All fireworks, including small fireworks devices containing restricted amounts of pyrotechnic composition (commonly referred to as “safe and sane” fireworks) are not allowed in San Mateo. The sale, storage, possession and use of fireworks is prohibited by the California Fire Code, which is adopted by the City via Chapter 23.28.010 of the San Mateo Municipal Code (SMMC). However, the Fire Code specifically grants authority to seize fireworks to the Fire Chief.

Last year was an exceptional year for fireworks, likely due to the COVID-19 pandemic and civil unrest across the country. During the two weeks leading up to and including July 4th, there were 294 fireworks-related incidents logged into the Police Department’s computer-aided dispatch system in 2020. This is compared to 109 in 2019 and 175 in 2018 during the same timeframe. The Police Department responds to these calls for service; however, an officer must actually witness the firework being set off in order to cite an individual for use or possession of fireworks. Due to the language in the Fire Code regarding authority to seize fireworks, Police Officers have been limited in their ability to seize fireworks without the presence of a Fire Marshall or their designated staff.

### **Proposed SMMC Amendments**

Prior to the Independence Day holiday this year, staff recommends introduction of an ordinance adding a new chapter to the SMMC to clearly indicate that the Police Department is authorized to seize any fireworks, as well as issue a citation. A draft of potential ordinance language is included as Attachment 1. A violation of the ordinance would result in an infraction, with fines as set in SMMC Chapter 1.04.010 at \$100 for a first conviction; \$200 for a second conviction within one year; and \$500 for each additional conviction within one year. Depending on the magnitude or frequency of the violation, offenders could be charged with a misdemeanor, which carries a fine of up to \$1,000 and potential imprisonment. Large quantities of dangerous fireworks can also be charged as a felony.

### **Use of Technology**

One challenge to enforcing illegal fireworks is the ability to quickly identify and respond to the location of illegal firework activity. The Police Department does authorize overtime details every year to provide selective enforcement to address the problem, but as described previously, it is very difficult to catch someone in the act and issue a citation. After receiving numerous complaints related to illegal fireworks last year, the Police Department was asked to investigate the use of acoustic detection technology (a commonly known example of this technology is 'ShotSpotter') to curtail the use of fireworks in the City.

Acoustic detection systems are used by several nearby law enforcement agencies including Redwood City and East Palo Alto, as well as larger agencies such as San Francisco and Oakland. This technology uses sound sensors to locate gunshots in a community, improve response times, determine how many shooters are in an area, and identify the types of firearms being used. The system is triggered by loud noises, which could include gunshots, fireworks, helicopters, construction sounds, or thunder. Once the system registers a sound, an algorithm classifies it as a potential gunshot or not. Sensors are installed on light poles, roof tops or buildings, and are intended to register an acoustic impulse within a square mile. When the sensors pick up on an impulse, the sound is recorded at slightly different times based on how far the sensor is from the source. The time differentials are then used to triangulate the location of the sound. The noise, along with a visual representation of the sound wave, are sent to a review facility to determine whether the sound is gunfire. If it is determined to be gunfire, an alert that notes the time and location is sent to the Police Department.

The technology is not intended to investigate illegal fireworks (smaller safe and sane fireworks would likely not register); however, it is possible that the data and information derived from such technology could be used to identify hotspots for fireworks use. Implementation of this technology in San Mateo would include a one time start-up cost of \$20,000 and ongoing annual costs of approximately \$210,000. This would include a number of sensors sufficient to capture acoustic sounds in three separate locations in the City, each spanning one square mile. In addition, the technology could be used to increase effectiveness in responding to incidents of gun violence such as a swifter response time, more efficient crime scene location, reduced victim transport time, and increased ability to collect evidence.

### **Feedback and Next Steps**

Staff requests Council feedback and action on the following:

1. Affirm that the City Council does wish for the Police Department to respond to and enforce calls for service related to illegal fireworks
2. Provide direction on whether to further pursue the use of audio enforcement technology
3. Introduce the Ordinance adding Chapter 10.20 to the Municipal Code. The proposed Ordinance would take effect 30 days after the second reading, which is tentatively scheduled for April 19, 2021. This timeline ensures the Ordinance will take effect several weeks before the Independence Day holiday.

### **BUDGET IMPACT:**

Enforcement of the proposed changes to the Municipal Code can be accommodated within existing staffing and budget authority. Costs associated with use of acoustic detection technology would require additional funding.

### **ENVIRONMENTAL DETERMINATION:**

This action is not a project subject to CEQA, because it can be seen with certainty that it will not cause a physical change in the environment. (Public Resources Code Section 21065.)

### **NOTICE PROVIDED**

All meeting noticing requirements were met.

### **ATTACHMENTS**

Att 1 – Proposed Ordinance

### **STAFF CONTACT**

Ed Barberini, Chief of Police

ebarberini@cityofsanmateo.org  
(650) 522-7600

Matt Earnshaw, Lieutenant  
mearnshaw@cityofsanmateo.org  
(650) 522-7627