Scientists study gases from cows

Belching may pollute more than manure.

By Mark Grossi / The Fresno Bee

Thursday, January 27, 2005
Air pollution regulators may have worried too much about the wrong end of the dairy cow.

Researchers announced Wednesday that cow manure and murky waste lagoons probably contribute far less smog-making gas than previously suspected.

The cow itself is the bigger offender, apparently accounting for a big chunk of the dairy air problem in the San Joaquin Valley. Bovine belches look like the real culprit, researchers say.

"We don't know for sure yet," said researcher Frank Mitloehner from University of California at Davis. "But I would almost bet that belching has a lot to do with it."

Mitloehner made one of nine presentations in Fresno as part of a livestock emissions symposium, called by the California Air Resources Board. The state's research is leading the nation on livestock emission, a poorly understood source of pollution. No place in the country has more at stake than the San Joaquin Valley's multibillion-dollar dairy industry, with more than 1 million animals.

By current estimates, the cows produce about as much smog-making gas, reactive organic gas, as cars. The 25,000-square-mile Valley, stretching from Stockton to Bakersfield, has had more daylong smog violations than any other place in the country since 1999.

So dairy farms have been considered a prime target for pollution reduction.

But there has been a big problem with cow pollution estimates, which rely on a 1938 study that focuses on the wrong kind of gas. Mitloehner's results indicate cows might emit only half the current estimate.

Another researcher, C.E. Schmidt, an independent environmental consultant, found a range of emissions from cows, some much lower and some much higher than the current estimate. Scientists said more work is needed to come up with a more accurate number.

Terry Cassel of UC Davis said the estimate will become very important because large dairies must sign up for a federal air-operating permit.

"It is difficult to quantify [reactive organic gases]," she said. "We have yet to define a source-specific list."

Cow emissions have hundreds of reactive organic gases, some of which will make smog or ozone. But some won't.

There are other complexities. The possible sources of the gases include stored piles of manure, bedding piles in the stalls, heifer pens and open feed storage.

Scientists have come at the puzzle from many angles. At California State University, Fresno, researchers Dave Goorahoo and Charles Krauter took measurements at two dairies, one in Merced County and one in Kings County.

Though both washed cow manure into lagoons, Krauter said the two farmers managed their dairies differently. One cleaned out his lagoon system regularly, while the other did it only twice a year.

"It might be that a simple management change would help," Krauter said.

In contrast, Mitloehner of UC Davis created a laboratory-type experiment, making a tented corral for cows. He wanted to get the animals away from the wind and other elements to measure whatever gas he could find.

He found manure and urine, by themselves, did not produce as much potential pollution as the cows themselves before they began making the waste.

"It was stunning to us," said Mitloehner. "But everyone else's data seems to be going in the same direction."

Holy cow! Study cuts emissions in half

Dairy livestock create less pollutants than previously thought, researchers say

By SARAH RUBY, Californian staff writer
Bakersfield Californian, Wednesday, Jan. 27, 2005

The 180,000 dairy cows poised to move into Kern County produce half as much ozone-causing gas as previously thought, according to researchers at the University of California, Davis.

"That was just stunning for us," said the study's lead scientist Frank Mitloehner at a livestock emissions conference in Fresno Wednesday.

Mitloehner said his study shows that most ozone-causing pollutants come from belching cows rather than the traditional culprit, manure.

Based on his calculations, individual cows and their waste produce 6.4 pounds of ozone-causing gas every year -- half the current estimate of 12.8 pounds per year, which is based on research from 1938.

While dairy industry representatives said they felt vindicated by the new data, air quality regulators and environmentalists said Mitloehner was reckless to draw such dramatic conclusions from an unfinished study that hasn't been peer-reviewed.

"(Mitloehner) is a bit premature," said Seyed Sadredin, second in command at the San Joaquin Valley Air Pollution Control District. "There is a lot of information we need to understand better. We've just begun scratching the surface."

Dairy skeptic Bill Descary said it doesn't matter if dairy cows emit relatively less gas, they would still harm the valley's air quality, which is already among the worst in the nation.

"What we have are dairies essentially coming into a metropolitan area," said Descary, former treasurer of the city of Bakersfield. "There's only so much room in the valley if there's going to be any quality of life at all."

In the next 18 months, the county will put dairies through $783,100 in environmental studies to figure out what a wave of eight new dairies would do to Kern's traffic, air quality, water quality, odor, floodplain and other environmental considerations.

A total of about 20 dairies have applied to locate in Kern County from Chino, where they've been crowded out by suburban homes.

By federal standards, the San Joaquin Valley's ozone pollution is "extreme." California's Office of Environmental Health Hazard Assessment calls ozone "a powerful respiratory irritant" that can lead to chronic illness.

Dairy cows also produce ammonia and other asthma-inducing particles, which scientists are trying to quantify.

Whether Mitloehner's study of dairy cows is the final word on their air quality impact, it's contributed much to the debate.

In what is known as the "bovine bubble" study, Mitloehner tented a herd of dairy cows and measured their emissions in a temperature-controlled environment.

He measured emissions from cow pies and flatulence, and found that flatulence, not fresh pies, pollute the air.

What his study didn't address is how much pollution comes from fermented manure in pens and lagoons.

Another scientist at Wednesday's conference, C.E. Schmidt, studied standing manure and calculated that emissions per cow ranged from 3.6 pounds per year to 19 pounds per year.

The dairy lobby is optimistic that scientists will continue to lower their estimates of air pollution from dairies.

"This (new data) confirms some suspicions we have had," said John Dunlap, spokesman for the Dairy Action Network and former chair of the California Air Resources Board.

County Supervisor Ray Watson said it's great news if dairy cows pollute less than previous estimates, but he'd still insist that new dairies employ the latest technology -- such as capturing gases before they leave the farm and use them as electricity for the dairy.

"I am happy to see progress being made," he said. "We (still) need to track down where every particle of pollution is coming from and what we can do about it."

Cows get whiff of vindication in smog study

By Edie Lau -- Bee Science Writer

Sacramento Bee, Thursday, Jan. 27, 2005

Cows may not be quite the pollution-making machines they're purported to be, after all.

At least when it comes to smog-forming gases, typical California dairy cows emit only half the amount that state air regulators have been blaming on them, according to early results from a University of California, Davis, study.

Moreover, it's not cow manure that gives off so much of the unwanted gases, the research found - rather, it's cow burps.

"It has large implications," said Frank Mitloehner, the animal scientist and air-quality specialist who did the study. "It will change the way dairies are regulated in this state, I believe."

How much gas comes out of a cow is one of the most avant-garde questions in the field of air quality today. Thanks to a 2003 law, which removed age-old exemptions given to livestock operations, California is preparing for the first time to place controls on air pollution from farm animals.

On Wednesday, Mitloehner and other researchers on the topic of livestock emissions were called by the California Air Resources Board staff to Fresno to present results from their work.

Other studies address issues such as how much methane - a greenhouse gas - comes from dairies, ammonia and hydrogen sulfide levels on cattle feedlots, and emissions from chicken and turkey farms.

Mitloehner's study was funded by the U.S. Environmental Protection Agency and the San Joaquin Valley Air Pollution Control District. The findings are incomplete and have not yet been peer-reviewed. UC Davis publicized highlights in a news release.

Mitloehner's measurements show a cow produces about 6.4 pounds of volatile organic compounds per year. VOCs are ingredients in the development of ground-level ozone, a scourge of Central Valley air.

In their estimates, California air board staff have figured that a cow produces 12.8 pounds of VOCs a year - a flawed figure that was based upon a misinterpretation of a study done in 1938.

The consequences are huge. California is the nation's No. 1 dairy producer, with some 3 million cows. Most of those animals live in the San Joaquin Valley, a segment of the Central Valley reaching from Lodi to Bakersfield. Based on the faulty number, regulators projected that dairy cow waste would surpass passenger cars as a pollution source in the San Joaquin Valley by 2010.

Patrick Gaffney, a state air pollution specialist, said last year that he knew the cow number was shaky, but it was the only figure the agency had to work with, and he looked forward to receiving more reliable data.

On Wednesday, air board spokesman Jerry Martin acknowledged the importance of the new information. "This type of information will go a long way toward developing regulations that are fair both to the public and the farmers," he said.

Martin also noted that the data will have to be confirmed, and compared with results from other studies.

The ongoing UC Davis study measures the gaseous output from a sampling of Holsteins, which are the predominant milk-producing cows in the state. The animals are kept for three days in special chambers in which researchers can measure their emissions, whether from their mouths, hindquarters or waste.

Mitloehner said the most surprising finding so far is that when the cows are removed and their manure left behind, VOC levels drop to near background levels.

"At the time that the animals were chewing their cud, when they were belching, we saw the peaks (in gas emissions)," he said. "That indicates the gases ... are released when the animal ruminates."

The rumination "is going to be very tough to mitigate," said Michael Marsh, head of the trade association Western United Dairyman.

"I don't know what kind of device you might come up with," he said with a wry laugh. "Maybe some antacids."

Mitloehner's idea is to test the gas-producing capacity of various dairy cow diets to try to find something that minimizes VOCs without compromising milk production.

ConocoPhillips reaches Clean Air Act settlement requiring $525 million in pollution controls

MARK SHERMAN, Associated Press Writer

in the S.F. Chronicle, Thursday, January 27, 2005

WASHINGTON (AP) -- ConocoPhillips will install $525 million in pollution controls at nine refineries and pay a $4.5 million fine to settle a federal lawsuit alleging Clean Air Act violations, the Bush administration announced Thursday.

The settlement requires ConocoPhillips, the nation's third biggest oil company, to reduce yearly emissions of nitrogen oxide by more than 10,000 tons and sulfur dioxide by more than 37,100 tons. Both can cause serious respiratory ailments and worsen cases of childhood asthma.

The refineries covered in the agreement among the company, the Justice Department, Environmental Protection Agency and five states, represent 10 percent of the nation's refining capacity.

The refineries are in California, Illinois, Louisiana, New Jersey, Pennsylvania, Texas and Washington. California and Washington are not part of the settlement, Justice Department officials said.

The settlement is the 13th reached under an EPA initiative begun in December 2000. EPA officials have said the earlier agreements have cut air pollution by 200,000 tons a year at 48 refineries in 24 states.

The money for pollution control will be spent over eight years and is just shy of the largest settlement reached over the past four years, a $550 million agreement with Motiva Enterprises.

In addition to the pollution controls and civil penalty, ConocoPhillips will spend another $10 million to further reduce emissions at its refineries in the five states that are part of the settlement. The agreement was filed in U.S. District Court in Texas and still requires the approval of a federal judge.

High Levels of Toxin Seen at 9 Chlorine Plants

Mercury emissions may be as high as those at coal-fueled facilities, an environmental group reports. Companies are making gains, however.

By Marla Cone, Times Staff Writer
L.A. Times, January 26, 2005

A new report has found that nine chlorine factories are among the nation's largest sources of mercury, a potent neurotoxin that spreads globally and has rendered some seafood unsafe to eat.

To be released today, the report, written by the environmental group Oceana, documents what it calls a "long-overlooked" source of mercury polluting the air. The findings are based on a review of toxic inventories filed by the chemical companies.

The chlorine industry and the U.S. Environmental Protection Agency acknowledge that the chemical plants have been a sizable source of mercury pollution. But they say the companies have substantially reduced their emissions in recent years.

Most U.S. efforts to control mercury have focused on coal-fired power plants, which are facing controversial and costly new efforts to regulate their emissions. But the report concludes that nine chlorine plants, mostly in the Southeast and Midwest, could be releasing as much, or more, mercury than the power companies are.

"The nine mercury-based chlorine plants in the U.S. may rival the entire power industry as the nation's largest industrial mercury polluter," says the report by Oceana, which is launching a campaign to reduce the levels of mercury and educate the public about its dangers.

Mercury is considered one of the most hazardous and ubiquitous contaminants. Emissions from factories and power plants travel thousands of miles in the air and drop into oceans and lakes, building up in the tissues of animals and people.

The mercury-cell chlorine factories each reported emitting an average of 1,097 pounds of mercury into the air in 2002, five times more than the average power plant, according to Oceana's analysis of reports that companies filed annually with the EPA. Eight of the nine plants rank among the top 25 U.S. companies in reported mercury emissions, the report says.

But their actual emissions could be much higher. How much mercury they release into the environment is largely unknown, because many tons are "missing" at the chlorine plants every year - unaccounted for in the companies' annual inventories, according to a 2004 industry report.

Chlorine is used for manufacturing vinyl, disinfecting drinking water, producing medicines and making cleaning solvents, among other uses. Most chlorine is produced using new, mercury-free technologies, but nine factories use a process that pumps a saltwater solution through a vat of mercury to set off a chemical reaction.

In 2000, 11 chlorine plants reported releasing 14 tons of mercury into the air through smokestacks and unmonitored leaks called "fugitive" emissions. But according to the EPA, another 65 tons of mercury were used there and unaccounted for.

EPA officials, in a 2003 report, said "that the fate of all the mercury consumed" at the chlorine plants "remains somewhat of an enigma."

If even half of that "lost" mercury were released into the air, the plants would have polluted the air with nearly the same volume as the 49 tons released by the nation's 497 mercury-releasing power plants that year, said Oceana's pollution campaign director, Jackie Savitz.

By 2002, two of the 11 plants had closed, and the reported mercury emissions dropped almost in half, to a total of 7.6 tons. The plants, however, had 28 tons of mercury that were unaccounted for, which amounted to about 1% of their total mercury used and stored, according to a 2004 Chlorine Institute report to the EPA. The missing mercury amounted to 30 tons in 2003.

Tracy Cullen, director of communications at the Chlorine Institute, an industry group, said the industry was trying to develop more accurate methods to measure fugitive emissions and account for all of its mercury. Although emissions from smokestacks and vents are measured with precision, fugitive emissions from the mercury vats are much more difficult to quantify.

"As an industry, we support the regulation of mercury," Cullen said. "The chlorine industry's use of mercury is on the way down…. We are committed to fully account for the mercury we use."

EPA spokeswoman Cynthia Bergman said the missing mercury was "a very important issue" to the agency, which had been working with the chlorine industry to resolve it. But, she said, there was "little evidence" that it was being released into the environment.

Instead, EPA and chlorine company representatives suspect that the dense metallic chemical remains inside the plants, accumulating in their piping, tanks and processing equipment. "Several tons of mercury could easily be caught in the thousands of feet of pipe in one plant," Bergman said.

The EPA tightened rules regulating the chlorine plants in 2003, but environmental groups criticized the agency for failing to shut them down if they didn't switch to mercury-free technologies.

Since the mid-1990s, the volumes of mercury used by the chlorine industry declined 76% because five plants closed and others upgraded, according to the Chlorine Institute.

The chlorine companies say they will further reduce mercury emissions by as much as 93% under the new EPA regulation.

"There is no good reason to eliminate more U.S. manufacturing jobs by closing plants that are operating safely and performing above and beyond all federal and local standards," Cullen said.

The nine plants are located in Louisiana, Alabama, Delaware, Georgia, Ohio, Tennessee, West Virginia and Wisconsin, and are operated by Olin Corp., Occidental Chemicals, PPG Industries, Ashta Chemicals Inc., Vulcan Chemicals and Pioneer Companies Inc.

The United States is responsible for a small fraction of mercury emissions worldwide. Globally, about 1,500 tons per year are released by coal-fired power plants and waste incinerators, about half in Asia, according to a report by the United Nations Environment Program. Europe has 53 mercury-cell chlorine plants.

One in every six babies in the U.S. - more than 600,000 per year - is born to a mother with a mercury level exceeding that deemed safe for a fetus. Mercury is known to interfere with brain development.

The Food and Drug Administration has advised women who are pregnant, nursing or may become pregnant to avoid eating large marine predators such as swordfish, shark, tilefish and king mackerel, and to eat no more than 12 ounces of other fish per week.

Motor fuel from vegetables, not the Middle East

Biodiesel: An Eastern Shore builder has sworn off gasoline and urges others to do the same.

By Tom Pelton, Baltimore Sun Staff
in the L.A. Times, January 26, 2005

BERLIN - Ron Cascio calls oil "the devil's tea" and decries what he sees as America's heroin-like addiction to the flammable black goo that fuels wars in the Middle East and pollutes his small town on Maryland's Eastern Shore.

So Cascio, a 50-year-old homebuilder, has gone cold turkey. For more than five years, he has avoided the gas pump and instead uses a form of vegetable oil in his pickup truck, station wagon, lawn tractor and the generator that powers his electric drills and saws.

His rationale for running these diesel engines on biodiesel, an oil squeezed from soybeans, is that it creates less soot and carbon monoxide pollution than petroleum, and it supports farmers he sees driving tractors near his home instead of regimes in Saudi Arabia, Iraq, Iran and Libya.

Cascio is one of a growing number of people across the country who perceive a moral good in consuming less oil by switching to an alternative fuel that they "home brew" in plastic barrels or buy at one of 300 distributors nationally. Five biodiesel distributors have opened in Maryland.

"When I saw them chopping people's heads off in Iraq, I thought - 'Add that to the price of gasoline'," said Cascio, as he cranked a hand pump to squirt sweet-smelling golden oil from a 500-gallon tank behind his home here into his Volkswagen Passat station wagon. "If you're putting petroleum into your car, you're putting blood into your car, too. I don't have blood on my hands."

The amount of biodiesel used by diesel trucks and cars in the United States has grown 60-fold in the past five years, to 30 million gallons last year, said Amber Pearson, a spokeswoman for the National Biodiesel Board, which is run by soy farmers.

It's not just tree-huggers trying it. The U.S. Navy, Park Service, Department of Agriculture, Postal Service and the Chesapeake Bay <http://www.latimes.com/news/nationworld/nation/wire/bal-beach-chesbay,0,6992125.htmlstory> Foundation are among 500 agencies, organizations and companies using varying amounts of the fuel, including 100 schools and 30 colleges.

The Navy buys biodiesel to run its trucks, cars and ground equipment at bases in the Northwest, said Lt. Tommy Crosby, Navy public affairs officer: "We are becoming more environmentally friendly and less dependent on oil, using what mother nature gave us."

The number of people switching to biodiesel nationally could rise even higher starting this month because its price is expected to fall. A recently approved federal tax credit for distributors should reduce the cost of the fuel to close to that of regular diesel fuel.

Biodiesel is sometimes $1 a gallon more expensive, which has been a major obstacle to wide acceptance, said Bob McCormick, senior fuels engineer for the federal National Renewable Energy Lab in Colorado.

The Maryland Soybean Board also offers drivers cash rebates of up to $1,000 to help knock down the price of biodiesel. Sixty-nine commuters used this incentive last year, up from 25 in 2003 and about 10 in the first year, 2002. People who sign up for the one-year program submit receipts showing their biodiesel purchases, and the soy board refunds half of any sum paid above the market rate of petroleum diesel, up to $1,000.

Swapping tips in Internet chat rooms and during informal garage teach-ins, the biodiesel underground has learned what not many average drivers know: vegetable oil (even recycled restaurant grease) mixed with alcohol and lye can run any vehicle with a conventional diesel engine. Most diesel engines can also run on straight vegetable oil, but this gunks up the works in

cool weather.

In some ways, biodiesel is like many other alternative fuels that have been tried across the country - hydrogen cells or electric batteries to power cars; corn cob combustion or solar panels to heat homes; windmills to generate electricity; and ethanol distilled from corn or sugar cane to extend gasoline.

But Walter J. Weber, a professor of chemical and environmental engineering at the University of Michigan, said biodiesel has advantages over other alternatives because it's easy to produce. It employs commonly used farm products and runs engines available on the market today without any modifications.

"It would be feasible to operate all of the diesel engines in the U.S. today on at least partial biodiesel," said Weber. "This would bring reduced air pollution. And the beauty of biodiesel is that it's a renewable resource, unlike fossil fuels."

More than 98 percent of truck engines in the United States are diesel, but less than 1 percent of U.S. cars have diesel engines, mostly models made by Volkswagen, Mercedes and Jeep. By contrast, in Europe, almost half of new cars are diesel, with many purchased because they're more fuel-efficient.

Biodiesel is sometimes whispered about, as if hipsters were passing recipes for growing good weed. That's because in Maryland and some other states it's illegal to brew your own fuel without obtaining a license and paying taxes on every gallon.

"Most home brewers I know don't like to talk about the tax part of it," said Joe Rappa, 39, a teacher from upstate New York, who preaches the art of concocting biodiesel from waste fry oil discarded by college cafeterias. "It's extremely illegal to sell home-made biofuel."

But such hassles aren't a problem for people who buy biodiesel from the small but growing number of licensed dealers, such as Cropper Oil here on Route 50. Dealers in recent years have started selling the fuel at two stations in Westminster, and one each in New Windsor; Arlington, Va.; and in Anne Arundel County just north of the Baltimore-Washington International Airport <http://www.latimes.com/news/nationworld/nation/wire/56505,1,7836880.venue>.

During the late 19th century, German inventor Rudolph Diesel intended the engines he designed to run on vegetable oil. But it has always been cheaper to pump petroleum out of the ground than to make oil from plants. That could change because of war in the Middle East and a limited supply of petroleum, energy experts said.

Another question is how much farmland is available for fuel. Soy farmers in the United States could easily produce enough oil to replace 5 percent of the 34 billion gallons of diesel fuel guzzled every year by trucks and cars, McCormick said.

But to allow the complete replacement of petroleum diesel with vegetable diesel, the amount of farmland devoted to soybeans, poppies, peanuts, rape-seed or other oil-producing crops would have to expand sharply, crowding out some food crops, said McCormick.

Biodiesel produces half the soot, half the carbon monoxide and about a quarter of the greenhouse gases of petroleum, said McCormick. When drivers fire up engines fuelled by pure biodiesel, white smoke that smells like roasting corn puffs from the tailpipe instead of the acrid, black soot that normally chugs from diesel engines. But biodiesel increases nitrogen air pollution by about 10 percent, which could contribute to ozone problems in summer, McCormick said.

There's another drawback. Pure biodiesel congeals into a buttery-like mess at about 20 degrees Fahrenheit, so it must be mixed with conventional diesel or kerosene in winter.

This sticky problem was experienced by Ron Cascio's wife, Katherine Munson, a land-preservation planner who drives a 1987 Mercedes diesel.

"One of the first times I drove with biodiesel in the wintertime, I was heading to work and had gone a half-mile when my car started bucking, and then it stopped because the fuel had jelled," Munson said.

They fixed the problem by adding kerosene in cold weather - meaning the family is not totally petroleum-free. Since then, however, they've had smooth running, and they've convinced about a dozen friends to join their boycott of the "devil's tea."

Lodi school evacuated after natural-gas line rupture

By Neil Gonzales
Stockton Record, Thursday, January 27, 2005

LODI -- A rupture in a natural-gas main line just outside Heritage Elementary School on Wednesday forced the evacuation of the school as well as some neighboring residents.

"I smelled gasoline in my class," said Rita Peralta, 8, a third-grader. "It was strong. I got scared a little bit."

Many students, teachers and school staff felt overpowered by the smell of gas, but authorities reported no injuries or serious health threats. School and fire officials said they decided to clear the campus of about 500 students because of the heavy odor and risk of an explosion.

Authorities also said they evacuated some 20 people from their homes and cordoned off the area for about two hours.

The leak occurred at 10:25 a.m. when a contractor for the city of Lodi working on a streetlight project and using an excavator broke a natural-gas main pipe at Garfield and Eden streets, fire officials said.

At one point, the gas was seen percolating through rainwater on the ground at the intersection.

"When I went out to start supervision for recess, I was overwhelmed by the smell," Heritage Principal Maria Cervantes said.

"The next thing you know, everyone was calling the office. I had staff and students saying their eyes were burning and tearing up. The staff complained about feeling nauseous and headaches."

When teacher Carla Price walked to the general classroom area toward the front of the campus, she said, the smell "almost knocked me over. I was getting nauseous."

Teachers and staff brought students to the cafeteria where parents picked up their children to take home after being notified of the torn gas line.

"I was pretty concerned once I heard about the gas leak," said Eric Vivanco Sr., who came to get his two children. "Maybe they could inhale it, or it could be bad for their health. But they seem all right."

"I was getting a little sick," Vivanco's 5-year-old son said of the strong smell.

Pacific Gas and Electric Co. spokeswoman Emily Barnett said the company shut off gas to the broken line and a crew made repairs. She said gas was again normally flowing through the pipe in the afternoon.

Cervantes said classes are expected to resume today.

The gas leak came a day after another utility-related problem struck Lodi. All of Lodi and much of northeast San Joaquin County were blacked out Tuesday after a truck driven by a contractor for PG&E made contact with power lines at the Lockeford substation, authorities said.

Lodi's utility director Alan Vallow had accused the private utility of not trying to notify the city about the widespread blackout. Barnett on Wednesday, however, denied those allegations and

said PG&E records show its workers tried calling Lodi's electric utility control room three times in the minutes following the outage.

Lodi's utility initiated the first call at 4:33 p.m. Tuesday to find out what was going on, Barnett said. PG&E workers at a Tracy control room tried calling back at 4:41, 4:50 and 5:10 p.m. without an answer.

Lodi's utility did answer at 5:42 p.m. with the worker telling his counterpart at PG&E he was swamped with calls and unable to answer every one, Barnett said.

The outage blackened Lodi for 12 to 15 minutes. Power in surrounding communities such at Woodbridge, Lockeford and Acampo was out for an hour.

Lodi Bureau Chief Jeff Hood contributed to this report.

Letter to the S.F. Chronicle, Thursday, Jan. 27, 2005, referring to recent ban on outdoor smoking by S.F. supervisors:

Editor -- Supervisor Michela Alioto-Pier really needs to get her priorities straight and stop her self-serving political agenda by limiting individual rights and personal freedom in public areas. There are many other items to focus on that could help children more directly.

How about helping homeless families with children? How about all the crack-heads puffing on their crack pipes out in the open in the Tenderloin in front of children? How about working on implementing nutritional lunches in the public schools? If litter is her issue, what about all the syringes and trash on the streets, and the feces on the sidewalks? How about working on an anti-pollution ordinance or working to get rid of those diesel Muni buses, if she is so concerned about air quality? Alioto-Pier must stop her hypocritical political agenda and start serving the needs of the city.

Christopher Stark, San Francisco