

## **Earth Log: Whiff of ‘wet ash’ – rain helps end soot siege**

By Mark Grossi

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After the spritzing of rain Monday, Fresnoan Tom Bohigian said on Facebook that it smelled like “wet ash” downtown. It really did.

The rain dampened the soot mess from the Rough fire, which at times last week made the San Joaquin Valley look like another planet. There were orange sunrises and soot clouds at noon – it looked like an air quality disaster.

But the rain on Monday and Tuesday quite literally gave the Valley a breather from the air nightmare.

What happened last week? A September heat wave collided with that expanding fire – which was started by a lightning strike near the Rough Creek at the end of July.

The breeze shifted, the fire picked up and the Valley got a dose of smoke, though not nearly as bad as the foothill communities in places such as Pinehurst. Ozone-making gases also poured into the Valley.

In other words, the summer’s worst air-quality week hit us with the double whammy of ozone and particle pollution. Call it a perfect soot storm.

The bad air spread far and wide as the pollution meandered around the Valley. Monday and Tuesday, the temperatures still were in the 90s, but ozone pollution was rising in the afternoons.

On Wednesday, the triple digits arrived and so did the soot. Clovis came very close to exceeding the health standard for soot, known as PM-2.5. The standard is a 24-hour average, pegged at 35 micrograms per cubic meter of air.

Clovis ended the day with an average of 34.3, but the PM-2.5 had spiked to 79 between 8 a.m. and 9 a.m., making it a dangerous time for schoolchildren.

On Thursday, the sun came out of the soot enough to create a rare, one-hour exceedance of the federal ozone standard in central Fresno. Valley air authorities probably will apply for a waiver because the fire helped create the conditions.

This sort of ozone spike hasn’t happened in a few years.

On Friday, things seemed to get worse. Fresno, Clovis and Madera unified school districts canceled home high school football games.

The largest high school girls tennis tournament in the nation, scheduled Friday and Saturday at sites around Fresno and Madera counties, also was canceled.

Bakersfield’s air breached the PM-2.5 health standard Friday with early evening hours peaking well above 60 micrograms per cubic meter of air.

The city also breached the eight-hour ozone health standard. With the temperature at 101 degrees, it was a lung-blasting September day.

On Saturday, Visalia, Porterville and Bakersfield had elevated soot levels, but the PM-2.5 standard was not breached.

On Sunday, Merced had the double whammy, breaking both ozone and PM-2.5 health thresholds.

Air pollution subsided with the breezes and gentle rain on Monday.

Has the siege ended with the rainfall this week? Has the weather begun to change over to fall? Meteorologists say the summer is statistically winding down, meaning a slight, theoretical cooling with each passing week.

But there have been plenty of Valley heat waves in late September and early October, meteorologists say. And the fire is still going. Don’t count out summer and dirty air yet.