

## **District doles out millions to help clean the air**

By Kellie Schmitt, staff writer

Bakersfield Californian, Sunday, Dec. 25, 2011

Valley air district officials often say it will be impossible to reach federal air quality standards without new technology, a so-called "black box" of tools yet to be invented.

They're trying to prod that creation along with about \$3 million in grants for a dozen technology projects that could help reduce the valley's emissions.

"We're helping air pollution while promoting technological research in the valley," said Seyed Sadredin, executive director of the San Joaquin Valley Air Pollution Control District.

The district received about 50 applications ranging from an electric agriculture sprayer to a natural gas conversion kit for locomotive engines. The projects focused on three areas: renewable energy, waste solutions and mobile sources.

Officials selected the winners based on a variety of factors including cost-effectiveness, relevance to the valley's pollution attainment goals and project readiness. They wanted technology that just needed a test run to ensure workability.

While the technology creators are based in diverse locations, their projects will be implemented at various valley locations.

"All of these are going to be real projects at real valley locations as opposed to a lab," Sadredin said. "Folks around here can get a buy-in, and see it up close and personal."

About half of the money for the projects comes from federal grants, while the local funding comes in part from an extra DMV fee valley residents must pay for failing to meet federal air standards. The district's funding only provides part of the projects' costs with the balance provided by the technology creators and the local partners.

Among the projects district officials say they're most excited about is a retrofit for two diesel trucks in the valley, which should reduce their emissions to the level of a new truck. The research will make sure there's no operational trouble once the equipment is installed.

A boiler project that uses solar panels to create steam is also generating enthusiasm at the district.

That project will be tested by Delano-based Styrotek, a manufacturer of foam produce boxes. The facility will be installing roof-top mirrors to reflect and magnify the sun's heat, a process that results in steam generation. That steam generation will supplement the facility's boiler during daylight hours, reducing their overall emissions.

Generating steam through sunlight would not only reduce emissions but also expenses.

"If it does what they say, it's a way we could be more competitive with our business," said Dale Arthur, the company's general manager.

Locally, Bakersfield's Bidart Dairy will test out a project that can collect methane, and use it to power an electric generator – all without substantial pollution.

After the projects are up and running, they'll be tested for about one year. At that point, their success will be evaluated. Eventually, the district's hope is that the technologies will be more widely available throughout the valley.

Even during the test run, the projects should help with the valley's air pollution, said Samir Sheikh, the district's director of strategies and incentives.

But, "the biggest benefit is if we demonstrate they're cost-effective and others want to take advantage," he said, "Then we'll see an even bigger air pollution benefit."

### **WHERE THE MONEY'S GOING**

- \$350,000 for add-on equipment for diesel trucks that would reduce smog-forming gasses

- \$300,000 for an electric generator fueled by dairy waste gasses that would produce near zero air pollution
- \$258,000 for electric hybrid machinery for a dairy
- \$75,580 for technology that converts locomotives from diesel-fired to natural gas
- \$270, 534 for an all-electric agricultural sprayer
- \$28,250 for a system that can burn paper raisin trays with very low air pollution
- \$300,000 for a solar steam generator
- \$292,830 for a hybrid propane/electric commercial utility truck
- \$250,000 for a power-generating burner that takes wasted energy and generates electricity
- \$242, 500 for electric hybrid garbage trucks
- \$230,000 for a low-polluting composting system that uses solar-powered equipment
- \$350,000 for electric utility trucks

## **Lingering smoke from holiday a Bay Area health hazard**

By Lisa M. Krieger

Contra Costa Times Mon., Dec. 26, 2011

Holiday wood-burning, coupled with stagnant air, filled Bay Area skies with smoke so unhealthy that it rivaled conditions seen after 2008's major wildfires, according to air quality officials.

Despite several consecutive "Spare the Air" alerts, by Monday morning, all nine Bay Area counties sat under a dense and lingering blanket of smoke, the Bay Area Air Quality Management District reported.

"People think fireplaces are a traditional thing. They're still unaware of how unhealthy smoke pollution is, so they continue to burn," said air district spokeswoman Lisa Fasano.

Late Monday afternoon, soot levels in central San Jose averaged 43 micrograms per cubic liter of air. In Oakland, they averaged 45; Livermore, 37; and Redwood City, 31.

They soared far higher on Christmas night, with levels hitting the high 60s and 70s in some spots.

That's nearly double the federally allowable limit of 35 micrograms per cubic liter of air.

And it's even higher than the smoke experienced by the Bay Area after Butte, Shasta and Trinity counties ignited in late June 2008 after a freak barrage of thunderstorms that sent clouds of smoke our way. Bay Area soot levels at the time averaged 35 to 42 micrograms.

Rebekah Sprecher took her 16-year-old son Ricky to the movies on Monday afternoon, hoping the indoor air wouldn't aggravate his cystic fibrosis.

But it didn't help.

"His breathing sounded thicker, and he was coughing," she said.

"People keep burning, not realizing that it is making people sicker," she said, "especially those with life-threatening diseases."

A growing body of scientific research shows that microscopic particles of soot can penetrate deep into lungs and cause deadly exacerbations of lung and cardiac illnesses. About 60,000

Americans die annually from illnesses caused by particulates, according to a recent study based on Harvard Medical School data.

The Bay Area is vulnerable to high pollution levels in both the winter and summer. In winter, the cold and still nights create a situation where air hangs low, trapping particulates until a storm scours them away. (In the summer, there's an ozone problem.)

On Monday, conditions were reminiscent of the air when smoking filled up planes and restaurants, according to Broadbent, executive officer of the district.

Anyone who violates the "Spare the Air" alert, triggered when levels climb, faces a warning -- then a \$400 fine. In addition to fireplaces, the ban covers woodstoves and inserts, pellet stoves, outdoor fire pits and any other wood-burning devices. Exceptions are made for homes where wood is the only source of heat.

But there is no official policing; violators are reported by the public.

A "No Burn" request has been issued for Tuesday, which means burning isn't illegal, but residents can protect the health of their neighbors by not burning.

This holiday, the Sprecher household didn't build a roaring fire in their living room. They never do. And they wish that other families were more cautious.

"Ricky can stay indoors and play video games," Rebekah Sprecher said. "But he'd be happier to get outside."

[S.F. Chronicle editorial, Sat., Dec. 24, 2011:](#)

### **EPA curb, at last, on coal emissions is welcome**

Mercury, arsenic and acid gases don't belong in the open air, where they cause sickness, heart attacks and premature deaths. Now these toxic emissions from coal-fired power plants will finally be curbed by an Environmental Protection Agency ruling.

The decision by the Obama administration caps some 20 years of government study and heavy lobbying by the coal and power generating industries. It's a welcome show of regulatory resolve at a time when GOP presidential contenders scoff at environmental rules and the White House's commitment to clean air was questioned by environmentalists.

The toxics at issue are blamed for some 11,000 early deaths and serious side effects. After spewing untouched out of power plant smokestacks, the substances settle into the natural food chain. For example, fish with high levels of mercury are consumed by humans who suffer the ill effects.

Study after study showed the problem while the EPA contemplated where to set the limit and to gauge the costs.

Under the ruling, power plants must install cleanup equipment with a deadline of up to four years. The total cost is estimated at nearly \$10 billion, far smaller than health care bills attributed to the toxics.

There are, of course, predictions of job losses from plants forced to close and fears of spotty power deliveries. But an Associated Press analysis suggests a number of generators are already moving toward cleaner smokestacks, with only the oldest power plants likely to shut down. Also, more than 12 states already have imposed EPA-like limits on the toxic emissions.

More broadly, the ruling gives a fuller picture of the Obama administration's approach. It's not shy about using regulatory powers to push its policies, though it comes with a moderating touch.

In September, the White House overruled the EPA on smog controls targeting chemicals pouring out of power plants. The reason then was that the heavy cost outweighed public health benefits.

Earlier, the administration had used its federal powers to double auto mileage minimums - a plan that both saves gas and cuts emissions - and imposed limits on the downwind drift of harmful chemicals across state lines.

The mercury decision this week is another turning-point choice in cleaning up the environment. The White House got it right this time, and the public, not the coal industry, is the rightful winner.