Use RAAN to gauge local summertime air quality

June's high temperatures mark the official beginning of the summer ozone season. The Valley Air District urges the public, Valley schools and businesses with outdoor workers to take advantage of a free, valuable tool which can help individuals protect themselves from the harmful effects of air pollution.

The District’s Real-Time Air Advisory Network (RAAN) is an automated tool that provides Valley residents with updates from the air monitor of their choice. Subscribers can receive emails, texts or iphone app notifications to view hourly air quality data as local conditions change. RAAN also provides outdoor activity guidelines for periods of poor air quality.

“While the Air Quality Index (AQI) forecast for a particular day and county may be in the “unhealthy” range, this only indicates the forecasted air quality for the worst location during the worst hour of the day. It does not take into account that air quality changes dramatically over the course of the day, and certain areas of a county might be much cleaner than others,” stated Jaime Holt, the District’s Chief Communications Officer. “The RAAN system is the best tool available for the public to fully understand the current air quality in their area.”

RAAN is based on actual air quality data coming from monitors throughout the Valley. The hourly nature of the RAAN system gives a much more detailed picture of actual pollution concentrations in an area during a given time. For example, the RAAN system will indicate that the worst hours for ozone often occur in the early afternoon.

Ground-level ozone is a colorless, odorless and corrosive gas that forms when emissions, primarily from mobile sources such as cars and trucks, react in heat, sunlight and stagnant conditions. This makes ozone dominant during summer months. High concentrations of ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can also exacerbate bronchitis, emphysema, and asthma, reduce lung function and inflame the lining of the lungs.

RAAN also provides current air quality readings for fine particulate matter pollution (PM2.5), a directly-emitted pollutant, most often in the form of smoke, ash, soot or dust, which can reach unhealthy levels due to wildfires, residential wood burning, vehicle exhaust and even fireworks. PM2.5 tends to be the dominant pollutant during winter months.

In addition, RAAN advises schools and the public to take precautions with regard to outdoor activities through the Real-time Outdoor Activity Risk (ROAR) Guidelines.

For more information about the RAAN Program and ROAR Guidelines, visit www.valleyair.org/RAAN.

The above chart shows RAAN as it would be seen on valleyair.org during a typical summer day.