

Smog: Who's on first? The RACT for the SIP

By Mark Grossi

FresnoBee.com, Friday, April 10, 2009

The San Joaquin Valley Air Pollution Control District has an item on its governing board agenda this week that's a little like Abbott and Costello's "Who's on First?" bit.

For those keeping score, it's the third attempt by the district to satisfy the federal government's requirements for "reasonably available control technology" in controlling ozone.

This is no knock on the district or the federal government or environmental activists or industries.

This is another of my rants about the foreign language and layers of nearly impenetrable bureaucracy on whatever planet air quality regulation originates. I'm like Costello in the classic comedy bit. I sometimes get lost in the shorthand.

Think I'm kidding? Look at the text of the district's report. Go about three pages into it, and you will encounter the acronyms RACT, SIP, SJVAB, NAAQS, ROP, CTG and EOADP -- all of which are accompanied by the full name, which is often as confusing as the acronym.

There are political layers between all the bureaucratic double speak.

Environmentalists say the district is not looking deep enough for ozone solutions. The district is contending with shifting federal standards and deadlines. Industries are trying to figure out how much money to invest in the next generation of pollution-control technology.

The discussion is item No. 7 on the agenda. It almost certainly will have an impact on how fast summertime ozone is cleaned up in the Valley. The question is: Will anyone outside of the wonks and lawyers understand it?

The meeting starts at 9 a.m. Thursday in the district's headquarters, 1990 E. Gettysburg Ave. in Fresno. Go to this link if you want to watch it on line.

Air district will withdraw dairy air pollution regs

By Seth Nidever

Hanford Sentinel, Friday, April 10, 2009

Dairy air pollution regulations are set to be suspended next month to comply with a judge's ruling that the local air district didn't adequately study the public health impact.

The San Joaquin Valley Air Pollution Control District announced Thursday that it will hold a hearing on May 16 to revoke Rule 4570, which was suspended by Fresno County Superior Court Judge D. Tyler Tharpe on March 12.

Tharpe instructed the district to conduct a public review of the public health consequences of the rule.

Air pollution in the Valley contributes to asthma and other respiratory conditions.

A recent California State University, Fullerton, study estimated that \$5.8 billion in public health costs could be saved if Valley air met all federal standards.

The Valley air district, which takes in all or part of eight counties, is currently out of compliance for ozone and fine particle pollution.

The district's governing board will review its health assessment on June 18 to decide whether Rule 4570 is adequate or should be changed, said Seyed Sadredin, district executive officer.

Rule 4570, originally adopted in 2006, gives dairies a smorgasbord of compliance choices like turning over corral manure more frequently and covering silage piles consistently. It's designed to reduce the release of volatile organic compounds into the air.

The district estimates that dairies are the leading source of the compounds, which combine with other substances in the atmosphere to form the Valley's notoriously thick smog.

Kings County has 166 dairies with about 178,689 milk cows, according to the latest estimates.

About one-third of the county's facilities are affected by the rule.

The Association of Irrigated Residents, a Wasco-based clean air advocacy organization, filed the lawsuit with assistance from the Center on Race, Poverty and the Environment, a San Francisco-based environmental group.

"The air district is basically a public health agency," said Tom Frantz, AIR president.

The association claims several dozen members in various Valley counties but doesn't release membership lists, arguing that the organization is unofficial and consists of volunteers.

The district didn't show that the rule actually has health benefits, Frantz said.

In its lawsuit, the association also claimed that the district didn't prove that the rule cuts emissions of the polluting compounds.

However, the appeals court sided with the district on that issue, declining to challenge the district's judgment about the amount of pollution being reduced.

Meanwhile, the air district is expressing concern that dairies might stop complying when the district's board of directors suspends the rule.

But according to the Wasco association, the rule codifies what many dairies were doing already.

Mike Marsh, CEO of Western United Dairymen, called the association's claim "nonsense."

However, one local dairy operator gave an account consistent with the association's position.

About 90 percent of what dairies agreed to do under the rule were things they were doing already, according to Jamie Bledsoe, a dairy operator in Riverdale.

Bledsoe said many of the practices made sense before the district's rule was implemented, and he'll continue doing them.

"We aren't changing anything," he said.

Dairy group: Keep following the rules

By Stacey Shepard

Bakersfield Californian, Saturday, April 11, 2009

A state dairy group Friday said it has called on all San Joaquin Valley dairies to continue complying with an air pollution rule that will be temporarily suspended in May.

"California dairy families have been committed to doing their part to protect air quality, and despite extremely tough economic times, that commitment still exists," said William C. Van Dam, chairman of the Community Alliance for Responsible Environmental Stewardship, or CARES, which advocates for environmentally and economically feasible dairy policies.

Earlier this week, valley air regulators said they have to rescind the rule in May, the start of the peak smog season. The rule limits the amount of certain pollution-forming emissions from dairies. It applies to hundreds of dairies in the valley and a smaller number of other confined animal facilities.

The revocation is the result of a lawsuit brought against the San Joaquin Valley Air Pollution Control District by an air quality group. The group, Shafter-based Association of Irrigated Residents (AIR), sued claiming the rule was too weak.

An appeals court found the air district failed to conduct a proper health assessment when developing the rule and ordered it suspended while the study is done. Air district staff asked AIR to allow the rule to remain in place while the study is done but said the group refused.

AIR members said they want the rule repealed so a new one can be developed. No adverse pollution impacts will occur, they say, because the rule was so weak to begin with.

Dairy waste rule halted

Air officials say ozone could soar because of lawsuit by activists.

By Mark Grossi

The Fresno Bee, Merced Sun-Star, Saturday, April 11, 2009

Local air officials say an activist lawsuit is forcing them to suspend an important pollution rule for dairies and other animal operations -- a rule that has the same effect as removing 1.3 million cars from the roads.

Officials said they must roll back the restrictions next month, potentially exposing the public to tons of pollution as ozone season begins. The rule may not return for many weeks, they said.

The rule is aimed at reactive organic gases coming from waste, feed and the animals themselves. Owners of animal operations reduce gases with such measures as special feed and washing waste out of animal stalls.

But a court agrees with Valley activists, who say there is no proof that the San Joaquin Valley Air Pollution Control District rule protects anyone. The district's claims misrepresent the court's opinion, the activists say.

"They just don't like losing this case," said lawyer Brent Newell of the Center on Race, Poverty and the Environment, representing activists.

Legal action and new state law had forced the district to pass the rule in 2006, Newell said. Soon after, he filed a lawsuit against the rule on behalf of the Association of Irrigated Residents, or AIR, based in Kern County.

A state court last year ordered an analysis of health benefits. The court also required the district to set the rule aside until the health study is considered.

The district has produced the study, and Thursday the district board is expected to set a May 21 public hearing on it.

Air officials say the study amounts to a technicality in the court case. They said the court rejected activists' main arguments -- that the rule didn't address all pollutants, did not require the best technologies and overstated emissions reductions.

Animal operations are considered among the biggest contributors of reactive organic gases. It is one of the two main ingredients in ozone, a corrosive gas that can trigger lung problems such as asthma. The Valley has some of the worst ozone pollution in the country.

After the public has commented on the health study in May, board members are expected to consider it at the district's June 18 board meeting. The board could adopt the same rule again or direct staff to begin the public process of amending it.

District executive officer Seyed Sadredin said he would prefer not to set aside the rule even for a short time, but activists refused to allow it.

"We are disappointed that Bay Area attorneys representing AIR rejected our proposal to leave the rule in place and continue the progress that we have made in significantly reducing dairy emissions," he said. "Setting the rule aside at the peak of the Valley's ozone season is not in the best interest of the Valley residents."

Sadredin said he is asking dairies to follow clean-air restrictions voluntarily so residents won't suffer.

An industry coalition -- Community Alliance for Responsible Environmental Stewardship based in Sacramento -- on Friday called on Valley dairies to continue complying with the regulations.

Newell said the appeals to dairy owners are disingenuous, saying the rule mirrors industry practices. Dairy owners are not likely to change their practices overnight, he said. In addition, he said, if the rule continued in place during the health study, the air board might reauthorize it without fully considering the health effects.

Dairy air emissions eased in San Joaquin Valley

The Associated Press

In the S.F. Chronicle, Contra Costa Times, and other papers, Friday, April 10, 2009

BAKERSFIELD, Calif.—A rule limiting pollution from dairies will be suspended while citizens sue for tougher restrictions.

A lawsuit by the Association of Irrigated Residents says the San Joaquin Valley Air Pollution Control District isn't tough enough on limiting volatile organic compounds from the region's more than 2 million cows.

A court has disagreed, but said the district had not properly analyzed the health benefits of the standards.

Now the rule will be revoked entirely beginning in May while the months-long health study is done.

Air district officials say they are worried about people who live close to the dairies. Members of AIR say the rules were so weak that lifting them will have little effect.

Information from: The Bakersfield Californian, <http://www.bakersfield.com>

Dairy rules to be lifted after appeal

Modesto Bee, Friday, April 10, 2009

FRESNO — Air quality officials Thursday said they plan to suspend some of their pollution rules on dairy farms because of a lawsuit claiming that they are not tough enough.

The rules, enacted in 2006 to deal with smog-forming emissions from manure, feed piles and other sources, were challenged by the Association of Irrigated Residents as doing too little to regulate pollution.

The Kern County group won a court order requiring further study of the rules' effect on public health by the San Joaquin Valley Air Pollution Control District.

The district board next Thursday will consider setting a May 21 hearing for formal action on the suspension. The board could review the revised study June 18, then decide whether the rules need changes.

The district, which oversees air quality from San Joaquin to Kern counties, is urging dairy farmers to continue with pollution-reduction efforts voluntarily.

The rules cover volatile organic compounds, which mix with other pollutants and sunlight to form smog. Officials estimated that they would eliminate 28 percent of these substances at affected dairies and 5 percent of the total from all sources in the valley.

The rules apply to dairy farms that have 1,000 or more milking cows and were built before 2004, about 70 percent of the cows in the valley. Those built since then are under another set of rules.

Dairy farmers generally supported the 2006 action because it offered more than 70 options to meet the standards. They include installing pollutant-trapping devices in cattle enclosures, covering feed, promptly tilling manure into fields and controlling moisture in waste to prevent reactions that add to pollution.

"We are disappointed that Bay Area attorneys representing AIR rejected our proposal to leave the rule in place and continue the progress that we have made in significantly reducing dairy emissions," said Seyed Sadredin, the district's executive director. "Setting the rule aside at the peak of the valley's ozone season is not in the best interest of the valley residents."

Warming could harm crops

Studies: Climate change bad for food production

By Tracie Cone, The Associated Press

In the Modesto Bee, Saturday, April 11, 2009

FRESNO — Rising temperatures could make pears, peaches, almonds and other crops that need a winter chill unsuitable for California farms, while others could suffer lower yields, a new report says.

The current issue of California Agriculture, mailed to subscribers this week, is devoted to peer-reviewed articles by researchers at the University of California who paint a dire picture of the impact of climate change on food production and the environment.

California temperatures are predicted to increase 7 degrees Fahrenheit by 2095, the studies say, and as temperatures rise, winter rain in the mountains instead of snow could mean overburdened reservoirs. That, the research says, could force water managers to release runoff into rivers long before farmers need it.

Researchers studied issues ranging from the effect of cow flatulence on rising greenhouse gas levels to the ability of invasive pests to survive across a wider range.

The studies mostly took place on farms in the San Joaquin and Sacramento valleys, but can be a warning to growers everywhere.

A projection covering the next 30 years — the life span of most permanent crops — shows wine grapes faring well but table grapes, almonds, walnuts and avocados suffering declines in yields.

Already, temperatures are at or higher than what is optimum, said David Lobell of Stanford University, who was an agriculture ecologist at Lawrence Livermore National Laboratory at the time of the study.

The climate change Earth is experiencing is coming three to 10 times faster than at the end of the last ice age, the researchers said, which also puts California's 2,400 endemic plants in danger of losing 80 percent of their range.

The researchers predicted that without drastic action, coastal redwoods will be found farther north, Sonoran desert plants will appear in the Central Valley, and oaks in Central California could die out.

University of California at Riverside entomologist John Trumble and graduate student Casey Butler say the temperature rise also means insects will eat more of certain plants because of changes in their nutritional value.

"We need to begin preparing now for the challenges of our changing environment," they wrote.

Energy use, gas emissions

About 15 percent of the energy use and greenhouse gas emissions in the United States is related to food production, with livestock-produced methane and nitrous oxide leading the way, followed by the breakdown of synthetic nitrogen fertilizers, transportation, heat used to operate greenhouses and the decomposition of waste.

"We are developing information so that major food suppliers, food service professionals and retailers, as well as consumers, can figure out where to focus to make the biggest impact on climate change," said Gail Feenstra of the Agricultural Sustainability Institute at the University of California at Davis.

One group of researchers found that winter cover crops, such as nitrogen-enriching fava beans, and managed fertilizer application reduce the creation of harmful gases. The report says policy-makers are studying ways to ease the financial burden on farmers through payments from businesses in the industrial sector that fail to meet emissions reduction requirements.

The researchers found that decreasing commercial nitrogen fertilizers by 25 percent on corn crops created no measurable decrease in production, an indication that many farmers overfertilize.

Research has shown that greenhouse-gas emissions can be reduced by decreasing emissions of nitrous oxide and methane, emitted as grains and grasses digest in cows' guts and as their excrement breaks down.

Researchers who studied cows in a test chamber wrote that increasing the digestibility of feed and improving milk production to reduce the number of cows in the San Joaquin Valley, now estimated at 2.5 million, could combine to reduce greenhouse gases.

Covering waste lagoons and using anaerobic digestion systems also would help.

California lawmakers want update on gas-station vapor rules

By Mark Glover

Sacramento Bee, Saturday, April 11, 2009

A bipartisan group of state lawmakers wants the California Air Resources Board and 35 air districts statewide to provide details on how they are enforcing a state-mandated vapor-recovery system designed to reduce air pollution at California gas stations.

The lawmakers, led by state Sen. Dave Cox, R-Fair Oaks, on Thursday released a letter sent to ARB Chairwoman Mary Nichols, asking her to provide "a clear picture of what is happening in each of the 35 districts" by April 17.

The deadline for the "enhanced vapor recovery" retrofit, a complex process started in 2000, became effective April 1. Last month, ARB estimated that 5 percent of about 11,000 California stations facing the deadline ultimately would close, partly as a result of the estimated \$11,000-per-pump cost.

ARB has insisted, however, that the improved nozzles, vapor processors and other equipment will eliminate the daily release of up to 10 tons of smog-forming compounds that result from spillage and fumes escaping at pumps.

However, Cox and four other lawmakers said they are concerned about the severity of fines being imposed on stations not in compliance, the closing of other stations and an accompanying loss of jobs.

In their letter, the lawmakers said they have received reports that gas stations not in compliance are "being subjected to daily fines that total thousands of dollars per month. We have also received anecdotal evidence that stations are closing down rather than paying the fines."

The letter also cites reports of confusion about regulations from district to district.

The letter requests that ARB provide lists of stations that are not in compliance and those that have been fined or ceased operation. It also asks for the total of fines collected so far, with "information regarding the uses for which these funds will be allocated."

Besides Cox, the letter was signed by state Sens. Rod Wright, D-Inglewood, and Ron Calderon, D-Montebello, and Assembly members Martin Garrick, R-Solana Beach, and Jeff Miller, R-Corona.

ARB spokesman Dimitri Stanich said Thursday that the lawmakers' letter had not yet been received. He said the air districts are "already collecting information ... so I don't see that being a problem."

As of Thursday, Stanich said, 89 percent of stations "have the needed permits, which is an indication of intent to install" and 55 percent have completed the retrofit.

Before April 1, ARB said it would be patient with stations that had shown "good faith" efforts to comply, but it warned that operators showing "blatant disregard" of the mandate could face "substantial penalties ranging from several hundred dollars to forced closure."

New Calif. homes would have to be energy producers

By Steve Lawrence, Associated Press

In the Modesto Bee, Sunday, April 12, 2009

SACRAMENTO -- If state Assemblywoman Lori Saldana has her way, buyers of California homes built a little more than a decade from now would not have to worry about paying big electricity bills. The homes would produce power themselves.

The San Diego Democrat has introduced legislation that would require all homes built starting in about 2020 to be so-called zero net energy buildings. That means they would be extremely energy efficient and produce enough power to offset any electricity they draw from the grid.

That homegrown power would probably come from solar panels. But it also could be generated by nearby wind or geothermal plants, said Bernadette Del Chiaro, a clean energy advocate with the group Environment California, which supports the bill.

The measure is on the agenda of the Assembly Natural Resources Committee on Monday. It is one of more than 400 bills scheduled to be considered this week as lawmakers return from an Easter recess.

"What you do is use the grid like a giant battery," Del Chiaro said. "You send surplus energy during the day to the grid and then offset that by drawing energy from the grid at night. That's how you basically get the bill down to nothing."

Saldana's legislation would require new homes to meet zero net energy requirements by Jan. 1, 2020, or when the California Energy Commission determines that use of solar systems is cost-effective, whichever comes later.

Del Chiaro said she expects that currently available state rebates and federal tax breaks will create enough of a mainstream market for solar systems over the next 10 years to cut their cost in half.

Saldana said her bill would help cut the emissions blamed for global warming by reducing dependence on fossil fuels.

"About a quarter of greenhouse gas emissions are related to buildings - heating and cooling them," she said. "Looking at ways to build smarter will have significant and beneficial impacts on reducing greenhouse gases and avoiding more impacts of climate change."

Tim Coyle, senior vice president of the California Building Industry Association, said new homes being built in California today already are highly energy efficient. He said Saldana should be looking for ways to reduce electricity use in older housing instead of targeting new construction.

"If the goal is to reduce fossil fuel dependency, why not go where the problem is?" he said.

New solar-equipped homes are popular with buyers, he said, but including that equipment can add \$15,000 to \$50,000 to the cost of construction.

"That's a pretty pricey premium to pay on a new home," Coyle said.

Saldana said the additional cost could be recouped by cutting electricity bills over a period of years.

She introduced essentially the same bill last year. It passed the Assembly but died in the Senate. She's hopeful that it will clear both houses this time.

Expansion of power plant to get final public hearing

By Tanya Sierra

San Diego Union-Tribune, Saturday, April 11, 2009

CHULA VISTA — The California Energy Commission is meeting in Chula Vista on Monday to hold its final public hearing on whether a power plant in southwest Chula Vista should be allowed to expand.

In January, the commission, through one of its committees, issued a preliminary decision recommending denial of the proposed Main Street power-plant expansion, saying it goes against the city's general plan and zoning rules. That ruling elated nearby residents and environmentalists, who wore breathing masks to city meetings as they accused officials of selling out their health.

In August 2007, MMC Energy Inc., which provides emergency power for the regional electricity system, applied for state permission to demolish its seven-year-old plant. The company wanted to replace it on the same site with a more efficient plant, at double the energy capacity, that would run on natural gas.

The plant stands behind a carwash and junkyard near Albany Avenue and Main Street. Several homes and Otay Elementary School are nearby.

The Energy Commission will vote on the proposal in Sacramento next month.

In the meantime, neighbors and the Environmental Health Coalition are urging the commission to stand by its committee's decision to deny the expansion.

Harry Scarborough, vice president of MMC Energy Inc., said that special interests are wreaking havoc on the company's expansion plan and that the commission is misunderstanding the city's stance on its general plan.

"This has created quite a stir," Scarborough said.

Energy Commission and city support of the expansion has shifted over the past several months.

Last summer, a commission staff report indicated that MMC had met all requirements and recommended approval. In January, the Energy Commission committee reviewing the expansion made the recommendation to deny it.

A similar reversal took place with city officials.

In June, officials issued a 12-page report that objected to the expansion, citing the plant's proximity to homes, a school and a recreation center and the increased air pollutants the bigger plant would emit. Also, city staff members wrote that they were not convinced that Main Street was the "only suitable location for the project." The project violated the city's general plan, city officials said.

Two months later, city officials changed their stance and came to an agreement with MMC on six issues they said would solve the general-plan and air-quality issues.

Under the agreement, MMC would provide \$210,000 for improvements to homes closest to the power plant, such as double-paned windows or air conditioning; provide \$30,000 for a weather station; agree to always pay the city's utility users tax; and not expand the project again.

Scarborough said the agreement should prove to the commission that the city no longer believes there is a conflict.

"We've hoped that we've provided enough additional evidence to show that they've misunderstood the city's stance on its general plan," he said.

The meeting begins at 4 p.m. Monday in the City Council chambers, 276 Fourth Ave.

Surf City landfill cleanup delayed

By Marilyn Kalfus

O.C. Register Blog, Friday, April 10, 2009

The cleanup of the Ascon /NESI landfill in Huntington Beach has been delayed for six months while officials come up with an air safety plan.

The California Environmental Protection Agency's Department of Toxic Substances Control released this statement:

"In coordinating with the Air Quality Management District, DTSC scientists learned that air district requirements affected the Ascon cleanup plan. The air district is concerned that the soil cleanup may impact air quality in the basin. The contaminants involved, volatile organic compounds (VOCs) evaporate quickly into the air. Currently, DTCS scientists and engineers are working with all involved to develop a revised plan to address the air district's concerns and anticipate a project delay of six months."

The state previously announced that they would notify residents living a quarter mile from the landfill on the corner of Magnolia Street and Hamilton Avenue about meetings on the site cleanup.

The quarter-mile radius is standard with cleanups ordered by the California Environmental Protection Agency's Department of Toxic Substances Control, according to the agency.

The landfill for 70 years was a dumping ground for oil drilling byproducts, construction and plastic materials. It all left the 38-acre site heavily polluted.

Some nearby residents say they were never told about the landfill; others say they weren't aware of any health dangers. Some cite nearby residents with cancer and other diseases and blame the toxic site.

Huntington Beach landfill cleanup is delayed by state agency

By Marilyn Kalfus

The Orange County Register, Saturday, April 11, 2009

The cleanup of the Ascon/NESI landfill in Huntington Beach has been delayed for six months while officials come up with an air-safety plan.

The California Environmental Protection Agency's Department of Toxic Substances Control said it is concerned that the soil cleanup may affect air quality in the basin.

The state has been notifying residents living a quarter-mile from the landfill at Magnolia Street and Hamilton Avenue about meetings on the site cleanup. The landfill for 70 years was a dumping ground for oil drilling byproducts, construction and plastic materials. It all left the 38-acre site heavily polluted.

East Bay community group sues air district for records

By Kristin Bender, Oakland Tribune

In the Contra Costa Times, Tri-Valley Herald and other papers, Friday, April 10, 2009

Berkeley — The Healthy Air Coalition, an East Bay community group, filed a lawsuit this week against the Bay Area Air Quality Management District to put pressure on the agency to release an odor control plan submitted to the district last October by Pacific Steel Casting, a steel foundry in West Berkeley.

The Healthy Air Coalition contends that the community has a right to know the level of the foundry's air emissions and its plan to control the odors, according to the lawsuit.

The Healthy Air Coalition contends the records should have been disclosed under the California Public Records Act. But Pacific Steel Casting has marked those documents trade secrets, district spokeswoman Lisa Fasano said. A spokeswoman for the company declined to comment on the suit.

For years, the company — which makes steel castings for truck parts, medical equipment and sewer pipes — has been at the center of complaints from residents and merchants about headaches and a tightness in their chests because of alleged foul odors.

The company has been sued four times, including once by the air district. In 2006, under a settlement with the district, the foundry was directed to install a \$2 million carbon absorption unit to reduce odor and emissions.

The Healthy Air Coalition, residents and governmental agencies asked for copies of the foundry's Odor Control Plan, but the air district denied all requests to release the records, instead deferring the decision to the company, according to a statement from the Healthy Air Coalition. The company also declined those requests and in fact earlier this year sued the air district to protect its trade secrets, Fasano said.

"The (district) is looking to the court to make a determination on whether the documents are considered trade secret, and then based on that whether they are releaseable to the public," she said.

The odor control plan was submitted to the district after the company was cited for air quality violations in 2006. The plan discusses where odors occur, where the foundry has vents and doors, and where foundry processes take place, Fasano said.

SANDAG eyes help for transit agencies

Board votes to consider range of funding options

By Steve Schmidt

San Diego Union-Tribune, Sunday, April 12, 2009

DOWNTOWN SAN DIEGO — San Diego-area elected officials yesterday wrestled over whether to bail out local public transit agencies, perhaps by digging deeper into the money that the TransNet sales tax provides.

But at a special San Diego Association of Governments meeting yesterday, county Supervisor Dianne Jacob and others said using a larger share of the money to pay for workaday operations would anger voters. In 2004, voters agreed to extend the half-cent sales tax, which was primarily intended to fund highway, mass transit and road improvements.

Jacob, who is also a member of the SANDAG board, made a motion asking that the agency drop the TransNet idea. Fellow board member and county Supervisor Pam Slater-Price concurred.

A majority of board members, however, spurned Jacob's motion and voted to look at a range of possible funding options at an April 24 board meeting.

San Diego Councilman Todd Gloria said he's not wedded to one particular solution but said it's critical that SANDAG help the public transit agencies regain their financial footing.

Other possible sources of funding include federal revenue, county Air Pollution Control District funds or perhaps a new sales-tax ballot measure, officials said.

Executives with the Metropolitan Transit System and the North County Transit District told the board that they expect deepening deficits through at least 2013, largely because of the drying up of state transportation subsidies.

“(State) funding has not only been reduced – it’s down to zero,” said NCTD Executive Director Matt Tucker. “That’s the big story for us.”

The cuts come as both agencies would like to expand services to accommodate rising ridership. Instead, both have been moving to cut service and increase fares.

“It’s absurd that we’re not supporting the transit system in an adequate manner,” City Heights resident Steve Russell told SANDAG board members.

During a lengthy hearing, public transit advocates and environmentalists said TransNet funding is biased in favor of big-ticket freeway improvements that encourage commuters to continue to use their cars, rather than shift to mass transit.

“Our county’s massive investment in freeways has only led to more gridlock,” said Elyse Lowe, executive director of Move San Diego.

Her organization wants SANDAG – the region’s long-range planning agency – to pursue more creative and cost-effective ways to lure people out of their cars, saying projects such as the bus rapid-transit system emerging on Interstate 15 are likely to prove ineffective.

But others, including representatives of the building industry, felt strongly that any significant changes in TransNet would be a mistake.

“The voters are going to revolt over that kind of thing,” said Matthew Adams, deputy director of the San Diego Building Industry Association.

Under the ordinance approved by voters, about a third of TransNet revenue goes to freeway and highway improvements, a third to city streets and county roads and a third to mass transit projects and operations.

Of the third that goes to transit, about half – some \$31 million – will go this year to MTS and NCTD operations. In recent weeks, some elected officials have questioned whether that figure should be increased, even if it means a delay in TransNet projects.

Obama, Who Vowed Rapid Action on Climate Change, Turns More Cautious

By John M. Broder

N.Y. Times, Friday, April 10, 2009

WASHINGTON — President Obama came to office promising swift and comprehensive action to combat global climate change, and the topic remains a surefire applause line in his speeches here and abroad.

Yet the administration has taken a cautious and rather passive role on the issue, proclaiming broad goals while remaining aloof from details of climate legislation now in Congress.

The president’s budget initially included roughly \$650 billion in revenue over 10 years from a cap-and-trade emissions plan that he wants adopted. But the administration, while insisting that its health care initiative be protected, did not fight to keep cap-and-trade in the budget resolutions that Congress passed last week, and it wound up in neither the House’s version nor the Senate’s.

Overseas, American officials are telling their counterparts that they need time to gauge the American public’s appetite for an ambitious carbon reduction scheme before leading any international effort.

Has the administration scaled back its global-warming goals, at least for this year, or is it engaged in sophisticated misdirection?

Maybe some of both. While addressing climate change appears to be slipping down the president's list of priorities for the year, he is holding in reserve a powerful club to regulate carbon dioxide emissions through executive authority.

That club takes the form of Environmental Protection Agency regulation of the gases blamed for the warming of the planet, an authority granted the agency by the Supreme Court's reading of the Clean Air Act. Administration officials consistently say they would much prefer that Congress write new legislation to pre-empt the E.P.A. regulatory power, but they are clearly holding it in reserve as a prod to reluctant lawmakers and recalcitrant industries and as evidence of good faith to other nations.

Industry lobbyists and members of Congress who are engaged in writing energy and global warming bills say they are well aware of the E.P.A. process bearing down on them.

"Once the Supreme Court declared carbon dioxide to be a pollutant under the Clean Air Act, E.P.A. had no choice but to act," said Representative Rick Boucher, a moderate Democrat from a coal-producing region of Virginia. "Most people would rather have Congress act. We can be more balanced; we can take into account the effects on the economy. But if we don't undertake this, E.P.A. certainly will."

Still, the agency's regulations would take months to write and years to become fully effective. Meanwhile, Congress is already starting work on energy and climate legislation, though without significant guidance from the White House, at least in public.

Carol M. Browner, the White House coordinator of energy and climate policy, issued a surprisingly bland statement last week when two top House Democrats unveiled a far-reaching plan to cap greenhouse gases and move the nation toward an economy less dependent on carbon-rich fuels like coal and oil.

Ms. Browner stopped short of endorsing that plan, issued by Representatives Henry A. Waxman of California and Edward J. Markey of Massachusetts, saying instead that Mr. Obama "looks forward to working with members of Congress in both chambers to pass a bill that would transition the nation to a clean-energy economy." She gave little clue as to what she and the president believe such a measure should say.

At an international climate conference in Germany that ended Wednesday, some delegates said they were disappointed in the Obama administration's lack of robust leadership. The explanation offered by Jonathan Pershing, a leader of the American delegation, was that the administration was waiting to measure the American technological and political capacity to address climate change and was looking to Congress to set specific targets for reducing carbon pollution.

Business lobbyists welcome the White House's go-slow approach, saying the issue is too complicated and too costly to be rushed, especially in a recession.

"We have not until now had a national debate on a climate change proposal, period," said Karen A. Harbert, a former senior Energy Department official who now heads the United States Chamber of Commerce's energy institute. "That has to happen for any piece of legislation to achieve broad support across the country."

Ms. Harbert and other business lobbyists also welcomed the administration's hesitancy to undertake regulation of climate-altering gases under E.P.A. authority, saying the matter should be fully aired before Congress so that all interests and regions could be heard.

Keith McCoy, vice president for energy and resources policy at the National Association of Manufacturers, said his organization was "strongly opposed to an E.P.A. regulatory process for greenhouse gas emissions under the Clean Air Act."

Mr. McCoy said his members would prefer a binding international treaty that would cover all nations, particularly those whose industries compete with energy-intensive American manufacturers. "Absent that," he said, "we would prefer a robust and transparent debate within Congress."

The administration's caution leaves many environmental advocates frustrated, although most are reluctant to speak on the record for fear of alienating their allies inside government.

One environmental and energy lobbyist with close ties to the White House said the administration had been inhibited by a number of factors, including vacancies in many top policy jobs, an intense early focus on the financial and economic crises, and an unwillingness to alienate business and Congressional leaders with a heavy-handed approach.

"With those realities, coupled with the fact that the president himself realizes this is harder to do in the midst of recession, they are basically content to see what Congress will do," this lobbyist said. "Plus, Henry Waxman has put together a very serious piece of legislation, and that in my mind justifies their lack of forceful intervention. That's just where they are now."

Global warming endangers U.S. corn production, study says

The report by Environment America contradicts contentions that moderate warming would actually boost crop yields. The U.S. could lose \$1.4 billion in annual corn revenue, the report says.

By Jim Tankersley

L.A. Times, Friday, April 10, 2009

Reporting from Washington -- Global warming could rob the U.S. economy of \$1.4 billion a year in lost corn production alone, a national environmental group estimated in a report released Thursday.

The Environment America study, based on government and university data, projects that warming temperatures will reduce yields of the nation's biggest crop by 3% in the Midwest and the South compared with projected yields without further global warming.

Iowa would be hit hardest, losing \$259 million a year in corn revenues, followed by Illinois at \$243 million. California, which leads the country in agriculture but doesn't grow much corn, would take an estimated \$4.7-million hit.

The study doesn't directly address other crops, but one of its main sources, a 2008 government report on the effects of warming on agriculture and natural resources, suggests that California's signature fruit and vegetable harvests could suffer even more than corn if temperatures rise.

"Corn likes it cool, but global warming is raising temperatures across the nation," said report author Timothy Telleen-Lawton in a news release. "Hotter fields will mean lower yields for corn, and eventually, the rest of agriculture."

Telleen-Lawton said the estimates of revenue loss were tied to expected increases in temperature and carbon dioxide levels that could be reached within the next few decades if steps were not taken quickly to cut the amount of greenhouse gases emitted into the atmosphere.

The report is a direct challenge to other studies, often cited by critics of government efforts to curb greenhouse gas emissions, that project moderate warming would increase crop yields.

Higher carbon dioxide levels would help plants grow, Princeton University physicist William Happer, a critic of emissions limits, told a Senate committee this year.

"Crop yields will continue to increase as CO2 levels go up," he said in submitted testimony, "since we are far from the optimum levels for plant growth."

The report by Environment America, an environmental advocacy group, contends that damaging effects from warming would far outweigh a carbon-fueled yield boost.

"Not all the effects of global warming will be bad for agriculture; growing seasons will be longer, and increased carbon dioxide levels encourage plant growth," the report says.

"But global warming will make some of the challenges that agriculture faces significantly worse, including increasing temperatures, more damaging storms, ozone pollution, and spreading pests, weeds, and diseases."

The report doesn't attempt to quantify losses from storms, floods, insects and ozone pollution related to global warming. It calculates damages based on warming temperatures, which could rise above corn's optimum growing range of 64 to 72 degrees Fahrenheit during the growing season.

It also says farmers can help fight global warming -- and the government can encourage their efforts -- in part by turning some of their land into wind and solar energy farms.

But the report stays silent on the fate of perhaps the most touted -- and politically controversial -- intersection of U.S. agriculture and global warming: corn ethanol, which proponents call a path away from fossil fuels but which critics say could cause as much global warming harm as good.

EPA gives Ariz. cash for truck anti-pollution push

USA Today, Friday, April 10, 2009

PHOENIX (AP) — Arizona is receiving \$1.7 million in U.S. Environmental Protection Agency money for a program designed to reduce pollution from idling diesel trucks.

The money is from the federal economic stimulus package and will be used by the Arizona Department of Environmental Quality to install about 80 plug-in electric systems at truck stops across the state. The power allows drivers to run air conditioning systems in their cabs and freezer units on their trailers without using their diesel engines.

DEQ spokesman Mark Shaffer says trucking companies are expected to pay for the electricity, but the cost should be half what they pay in fuel for idling trucks.

The work must be finished by September 2010.

Prairie burns lower air quality

USA Today, Saturday, April 11, 2009

KANSAS CITY, Mo. (AP) — The annual tradition of burning the prairie in Kansas this spring has pushed air quality levels below federal standards in Kansas City and Wichita.

An ozone monitor in Johnson County this week registered a level of 79 parts per billion, while a monitor in Wichita registered 95 parts per billion. The federal standard is 75 parts per billion.

Tom Gross with the Kansas Department of Health and Environment said the smoke that passed through the region has filtered all the way through Missouri to Tennessee and Kentucky.

Many ranchers burn prairies to control weeds and the state tries to keep the burns staggered to limit the amount of smoke at any one time.

Gross said it's not a good sign that the area has busted federal standards so early in the burning season.

Shuttles through parks add to the experience

By Seth Shteir

L.A. Daily News, Friday, April 10, 2009

It's 5 p.m. and I'm cruising along the serpentine Hermit Road on the South Rim of the Grand Canyon. To my right are the magnificent buttes and the abyss of the canyon. On the left are gnarled Utah junipers, twisted like contortionists, their forms pleasing to the eye.

I'm en route to watch the sunset at Hopi Point, but I'm not alone. Behind me are 20 other national park visitors eager to watch a western sunset while also doing something good for Mother Nature - we're riding the South Rim shuttle bus.

Anybody who has been in a traffic jam in the Great Smoky Mountains, argued over a parking spot at the Grand Canyon, or seen the creeping yellow haze of ozone in Sequoia, can attest to the importance of alternative transportation options like shuttle buses in our national parks. Buses and other options, like bike paths, help reduce the number of private vehicles in the park at any one time, which helps address air pollution and greenhouse gas emissions.

Reducing automobile traffic also protects wildlife and reduces noise pollution, enabling visitors to have a more enjoyable experience.

Zion National Park and its neighbor, the town of Springdale, Utah, developed a successful shuttle system in the 1990s when the town and park were inundated with automobile traffic and tour buses. The influx of more than 2,000 vehicles some days during peak season made it difficult to hear the natural sounds of the park, disturbed wildlife, and made finding a parking space all but impossible.

The propane-powered shuttle bus system began operation in 2000. It runs in two loops from the town of Springdale to Zion's scenic inner canyon from April through October. Since the inception of the shuttle, the park has become quieter, wildlife sightings have increased, and the park has eliminated 12 tons of carbon dioxide emissions per day.

It has also had a positive economic impact: The concession that runs the shuttle employs 63 people and tax revenues in Springdale have increased 22 percent since the shuttle started. The majority of feedback from visitors has been positive and it's estimated that 75 percent of Zion's 2.5 million annual visitors ride the shuttle.

Offering options for visitors other than traffic jams and crowded parking lots is becoming increasingly important as the National Park Service works to reduce air pollution at parks across the country. But successful shuttle bus systems, like the one at Zion, can't be developed without federal funding.

Every five to six years, Congress passes a transportation bill that provides funding for road repair across the country, including roads and shuttle buses in national parks. The current legislation expires in September. What's needed in the new bill is increased funding to improve transportation systems in our national parks. That should include funds to repair roads and bridges used by visitors every day, and funds to offer shuttles, bike paths and other options to reduce air pollution and crowding and improve the safety and experiences of visitors.

Back at the Grand Canyon, my fellow shuttle riders find seats along rock slabs to take pictures, relax and chat. From where I'm sitting I can hear many accents and languages: Texas drawls, Boston twangs, lilting French, and staccato German. Half an hour passes as the crimson sun slips gently behind the buttes, and the moon seesaws into the darkening sky. As if on cue, a park

shuttle arrives and we board, each of us happy to have seen a magnificent sunset, and perhaps also because we played a role in protecting this magnificent national park.

Study digs for health effects of plentiful ND rock

By James MacPherson, Associated Press Writer

In the Contra Costa Times, Tri-Valley Herald and other papers, Monday, April 13, 2009

BISMARCK, N.D.—Scientists want to study the health effects of an asbestos-like mineral used widely in western North Dakota and linked to cancer elsewhere, but they're having a hard time finding volunteers for testing.

The state's top rock researcher and the state's chief fossil finder have signed up to find out if they've been harmed by long-term exposure to erionite, which can collect in the lungs of people who breathe it.

But not many others are biting in a part of the state where many of the roads are covered with erionite gravel mined from the nearby Killdeer Mountains.

State health officials and the Environmental Protection Agency are looking for about 50 test subjects to get chest X-rays and CT scans that will be sent to researchers at the University of Cincinnati. Volunteers will be paid \$100 each.

Fewer than 10 people have signed up, said Mark Dihle, a scientist with the state Health Department's air quality division.

"We haven't had quite the response we're looking for," he said. The department has now extended the sign-up deadline from April 17 to June 12.

Eric Kehr, owner of the Buckskin Bar & Grill in Killdeer, predicts the government will have a tough time finding enough volunteers.

"Maybe we'd rather not know we have cancer, and if we stick our head in the sand maybe it will go away," he said. "What can anybody do about it anyway? There is no way to blacktop all these gravel roads, so practically speaking, it's an unsolvable problem."

State geologist Ed Murphy notified the EPA of the erionite in the region about three years ago, after he found that in Turkey, the mineral was linked to mesothelioma, an incurable form of lung cancer.

Erionite found in North Dakota differs slightly than the mineral found in Turkey, where it's a known carcinogen, Murphy said. Erionite found in North Dakota is more calcium-based; the mineral in Turkey is sodium-based.

The EPA says erionite is found in at least a dozen states in the West, but not at the levels in western North Dakota, where it's used on many rural roads. The EPA says U.S. studies also have shown that erionite causes cancer in lab rats, though the mineral is not regulated by the agency.

"I've been under cliff faces chipping out fossilized mammal bones with this stuff falling in my face, so of course I'm pretty curious to see what it's done to me," said John Hoganson, the state paleontologist.

State Rep. Shirley Meyer of Dickinson believes the fears over erionite are overblown.

"I grew up playing in that gravel pit, and if there is anyone that has been exposed to it, it would certainly be me," Meyer said.

Still, Meyer said she would sign up for the study and encourage residents to do the same. She said she hoped the tests would halt the fears that have led Killdeer's Dunn County to stop using free erionite gravel until the study is complete.

"I think they (the EPA and the Health Department) are making it a concern, but most people around here think it's silly," Meyer said.

Murphy said he's taking part in the study more for others than for himself.

"This is the best thing we can do to see the effects on those of us that have had exposure, so that we can prevent this from happening to the children," Murphy said.

Chinese connection

Officials detail plan to put country atop electric-car market

By Keith Bradsher, New York Times News Service

In the San Diego Union-Tribune, Sunday, April 12, 2009

BEIJING – Senior Chinese officials yesterday outlined how they aim to turn their country into the world's largest producer of electric cars, including a focus on consumer choice rather than corporate subsidies.

Speaking at a conference at the government's prestigious Diaoyutai guesthouse in Beijing, the officials acknowledged that their efforts face challenges in terms of the cost and safety of electric cars. They promised a nationwide effort by manufacturers, universities, research institutes and government agencies to overcome those obstacles.

Wan Gang, a former Audi engineer in Germany who is now China's minister of science and technology, portrayed the country's electric-car initiative as central to China's international competitiveness but said there are environmental goals, as well.

"We need to be sustainable in different sectors, particularly in the auto sector," Wan said.

Zhang Shaochun, a vice minister of finance, said the government wants to let the market determine which electric vehicle models will become popular. So while the government is providing some research subsidies, the main step will be to provide very large subsidies for buyers of electric cars – already up to 60,000 yuan, or \$8,800, for purchases by taxi fleets and local government agencies.

"The fiscal subsidy gives voting rights to the consumer," Zhang said.

China also has a 10 billion yuan (\$1.46 billion) program to help the industry with automotive innovation.

In the United States, the government is providing \$25 billion to help cover Detroit's research costs in the coming years.

Zhang said that with a greater emphasis on incentives for electric-car buyers, "we will cut back on the discretionary power of government agencies – otherwise, the companies will just fight for subsidies."

Chinese and foreign automakers have embarked on a slew of demonstration projects for electric cars, with Nissan announcing one yesterday in Wuhan, a city in central China. But very few electric cars are on the road in China yet.

Although electric cars are rapidly improving, they remain roughly twice as expensive as gasoline-powered cars of similar size that also provide greater range, higher top speeds and better records for reliability. Wan raised another concern when he noted that the industry has to look at safety as it seeks to make electric cars ever lighter.

Electric-car makers could find it easier to gain a following in the Chinese market than in other countries. First-time buyers in China are less accustomed to the power of gasoline-fueled cars; most commutes are short and slow because of traffic jams; and Chinese law makes it hard for consumers to sue automakers for safety problems.

Miao Wei, the vice minister for industry and information technology, said at the conference that automotive sales and production set records last month; the previous records for both were set in March of last year.

Sales and production were running at an annualized rate of about 11 million vehicles last month, Miao said, indicating the previous records were narrowly beaten. In the United States last month, sales were running at an annualized rate of 10 million.

On Thursday, the China Association of Automobile Manufacturers said passenger-car sales jumped 10 percent in March from a year earlier. The group said sales of cars, minivans and multipurpose vehicles rose to a record 772,400. Including trucks and buses, vehicle sales were up 5 percent to 1.11 million units.

Yale Zhang, a China specialist at CSM Worldwide, a vehicle market forecasting service, said sales of small cars and minibuses had surged because of a tax cut on vehicles with engines of less than 1.6 liters and because of a \$730 subsidy introduced last month for car buyers in rural areas.

Miao, a former chairman of Dongfeng Motor, one of China's biggest automakers, said the country's ever-growing fleet poses three problems: air pollution, rising consumption of imported oil and traffic congestion.

"If these three bottlenecks cannot be addressed, the Chinese auto industry cannot grow sustainably," he said.

Alternative-energy vehicles "are the only way out to address these challenges," Miao said, without explaining how a shift from gasoline-powered cars to electric cars would address the chronic traffic jams in Chinese cities.

[Letter to the San Diego Union-Tribune, Sunday, April 12, 2009:](#)

Rerouting transportation funds?

Regarding "Bait and switch/No need to plunder TransNet funds" (Editorial, April 9):

Your same argument could easily be made by transit riders who have faced significant reductions in service and increases in fares in recent years. When TransNet was renewed in 2004, voters such as myself supported the initiative in part because it promised a robust transit system for our region. Recent budget cuts to public transit at the state level and service cuts in prior years are placing that goal further and further out of reach. It is vitally important that we seek adequate funding to support our transit system. If changing the TransNet allocation formula to assist public transit operations is not the favored method of achieving this goal, then other funding options must be explored. Simply ignoring this problem is shortsighted and wrong.

TransNet represents our region's vision for transportation through 2048. If we are to preserve our enviable quality of life, we must have the strong transit system voters were promised with this initiative. Without it, all San Diegans – transit riders and not – will be forced to endure more traffic congestion and poor air quality. Public transportation is not optional. It is a worthy and critical investment for the public good.

*Todd Gloria, Third District
San Diego City Council*

[Letter to the Contra Costa Times, Friday, April 10, 2009:](#)

Nano car

Regarding the new Nano car by Tata Motors, I feel that this is advancement for India and other countries that follow.

India has a huge population, and almost every family has a motorbike, or a huge car that uses up a lot of gasoline and emits lots of carbon (dioxide). Because of the carbon emission of all the vehicles, big cities such as Mumbai have a lot of air pollution and are detrimental to the health of those living there. A car with an affordable price like the Nano will help those who do not have enough money to spend 7-8 lakhs (\$13,855-\$15,833) for a basic working car. The affordable price will also encourage buyers, and in turn will probably lower carbon emission rates.

So hats off to Ratan Tata and his company for helping advance India, its economy and the lives of those living there. And also hopefully eventually helping it become a "first world" country.

*Shalini Nair, Danville
9th Grade, California High School*

[Letter to the San Diego Union-Tribune, Friday, April 10, 2009](#)

A simple method to help traffic flow

The new auto tire inflation regulation imposed upon repair shops by the California Air Resources Board is a positive, if incremental, step in reducing fuel consumption, tire wear and greenhouse gases. Each increment is important, and I'd like to suggest another that should be considered.

Most left-turn arrows after being green become a solid red arrow and remain so until the entire cycle brings it back to green again. At many of these intersections motorists are made to sit idling for as much as two minutes, even though in the absence of oncoming traffic it would be safe to proceed with the left turn. Newer signal installations eliminated this inconvenience with sensors, but high cost makes it impractical to retrofit the older ones to do the same.

A very simple and inexpensive way to modify older signals at intersections where it is deemed safe to do so: install a blinking device, so that following a left turn green arrow the change is not to a solid red, but to a blinking red arrow. This would indicate that motorists must first stop, but would then be allowed to proceed when safe to do so.

Robert Irwin, Carlsbad

[Note: The following clip in Spanish discusses Obama Administration looking at cooling air to fight global warming. For more information, contact Maricela Velásquez at \(559\) 230-5849.](#)

Enfriar el aire para combatir calentamiento global

Seth Borenstein, Associated Press
La Opinión, Saturday, April 11, 2009

WASHINGTON (AP).- Manipular el clima de la Tierra para combatir el calentamiento global, idea radical que otrora fue desestimada, está siendo considerada dentro de la Casa Blanca como potencial opción de emergencia, dijo el miércoles el asesor presidencial de ciencias.

Eso se debe a que el calentamiento global está ocurriendo muy rápido, dijo John Holdren a la AP en su primera entrevista desde que fue confirmado el mes pasado.

El concepto de usar tecnología para enfriar el clima a propósito es llamado geoingeniería. Una opción sugerida por Holdren y propuesta por científicos ganadores del premio Nobel incluye el lanzamiento de partículas de contaminación a la atmósfera para que refleje los rayos solares.

El usar tal medida se piensa sólo como último recurso, explicó Holdren.

"Tiene que ser evaluada", apuntó. "No podemos darnos el lujo ... de descartar ninguna propuesta".

Su duda, Estados Unidos y otras países no reducirán el calentamiento global lo suficientemente rápido, y varios "momentos clave" podrían estar acercándose rápidamente. Cuando estos hitos se concretan, como la pérdida total de hielo sobre el mar del Ártico, incrementan las probabilidades de "consecuencias realmente intolerables", agregó.

En su entrevista de media hora, Holdren comparó dos veces al calentamiento global con estar "en un carro con frenos malos manejando hacia un acantilado en medio de la neblina".

Holdren y muchos expertos creen que el calentamiento de unos cuantos grados más conllevaría a condiciones de sequías desastrosas y escasez de alimentos en algunas regiones, mientras que en otras subiría la marea y habría tormentas más poderosas en costas.

Al principio, Holdren describió la potencial necesidad para manipular con tecnología el clima como sólo su manera personal de pensar. Pero luego agregó que ha pasado el asunto hasta nivel presidencial administrativo.

Holdren añadió que las negociaciones incluyen a funcionarios del gobierno de Obama y jefes de agencias de nivel subgabinete, como la NASA y la Agencia de Protección Ambiental.