Air officials urge July 4 fireworks restraint

Use of personal fireworks elevates neighborhood PM levels, threatens health

As Independence Day approaches, local air officials remind Valley residents that July 4 fireworks increase levels of dangerous particulate matter (PM) and pose a health threat to themselves and their neighbors. Historically, the Valley experiences dangerous particulate levels four or five times higher than the health based federal standards. These spikes are largely attributable to personal fireworks use throughout Valley neighborhoods.

“We urge Valley residents to exhibit their patriotism by attending a professional Independence Day event in their area instead of using personal fireworks,” said Seyed Sadredin, the District's Executive Director and Air Pollution Control Officer. “Each year, people suffer serious health consequences from direct exposure in the neighborhoods where they live and breathe… from fireworks activities that are entirely preventable.”

Fireworks emit large quantities of PM, including soot, ash and metals, which cause serious health impacts, especially to people with existing respiratory conditions, elderly people and small children. Fine particulate matter—PM2.5—can invade the bloodstream and has been linked to heart attacks and stroke.

Air quality in the Valley during summer is already burdened by ozone pollution, and fireworks emissions add to what already may be poor air quality. Air monitors throughout the Valley reflect spikes in particulate pollution every year following Fourth of July fireworks displays. (An attached graph illustrates a typical increase in PM following fireworks.) The high levels of PM jeopardize the Valley’s progress in meeting air-quality standards that protect public health.

The Air District’s Real-time Air Advisory Network (RAAN) makes localized air quality data available from an extensive air-monitoring network, visit www.valleyair.org/RAAN. Hourly air quality data is also available through a free iPhone app, Valley Air, available at the App Store.

For more information about the Air District, call a regional office in Fresno (559-230-6000), Modesto (209-557-6400) or Bakersfield (661-392-5500).
This graph illustrates a spike in particulate levels on July 4, 2011 in Turlock as a result of fireworks use. Similar impacts are seen throughout the Valley each July 4.