



**BOARD OF SUPERVISORS
AGENDA LETTER**

Agenda Number:

Clerk of the Board of Supervisors
105 E. Anapamu Street, Suite 407
Santa Barbara, CA 93101
(805) 568-2240

Department Name: Fire
Department No.: 031
For Agenda Of: August 19, 2014
Placement: Administrative Agenda
Estimated Tme:
Continued Item: No
If Yes, date from:
Vote Required: 4/5th

TO: Board of Supervisors
FROM: Department Chief Michael W. Dyer (805) 681-5507
Director:

SUBJECT: Donation for Fire Department Flame Sniffer Devices and Mission Canyon Pilot Project

County Counsel Concurrence

As to form: Yes

Auditor-Controller Concurrence

As to form: Yes

Other Concurrence: Risk Management

As to form: Yes

Recommended Actions:

That the Board of Supervisors:

1. Authorize the Fire Department to accept a donation of approximately \$40,500 worth of equipment from FlameSniffer Pty Ltd. for FlameSniffer devices to be set up in the Mission Canyon area. (Attachment A) The equipment includes 9 sensor units which will be attached to the existing Southern California Edison power-line infrastructure located in the Santa Barbara Mountains.
2. Approve and authorize the Chair to execute the attached Flamesniffer Agreement with Southern California Edison ("SCE"), authorizing the installation and operation of Flamesniffer devices on SCE powerline infrastructure. (Attachment B)
3. Approve Budget Revision Request #BJE-0003559.
4. Determine that the execution of this contract is categorically exempt from the California Environmental Quality Act (CEQA) in compliance with Section 15061 (b), (3), (No possibility of impact on the environment), (Attachment C).

Summary Text:

FlameSniffer sensors provide a proactive approach to fighting fires by allowing for early detection of the onset of a fire and by providing a system that continually streams real-time intelligence to assist the County Fire Department in making informed decisions.

A pilot program has been developed for the Mission Canyon area. FlameSniffer Pty Ltd. is donating the following to the Fire Department: nine (9) sensor units (FlameSniffer 4C-V5 series sensors), two (2) communication hubs, and two (2) base stations to be located at the Public Safety Dispatch Center, 4434 Calle Real, Santa Barbara and Santa Barbara County Fire Station 15, 2491 Foothill Road, Santa Barbara, respectively. The estimated cost of this equipment is \$40,500, \$4,500 per sensor unit. The communication hubs and base station estimated costs are included in the estimated costs of the sensors.

Background:

A 12 month pilot program has been developed for the Mission Canyon area. Mission Canyon has been selected as the most appropriate area, in particular, the area affected by the Jesusita Fire in 2009. The pilot installation shall commence at Gibraltar Road, encompassing Spyglass Ridge, San Roque, Jesusita Lane through to the Arroyo-Burro Trail. This line of detection will require the installation of nine (9) sensor units (FlameSniffer 4C-V5 series sensors), two (2) communication hubs, and two (2) base stations to be located at the Public Safety Dispatch Center, 4434 Calle Real, Santa Barbara and Santa Barbara County Fire Station 15, 2491 Foothill Road, Santa Barbara, respectively. The installation of two base stations provides redundancy should communication be lost at either location. The nine sensor units will be attached to the existing Southern California Edison power-line infrastructure located in the Santa Barbara Mountains.

The pilot network installation of the FlameSniffer 4C-V5 series sensors provides detection of fire ignition in several ways:

- Fire ignition without visible flame (smoldering slow ignition) is detected through continual air sampling to detect the presence of smoke particles and increased levels of CO₂.
- Fast burning visible flame fires are detected through 360 degree long range thermal measurement sensors that measure 31,744 individual locations per sensor unit.
- Infrared thermal sensors continually monitor changes in temperature throughout the detection areas, triggering alarms once a threshold is exceeded and provide a viewable thermal image of the heat source,
- External temperature sensors provide a continual reading of the temperature surrounding the sensor unit, providing a secondary temperature reference,
- Infrared flame detection sensors await the presence of a flame, perform an algorithmic analysis and detail the location of the flame source,
- Cameras provide further analysis as a backup resource, only after the initial sensors have provided detailed information of the onset of fire.

The combination of these multiple series sensors ensures instant detection, situational awareness and real-time information to instantly investigate the alert as well as provide an understanding of the extent of the ignition and the attributing climatic factors.

If fires can be detected early, intelligence detailing the surrounding conditions are available in real time allowing the Fire Department to respond to confirmed fires faster, direct resources to critical points, reduce property destruction and emissions, but most importantly save lives – residents and firefighters.

Performance Measure:

Percentage of all wildland fires contained to 10 acres or less to protect life and property.

Fiscal and Facilities Impacts:

Budgeted: Yes (Budget Revision Request attached)

Fiscal Analysis:

There will be no Fire Department costs associated with this pilot project. The attached budget revision recognizes the donation revenue and records the associated equipment expense.

Special Instructions:

Please send a certified copy of the minute order to the following:

Kari Burks, Santa Barbara County Fire Department

Auditor-Controller

Attachments:

Flamesniffer Devices Donation Letter

Southern California Edison Flamesniffer Agreement

Budget Revision Request #BJE-0003559

CEQA Exemption

Authored by:

Michael W. Dyer, Fire Chief

cc: