

Valley air district's \$500m fund key to curbing diesel pollution

By Mark Grossi

The Fresno Bee, Monday, Jan. 28, 2013

As the economy shrunk government budgets over the past five years, a special air district fund quietly has grown tenfold -- beyond \$100 million annually.

But it's no slush fund, and it isn't the target of activist lawsuits. This obscure pot of money is a key to curbing diesel pollution, the biggest California air-quality problem of this era.

It's the San Joaquin Valley Air Pollution Control District's incentive fund, bankrolled by government agencies, businesses and your vehicle registration fees.

Nearly \$500 million in incentives have been used to coax businesses into buying air-friendly advances -- like cleaner diesel water pumps on farms and school bus replacement. It has killed off 96,000 tons of pollution in the Valley in the last decade.

"Incentives will give us the extra reductions we need to attain the federal standard years ahead of schedule for most of the Valley," air district executive director Seyed Sadredin said.

It has become a popular tool among air districts in California, where voters have approved bonds and lawmakers appropriated money to help achieve tough new federal standards. The Valley and the South Coast Air Basin, the two most polluted places in the country, get the most dollars.

Incentives could account for as much as 25% of the future air quality progress in the Valley. But rules have always been more effective, and air quality activists say the rules should be emphasized.

Activist Kevin Hall in Fresno says there is nothing wrong with incentives, but he says he sees a downside to incentives if they delay rules.

"It's in an attempt to avoid economically harming businesses," said Hall, executive director of the Central Valley Air Quality Coalition. "Rules get delayed. And the air doesn't get cleaned up. Why haven't we met even the old ozone standard yet?"

The Valley has made plenty of progress, Sadredin said. He illustrated by comparing ozone violations over the last decade for the federal one-hour ozone standard. He said the Valley violated it 56 times 10 years ago. Now, it happens fewer than five times a year.

Hall also said he would like to see a nongovernment audit of the Valley account each year, not just the state audit. The \$100 million is roughly three times larger than the budget to run the entire air district.

The California Air Resources Board audits show the Valley district is a model of efficiency in using the money.

Another form of accountability: The money comes with strings. Diesel trucks, for instance, must be based in the Valley, used at least half the time in the Valley and 75% of the time in California, meet requirements for size, fleet specifications and standards for a given year.

Jim Ganduglia, owner of Ganduglia Trucking, a Fresno freight hauler, said he does formal presentations for truckers to describe rules for incentives.

"It's gone way past complicated," he said. "It's insane."

Diesel engines and trucks will become the major focus in the next decade in the chase to clean up the air. The state's diesel rules mean replacement of many thousands of Valley trucks, ultimately costing billions of dollars.

Moreover, the rules will require cleanup of school buses, locomotives, farm tractors, water pumps and off-road machinery, such as land movers.

Businesses can get incentive money if they upgrade before the rules are enforced. Once the rules take effect, incentives are off the table.

Incentives pay a percentage of the bill for air-friendly technology -- 25% to 80%, state officials say. For truckers, the upgrade might be a new \$135,000 truck or a \$20,000 modern particulate trap to prevent soot from escaping into the air.

"In 2007, we figured we would need about \$200 million per year over 15 years to help businesses," Sadredin said.

The district is only getting half that amount each year, because the distressed economy has kept the federal government from chipping in its share. But some federal dollars still have helped by replacing dirty diesel water pumps and tractors on farms.

"The Valley is a big focus for us," said Kerry Drake, San Francisco-based associate director for the U.S. Environmental Protection Agency.

Valley motorists, businesses and developers also are providing money. Motorists pay about \$25 million of an annual \$30 million penalty for the Valley's failure to achieve the federal one-hour ozone standard. Businesses are picking up the rest.

Developers also are paying millions of dollars to the district for building projects at the edge of town. This sprawl fee helps offset pollution created by the new traffic.

The state's contributions have come from a number of sources, including Proposition 1B, Assembly Bill 118 Air Quality Improvement and the Carl Moyer Program.

Cold front leaves behind clear, crisp air

By John Cox, staff writer

Bakersfield Californian, Monday, Jan. 28, 2013

Winds from the northwest combined with the remnants of a cold front Sunday, giving Bakersfield clean air and sparkling views on a brisk mid-winter day.

Hardly any rain fell in the city despite what looked all day like gathering storm clouds. The Kern County mountains got a dash of snow and residents there braced for the possibility of more Sunday night.

"You could squeeze out a few (snow) showers but it won't be anything heavy," National Weather Service meteorologist Cindy Bean said Sunday afternoon about the overnight outlook for Kern's mountain areas. She pegged the snow level at 4,500 feet.

At Bakersfield's Beach Park shortly before dusk, dog owner Matt Faulkner delighted in the crisp air as children rollicked in the sand and joggers headed for home.

"I love this kind of weather," the 43-year-old said, his small pack of miniature Pinschers frolicking nearby. "It's just really nice when we have good, clear air like this."

Clear it was, according to the San Joaquin Valley Air Pollution Control District's daily air quality forecast. It listed the entire valley as having "good" air -- same as Saturday and Monday; nowhere was there a ban on burning wood in a fireplace.

Jim Bagnall, another meteorologist at the National Weather Service's Hanford offices, noted that clean air generally results under such conditions.

"We got a nice frontal system that came through and that's usually what it takes to scour that bad air out," Bagnall said. He added that the good air quality will likely remain for a few days until high pressure traps the air "and then you wait for the (frontal) system to come along."

Sunday was a bit cooler, too. Bagnall said the high was 52 or 53 degrees, as compared with Saturday's high of 60 degrees.

Looking forward, Bean said it's too soon to say goodbye to the clouds that formed when Sunday's northwesterly winds hit moisture left behind by the cold front.

"They'll remain in the mountains, and we could see some more cloud cover (Monday) -- some partly cloudy skies," she said.

As for the rest of the week, she said to expect dry, warmer weather.

"We should see a gradual warming trend through the week," she said, with temperatures topping 60 degrees by Wednesday or Thursday.

NASA flights measure quality of San Joaquin Valley's air

By Tim Sheehan

Fresno Bee and Modesto Bee, Saturday, January 26, 2013

ABOVE THE SAN JOAQUIN VALLEY -- A pair of NASA airplanes crisscrossing the sky and doing stomach-turning loops are giving scientists a 3-D look at winter air pollution in a way they've never seen before.

The flights are part of a five-year, \$30 million mission called DISCOVER-AQ, an effort to help researchers develop the next generation of satellites to measure air pollution from space.

Jim Crawford, the mission's lead investigator from NASA's Langley Research Center in Virginia, explains how the airplanes work with monitoring stations on the ground to provide a better understanding of how air pollution forms and mixes.

The valley's unique geography — flat land ringed by mountains — and stagnant winter weather are the perfect lab for pollution research, Crawford said: "This is a great place to come."

The valley is the second of four places in the United States where scientists are using the aircraft and ground stations to learn about pollution formation.

One of the planes, a four-engine P-3B Orion, has attracted considerable attention with its low-level passes and circles over and around valley cities. Instruments on the plane measure the air quality at altitudes from less than 1,000 feet to about 9,000 feet.

At the same time, a smaller plane cruises at about 26,000 feet, using lasers and reflected light to simulate how an orbiting satellite sees the atmosphere over the valley.

Tuesday was the fifth of 10 scheduled DISCOVER-AQ flights over the region, and the last before a weather front came through to help clean the air. When flights resume, perhaps as early as this weekend, scientists hope to examine how pollution forms from a clean slate and worsens with time in the region.

"We arrived here at an ideal time for us," Crawford said.

Winter soup

Winter weather in the valley creates an accumulation of very fine dust and chemical particles, compared with the summer, when chemicals that create ozone are more prevalent. But conditions can change daily or hourly.

Ground stations operated by the San Joaquin Valley Air Pollution Control District and the California Air Resources Board give air-quality regulators a snapshot of what's happening on Earth's surface. Satellites that pass over once a day offer a glimpse at the atmosphere at that time.

But satellites in space cannot distinguish whether pollution is in the upper atmosphere, near the surface, or somewhere in between.

"Trying to make a judgment about what the regulator wants to know — which is what you're breathing on the ground — and teasing that apart is not the easiest thing to do right now with satellites," Crawford said.

NASA's project is filling the gap.

The P-3B is festooned with probes that suck air as it climbs and descends. The probes connect to eight instruments that identify chemicals in the air and their concentrations at different altitudes. Scientists get a real-time look at the gunk that blankets the valley between winter storms.

David Lighthall, health science adviser for the valley air district, said the research will help his agency better predict pollution problems for the region's residents.

"They're laying the foundation for an improved model for both ozone and PM-2.5 (fine particles)," Lighthall said. "From these studies, they're collecting fine-grained meteorological information over time, to get different combinations of information that we can relate to our ground-level observations."

By improving computer models to match atmospheric and ground-level data, "we'll have a better ability to predict what we're going to see under specific sets of conditions," he added.

Each of the P-3B's 7½-hour missions takes off in the morning from NASA's Dryden Aircraft Operations Facility in Palmdale and flies a course that includes stomach-turning spirals over Bakersfield, Porterville, Hanford, Huron, Tranquillity and Fresno. It repeats that course two more times, providing data from the morning, midday and afternoon as conditions change.

Up, up and away

The scientific instruments aboard the plane showed that Tuesday was a particularly dirty day. As the airplane descended, the machines showed a sharp rise in the chemicals and particles at altitudes of less than 2,000 feet. The meters then dropped off as the airplane climbed.

That corresponded with the view from the cockpit, where a layer of gray-brown haze was trapped at less than 2,000 feet.

"Boy, I'm glad I don't live here," said Alan Fried, a senior researcher from the University of Colorado at Boulder. His job on the plane is to monitor formaldehyde with a machine called an infrared spectrometer.

Since the valley missions began Jan. 16, Crawford added, "we've seen the particulate levels over Bakersfield double over the past six days."

That changed Wednesday, the first of several days when weather fronts stirred things up to clean the atmosphere. The fronts not only give Crawford and the other researchers a break from a hectic flight schedule, but set the stage for a new set of measurements when flights resume.

"We are looking forward to sort of resetting the situation and watch it happen again," Crawford said.

The team will have plenty of chances to reset situations during its five-year mission. DISCOVER-AQ research began with flights over Baltimore and Washington, D.C., in the summer of 2011. This fall, the research team will move on to Houston. The research will wrap up with a fourth city or region in 2014.

All that data — including the measurements from 180 spirals over the valley cities — "will prepare us to make better observations from space, as well as determine the best mix of observations to have at the surface when we have new satellites in orbit," Crawford said. He added that NASA expects to launch its newest generation of air-quality satellite, called TEMPO, in 2017.

A smarter satellite can help air-quality regulators understand how pollution develops and forms at different levels of the atmosphere.

"Ultimately, from space you don't want to just say it's polluted or it's not," Crawford said. "You want to know the degree to which it's polluted, and you want the satellite to help you find models to strategize what emissions can be addressed to make things better."

New clean-air plan likely to increase no-burn days

By James Burger, staff writer

Bakersfield Californian, Friday, Jan. 25, 2013

State air regulators on Thursday, unanimously approved a plan to meet federal standards for particulate matter in the San Joaquin Valley's air that could double the number of no-burn days called.

Also notably, said San Joaquin Valley Air Pollution Control District Executive Director Seyed Sadredin, the rules require trucking fleets to install filters on their equipment and, by 2020, replace all vehicles constructed before 2010 in an effort to remove high-pollution diesel engines from the road.

The plan, drafted by the local air pollution district board last month, was unanimously approved at a meeting in Bakersfield by the California Air Resources Board and will be forwarded to the U.S. Environmental Protection Agency for final approval.

The only opposition publicly expressed at the meeting came from environmental groups and area residents who argued the plan doesn't do -- or move quickly -- enough to protect valley residents from bad air.

What the state board took up was the valley air district's proposal to comply with the U.S. EPA's 24-hour PM 2.5 standard. The standard regulates the levels of tiny particles of dust, soot and other matter present in the air, sized 2.5 microns or smaller, over a 24-hour period.

The plan aims to meet the federal standard by 2019 using a number of regulations to control diesel engine exhaust, residential wood burning and commercial cooking emissions.

But the air district has tempered some of the regulations to help people and businesses clean the air in different ways. The increase in no-burn days, for instance, would not apply to people who have an EPA-certified wood burning stove in their homes.

The stoves, which the air district indicates are more energy efficient, also reduce the emissions drastically. The units can cost from around \$500 to \$2,000, according to an online survey of retailers.

Under the plan, Air Resources staff said, 90 percent of valley residents will live in communities that comply with the federal standard by 2017, but that Bakersfield -- where air pollution is the worst -- will take until 2019 to meet the standard.

Brent Newell, legal director for the Center on Race, Poverty and the Environment, said that the plan doesn't meet appropriate federal standards and falls short of the level of regulation needed.

"Make revisions to the plan directly or send it back to the air district," he said. "Given the health effects of PM 2.5, don't you think you should do it once and do it right?"

But Air Resources Board staff said the valley plan currently complies with EPA rules on the books. And board members said that although the plan could do more, it's the best that can be achieved now.

"We need to grab what we can grab," said board member Dr. Alexander Sherriffs, a family physician from Fowler. "We all want something as soon as possible. This is not the last, best plan."

Sadredin said the consequences would have been dire for the valley if the plan, which has already missed a Dec. 31 deadline for submittal to the EPA, was not approved quickly.

Non-compliance would trigger EPA sanctions across the air district.

Federal sanctions would double the amount of emissions new businesses would have to offset to locate in the San Joaquin Valley, effectively creating a de facto ban on new businesses, Sadredin said.

And if the district didn't approve a valid plan within six months, the valley could lose \$2.5 billion in federal transportation money, some of which is needed to complete major projects being planned for and under construction in Bakersfield.

And ultimately, Sadredin said, the federal government could take control of regulations designed to improve valley air.

But speaker after speaker told the state air board that the valley district's plan was both too weak and would take too long to reach the federal goal.

They talked about riding in ambulances to hospitals with children who couldn't breathe and keeping their children inside to protect them from the air.

Many of the speakers, from up and down the valley, were affiliated with the Central Valley Air Quality Coalition, a Fresno-based group of medical, public health and environmental organizations.

Fresno pastor Christopher Breedlove said the majority of his family suffers from asthma and the proposed rules don't go far enough to protect them.

"It needs to be stronger and it needs to happen on a faster time frame," he said, comparing the state of the San Joaquin Valley's air to a patient in critical care.

"If we're in critical care, then urgent measures need to occur quicker and faster," Breedlove said.

Maria Elena Garillo spoke in Spanish through an interpreter.

"I have a son. He has asthma," she said. "Please do something to clean up the air as soon as possible so my son can go out to play."

But Sadredin said that plan was studied carefully and is as strong as the district can practically make it.

"They were tough on us," he said of Air Resources Board staff. "They held our feet to the fire to make sure this was the strongest plan possible."

Wheeler new valley air board member

Sierra Star, Wednesday, Jan. 23, 2013

Madera County District 5 Supervisor Tom Wheeler has been appointed to the San Joaquin Air Pollution Control District Board, filling the seat left open by former Supervisor Ronn Dominici.

The Valley Air District's Governing Board is made up of a supervisor from each of the Valley's eight counties, five city representatives from throughout the Valley and two members of the public appointed by the governor.

[Bakersfield Californian Editorial, Sunday, Jan. 27, 2013:](#)

CEQA due for another rewrite

The California Environmental Quality Act has been updated or revised repeatedly since Gov. Ronald Reagan helped usher it into existence in 1970. By at least one count, 334 sections of the state's environmental review law have been modified since 1990, including 83 sections in just the past five years.

CEQA is due for another one.

That has been the broad consensus for several months, but the effort picked more momentum last week when, in his Jan. 24 State of the State address, Gov. Jerry Brown declared, "We ... need to rethink and streamline our regulatory procedures, particularly the California Environmental Quality Act. Our approach needs to be based more on consistent standards that provide greater certainty and cut needless delays."

Brown is no doubt thinking about his legacy project, California High Speed Rail, for which CEQA, applied in all its full-force glory, would wreak havoc. But CEQA's critics -- and there are many, most of them Republicans -- have plenty of other reasons to seek revisions. Chief among them is the belief, increasingly valid, that CEQA is employed as a sort of development fillibuster, an abusive misuse of the law that intentionally creates delays and paperwork headaches that slow and ultimately kill projects. Some of these efforts are motivated by legitimate environmental concerns, but increasingly they are seen as roadblocks created by self-interested parties.

One of the consequences of these CEQA lawsuits is a furtherance of California's reputation as an overly regulated, business-unfriendly state.

Advocates for change brought forth a proposal last summer to cut back dramatically on CEQA's reach.

Their proposal, not yet in the form of legislation, would exempt certain projects from CEQA review that meet the criteria of existing planning documents for which environmental reviews have already been accomplished.

"Most people would agree that if a school, a transit-oriented housing development or even a solar-power-generation facility had completed extensive environmental review and met all local, state and federal environmental-protection laws, then the project should be allowed to proceed without the threat of suit. Sadly, this is rarely the case," representatives of one such advocacy group, the Silicon Valley Leadership Group, wrote last year.

Make no mistake, however: CEQA has done some good things. As Thomas Adams, former board president of the California League of Conservation Voters, recently wrote in the Sacramento Bee, CEQA findings "led to the preservation of the Santa Monica Mountains ... (and) kept sewage out of vital bodies of water such as San Francisco Bay and Newport Bay. ... CEQA has required freeways to make room for

transit. It has required the Department of Food and Agriculture to consider the effects on schools, hospitals, nursing homes and parks before it authorized spraying of pesticides."

Can the Legislature rewrite or modify CEQA in ways that lift overly burdensome restraints on business, state infrastructure development and other important projects that have already undergone environmental review without limiting the law's core intent? That should be its charge going forward. That should be their charge going forward.