And the lasers' red lights lit up holiday nights  
Air group, citing pollution, seeks fireworks substitute

By Alex Breitler, staff writer  
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There could be no rockets' red glare, nor bombs bursting in air, in some San Joaquin Valley communities if air-quality officials approve a plan today to reduce dramatic spikes in pollution each Fourth of July.

The regulators want to offer up a quarter of a million dollars this summer to encourage communities to switch from fireworks displays to high-tech, zero-emission laser shows.

It's a voluntary program; no one is banning fireworks displays.

And officials say they realize the implications of tampering with a tradition that dates back to, oh, 1776.

"We completely understand there's deep cultural significance," said Todd DeYoung, grants program manager for the San Joaquin Valley Air Pollution Control District. "But we definitely think there's room (for change). We're not the first ones to have done this - they've made the switch in other places."

That's true, especially in drought-stricken Arizona and Texas, where the fire danger has been too great for fireworks. Laser shows have been held in California, too, including periodic Independence Day celebrations at a church in Sonora.

This may be the first case, however, in which the goal is to curb pollution.

For traditionalists, it might be a difficult sell. Parades, hot dogs, John Philip Sousa and - lasers?

"There's just something about a fireworks show - the noise and the smell. A laser show would be like watching a silent movie in color," said 64-year-old Orlene Dentome, a part-time worker at the American Legion Post 22 in Lodi.

"There's some things you just don't change," Dentome said.

Stockton hasn't had a municipal fireworks show since 2008. The Stockton Ports have helped fill the void by offering their own show at Stockton Ballpark; that show should be eligible for the incentive program, along with other established events in Lodi, Manteca and Tracy.

Ports President Pat Filippone said he hadn't heard about the program. When told about it, he was noncommittal.

"Our fireworks nights are generally our most popular nights," he said. "However, we'd always be open to new thoughts and ideas."

Laser shows ought to cost about $15,000 to $25,000 - comparable to an average fireworks show, according to one laser show promoter.

But under the new program, the air district would pay half the bill, using fees collected from regulated businesses.

The pollution problem is well documented. Last July 4, the amount of tiny particle pollution soared by about five times as fireworks exploded in the late evening, according to one air quality monitor on Hazelton Avenue in Stockton. Much larger spikes have been detected in the south Valley, where the air quality is often worse.
Some of the increase doubtless comes from individual fireworks use, which would not be affected by the new program, DeYoung said. But officials believe much of the pollution is the result of organized fireworks.

The spikes have been dismissed as "exceptional events" under the law, and therefore don't affect the Valley's efforts to meet clean-air standards. They are still, however, a threat to public health - even if only for a few hours.

The particles, some nearly 30 times smaller than the width of a human hair, embed themselves in the lungs and exacerbate asthma or other respiratory conditions.

"These are acute, intense exposures which do have significant health impacts," DeYoung said. The smallest particles also cost the Valley an estimated $3.2 billion per year.

San Joaquin County Supervisor Leroy Ornellas, a member of the air district board that will consider the fireworks program today, said he supports the fact that it's voluntary.

But he understands why some people might be wary.

"I'd like to see a laser show and see what it's like," Ornellas said. "But that explosion, that final burst of that last wonderful $10,000 fireworks rocket - how are you going to come up with something like that? Are you going to get the 'oohs' and 'ahhs'?'"

Yes, said James Donaldson, production manager with Creative Laser Media & Design, with offices in Northern California. Donaldson's company travels around the country performing laser light shows, including some with an Independence Day theme.

These aren't just random beams slicing through the air, he said. The professionals create graphics that project onto large screens seen by thousands of people. And while there's no way to really replace the thunderous booms of the fireworks, the laser shows are carefully choreographed with music.

"It's like watching a patriotic movie with lasers as the light source, which is very unique," Donaldson said. "People haven't seen lasers like this before."