

## **Garbage trucks help clean the air**

By Mark Grossi / The Fresno Bee  
Tuesday, June 14, 2005

Fresno is the first large city in California to clean up its fleet of refuse vehicles and meet a state standard years before deadline, state officials said.

The city spent almost \$14 million for 69 natural gas-powered refuse vehicles that run cleaner than diesel-powered models, city officials said. Now, more than half of the fleet operates on natural gas — the rest are diesels with new clean-air filters.

State regulation requires clean-air conversions for refuse fleets by 2010. Fresno meets that standard.

The California Air Resources Board lauded Fresno's efforts. "This is the direction we want to go," spokesman Jerry Martin said.

In the San Joaquin Valley, one of the nation's dirtiest air basins, several cities, such as Madera, Tulare and Bakersfield, are investing in natural gas-powered fleets and other clean-air technologies.

Fresno's natural gas purchases have prompted the U.S. Department of Energy to recognize the Valley's largest city for a national award in May.

At its board meeting Thursday, the San Joaquin Valley Air Pollution Control District is scheduled to honor Fresno for the award, known as "Clean Fleet of the Year."

The city refuse fleet has 130 vehicles — 61 still powered by diesel. The city outfitted the remaining diesels with filters to trap particle pollution, which can lodge in the lungs and trigger asthma or other lung ailments.

Natural-gas vehicles send out 40% less smog-making gas, called oxides of nitrogen, and 85% less particulate matter than diesels, city officials said.

As the diesels wear out, the city will replace them with natural gas-powered vehicles, said Jim Schaad, fleet administration supervisor.

He said the use of natural gas addresses city leaders' concerns about air quality and reduces dependence on foreign oil.

Refuse vehicles travel 1,500 to 2,000 miles a month, according to city records.

It's stop-and-go city driving, and a lot of people are exposed to their exhaust.

"They're in our neighborhoods," Schaad said.

The city was going to buy the 69 refuse vehicles as part of its routine replacement plan, Schaad said.

He said a \$1.6 million grant from the San Joaquin Valley Air Pollution Control District covered the additional cost of the natural gas-powered vehicles.

"They cost about \$23,000 more than the diesels," he said.

The city installed a \$600,000 refueling station, and officials received another air district grant to cover about half of the cost.

The air district provides the grant money as a way to combat the Valley's No. 1 air quality problem: vehicle pollution, which the district does not directly regulate.

The state and federal government have authority over engine and fuel standards.

The district offers the grants as a way to make pollution control more affordable, spokeswoman Kelly Malay said.

"But that only happens," she said, "because fleet operators, such as the city of Fresno, take an active part in the program."

## **Up in smoke**

### **California's boating craze comes with a high emission of fumes.**

By Gary Polakovic, Times Staff Writer

LA Times, June 14, 2005

With summer fast approaching, outdoor enthusiasts will soon launch thousands of boats and personal watercraft into rivers, lakes and the ocean, unleashing a huge pulse of smog-forming exhaust into California skies.

Manufacturers post booming sales and produce even more permutations of vessels - personal watercraft, kayaks, ski boats and pontoon party barges, to name a few. Although powerboats are a staple of the season, they are hard on the environment, especially in California, which has about 900,000 such registered vessels, the highest in the nation.

A major source of pollution is how Jerry Martin, spokesman for the California Air Resources Board, characterizes them. "Those engines are not nearly as well controlled as cars," he says. "They drop a good portion of fuel back into waterways that are our sources of drinking water, and these small engines are inefficient and produce a lot of emissions."

On a typical summer weekend, officials say engines statewide release about 390 tons of air pollutants daily, 10% of all the emissions from mobile sources, a category that includes cars, buses, trucks and other vehicles.

In the Los Angeles region, recreational boats emit nearly four times as many smog-forming fumes as all of the area's oil refineries, according to the South Coast Air Quality Management District. Although recent regulations have resulted in dramatically cleaner new vessels, the state air board estimates one 5-year-old personal watercraft steered for seven hours produces the same emissions as a new car driven 100,000 miles.

Some of the emissions consist of volatile gases and combustion byproducts that, when mixed in sunlight, form ozone. Ozone, a widespread and poisonous gas, causes chest pains, nausea and headaches and long-term exposure can lead to loss of lung function. California has the worst ozone pollution in the nation.

But other pollutants, such as carbon monoxide, can be acutely toxic. Boat exhaust has been linked to dozens of fatalities in California and the West as swimmers, bathers and water skiers unwittingly inhale the odorless gas and drown. To prevent such accidents, Gov. Arnold Schwarzenegger last year banned the controversial practice of "teak surfing," in which riders hang from the stern of a moving boat.

Air quality officials say boat pollution is particularly troublesome because emissions increase during the summer when smog is already at its worst. Stagnant air, bright sunlight, long days and high mountains make most of inland California a smog trap.

Emissions from powerboat engines have generally been overlooked by regulators who have targeted more conspicuous sources of air pollution. Many vessels are powered by inefficient two-stroke engines, which burn approximately 60% of their fuel. The rest, according to air quality officials, is discharged into the environment. Also, it is harder to affix catalytic converters to these motors than land-based engines.

But the good news is that power boats are running cleaner as manufacturers and regulators develop and apply new technologies to vessels.

"Boats coming off the factory floor are very clean and [produce] low emissions. The manufacturers have done a good job," says David Johnson, spokesman for the state Department of Boating and Waterways.

The state air board and the U.S. Environmental Protection Agency have adopted stringent new regulations that force manufacturers to reduce emissions from outboard motors and personal watercraft by 95% by 2008. Meanwhile, other regulations require manufacturers to install catalytic converters that will cut emissions from inboard and stern-drive engines by 35% by 2009. Later this month, regulators, manufacturers and engineers at the Southwest Research Institute in San Antonio, Texas, will test new catalytic converters for inboard and stern-drive recreational boats.

"We've got quieter, cleaner, bigger-performing engines. There's no more blue smoke that comes out these new engines," says John McKnight, director of environmental and safety compliance for the National Marine Manufacturers Assn., which represents 1,400 companies that make 80% of the nation's marine products.

But the new regulations and advanced technology apply only to the 350,000 new engines sold annually. Meanwhile, millions of older, dirtier boats remain in service with no plans to clean them up.

"Pleasure boats are a significant source of smog-forming emissions. Pleasure boats are a mixed category; some are very dirty and some are a lot cleaner," says Sam Atwood, spokesman for the Air Quality Management District. "They are a major source of smog-forming emissions and we're going to need more reductions."

## **Meeting To Focus On City's Growth, Economy**

By John Branch, Reporter

The Riverbank News, Tues. June 14, 2005

Riverbank's general plan and its update is the topic of a joint meeting of the Riverbank City Council and Planning Commission set for Thursday, June 16, at 6 p.m. in council chambers.

"The general plan is a community's vision and guide for its future physical, economic and social development and a long-range policy document covering a period of 20-30 years," reads a consultant's pamphlet.

"The general plan contains goals, policies and action statements that guide decisions such as how the city grows and looks in the future, where to put houses and businesses, which lands to preserve for agriculture and natural habitat, and where to place new roads or expand existing roads."

The consultants are seeking public opinion and comment at this stage of a process that will take 18 months to complete.

Residents are urged to attend the June 16 meeting, call Community Development Director J.D. Hightower at 863-7124, pick up information pamphlets at City Hall South or visit the city web site at [www.riverbank.org](http://www.riverbank.org).

Different components of the general plan will include land use, transportation, housing, natural resources, public safety, historic preservation, agriculture, growth management and community character.

The existing Riverbank plan is 20 years old and may no longer reflect residents' desires to grow in a more sustainable manner and preserve those aspects of the community that residents cherish.

Residents, for example, may want the city to encourage more compact development; revitalize downtown and older neighborhoods; preserve agriculture and open space; encourage pedestrian and bicycle travel; build on the city's industrial base; improve connections between neighborhoods; and increase retail and other services.

The city's web site carries a questionnaire that residents are encouraged to complete and e-mail back, said Hightower.

Residents can also volunteer to be "visioneers" who will lead discussions with community groups on planning issues and provide ideas to the city.

The city has assembled a team of expert consultants and will spend \$425,000, drawn from system development fees levied on land developers, to revise the existing plan.

Experts hired by the city include PND Consultants of Sacramento, covering land use, housing and growth; K. D. Anderson of Roseville, who are traffic engineers; Applied Development Economics of Sacramento and Berkeley; and Nogavero/Notestine of Sacramento, who are architects and urban design specialists.

Consultants conducted an open house on May 19 at the Community Center. They also spoke to an economics class at Riverbank High School before school closed for the summer vacation.

[Air and water quality](#), in addition to community character and urban design, were listed as priorities by many open house visitors, Hightower noted.

Consultants are expected to summarize their findings from this open house and the RHS classroom during a presentation at the June 16 meeting.

Hightower said that the State technically requires cities to update their general plan every eight years. But many cities, such as Escalon and Lodi, in addition to Riverbank, have plans far older than that.

## **It's a gas**

### **Oxygen bars help customers clear the air.**

By Don Mayhew / The Fresno Bee  
Monday, June 13, 2005

Toni Broaddus is breathing easy.

She's sitting on the porch of Trends, a new tattoo and piercing studio in the Tower District that also offers an oxygen bar. The day is hot and sunny. But here in the shade, atop a padded silver barstool, Broaddus looks comfortable and contented — despite the green plastic tube stuck up her nose.

The other end of the tube is attached to a bubbling bottle of fluid labeled "lemongrass." It's the first oxygen treatment that the asthma-afflicted Broaddus, visiting from San Francisco, has experienced outside a hospital.

She likes what she's breathing.

"I feel like all my cells are waking up," she says. "It's a subtle energy rush throughout your body."

Since the first oxygen bar in North America opened nearly 10 years ago in Toronto, they've become popular in large cities where air pollution is a problem (such as Los Angeles) or healthy lifestyles are manifest (think San Francisco).

Like countless other trends, oxygen bars took years to find their way to Fresno. But at least three such places have opened in the past eight months.

Yirjanik Ohanian, owner of My Internet Cafe in Fresno, says he opened his oxygen bar in January because there was a clear demand for it.

"People came in here and said, 'I was in Vegas, I did the oxygen,' 'I was in San Francisco, I did the oxygen,'" Ohanian says.

It's typically administered with a tank that shoots the gas through brightly colored tubes and one of a dozen flavored fluids with natural-sounding aromas such as eucalyptus, wintergreen and lemongrass.

Proponents of the treatments say they make you feel more alert and relaxed. They say the combination of oxygen and aromatherapy will help clear sinuses, cleanse the body of toxins and even allow you to see more vividly.

"Almond is good for suppressing your appetite," says Sheree Dyer, owner of Trends. "Peppermint increases appetite." Other aromas have been given other characteristics.

But many medical professionals scoff at the idea that concentrated oxygen does much of anything in short doses, and some worry that extended treatments might prove harmful.

Little scientific study has been performed to measure what benefits the treatments might provide, leaving a trail of anecdotal evidence that suggests, at the very least, people enjoy pampering themselves.

Broaddus is a good example. She always wanted to try an oxygen bar but never had a convenient opportunity, though they're popular in her hometown. After her 10 minutes are up, she's pleased and ready to try it again sometime.

"It would be good for days when it's hard to get going," she says. "It would be nice to have oxygen there when a cup of coffee's not enough. If it were convenient and cheap enough, I would do it on a regular basis."

Sherif Abouseda, 28, of Fresno has tried concentrated oxygen a couple times.

"It makes you more alert," he says. "You don't feel groggy. People walk around in a caffeine haze. You can feel the benefits of this."

"We'd be better off if we took deeper breaths, but we don't do it. With this, you hold them longer. You get a sense of well-being. You're more alert. With pure oxygen, you simulate the breathing people should be doing."

Actually, what Abouseda and others breathe isn't pure oxygen. Dyer says the gas they dispense at Trends is between 87% and 92% oxygen. Normal air consists of about 21% oxygen.

Broaddus says her Trends treatment feels much different from those she's experienced at hospitals for her asthma.

"It doesn't tickle," she says. "It's not cold. It smells better."

Joe Castro, owner of the Fresno spa Beyond the Century, says his first experience with concentrated oxygen was a real eye-opener.

"My eyesight improved dramatically in 30 minutes," he says. "The colors of the panes in my spa, they just came alive. It's like the colors were brighter, sharper, clearer."

Like others who have opened an oxygen bar, Castro uses it as a secondary lure into his business. He says it's been a popular addition, drawing 15 to 20 customers a week.

A treatment typically costs \$10 for 10 to 15 minutes.

Sue Bailey of Fresno says it's worth every penny because it gets rid of her migraine headaches more effectively than the medication she's been prescribed. She first tried oxygen from a tube about four months ago in San Francisco. The effect was nearly immediate.

"I hate taking medication," Bailey says. "You always have side effects. The next day, I would feel like I had a hangover. I'd be lethargic. At the oxygen bar, I don't get that aftermath."

Bailey's tale worries Kevin Hamilton, a respiratory therapist and the director of the asthma program at the Community Regional Medical Center in Fresno. He says anyone whose headache disappears simply from concentrated oxygen "really needs to talk to a doctor."

He also says it might be dangerous for someone already on oxygen to get an extra dose at an oxygen bar. The rest of us need more oxygen, he says, about as much as we need another hole in our heads.

"It's an interesting phenomenon," Hamilton says. "People are looking for ways to enhance intelligence and do something healthy for their bodies. It's unfortunate they don't try a little exercise and limit their diet."

He understands the lure of oxygen as a quick fix, particularly after watching athletes take a couple huffs on the sidelines.

"You see them on the bench, football players breathing oxygen, and in the short term, a couple breaths of oxygen helps keep muscle from being destroyed — or at least that's what trainers say," Hamilton says. "It's probably true, and that makes sense. But you have to keep in mind that these people are putting incredible physical effort into what they do."

He says the bloodstreams of most people at rest already are at 97% capacity of the oxygen they can hold.

"Going to an oxygen bar is not going to help people in the least," he says. "There's only so much room in your blood for gas."

A few breaths of concentrated oxygen, Hamilton says, will take a person up to 100%. After that, "you're just breathing it in and out. ... If you were wearing a little oximeter, you'd see it right away."

Despite his reservations, even Hamilton admits there might be some benefit for people with hangovers — a common motivation for customers seeking oxygen bars, to hear their employees tell it.

Andy Dyer, Sheree's brother-in-law, also works at Trends and says a couple customers stumbled in early one morning for a treatment.

"They were whistling when they walked out," he says.

Hamilton laughs and says, "This is a tough one. Let's just say that it was well known in the late '70s and early '80s in the hospital where I worked that if you had to be to work early and put on an oxygen tube for 15 minutes, it would get rid of your hangover.

"But even then, it would only last a half an hour or an hour, then you'd have to put the oxygen back on. I don't know that anybody's done a study. But there is some anecdotal evidence that there is short-term improvement from extreme intoxication."

He counsels moderation for any kind of treatment — oxygenated, herbal or medical.

"If you believe it's medicine, treat it that way," Hamilton says. "That means you can overdose on it, and you become very sick if you take too much of it. It can hurt you as well as heal you. Show respect for it. You can't do it forever."