

## **Easing off the Nitrous New Rule Hopes to Dramatically Cut Emissions**

by Richard Mavis

Valley Voice Newspaper, July 7, 2005

San Joaquin Valley - The newly-adopted amendments to Rule 4702, dealing with internal combustion engines used in agricultural operations, aren't pulling many punches. The goal is to cut 24.3 tons of nitrogen oxide pollutants from Valley air per day. Nitrous oxides are one of the primary contributors to the smog problem. With the right cooperation from farmers, air conditions in the Valley could soon be noticeably improved.

Most days in Visalia, it's hard to even see the mountains that help keep the air in the Valley so dingy. And while nobody would suggest leveling the mountains in effort to clear the air, many aren't very enthused about paying the prices for better technology either.

Which is why the San Joaquin Valley Air Pollution Control District has come forward to help ease the transition pains. They have devised programs for assisting farmers upgrade their current equipment, and incentives for upgrading sooner than later. Without assistance, the District expects mandated engine upgrades will cost the agricultural community over \$28 million per year.

A group called M.Cubed expects the cost will more realistically be between \$63 and \$87 million.

The District is urging farmers to contact them before January 1 2006, when they will commence the implementation of the new rules. The process for reviewing the situation and applying for funding is expected to take some time, and will be handled on a case-by-case basis for best effect.

"This is one of the bigger grant programs that we have," said Brenda Turner, of the Air Pollution Control District. "And it's one of the most cost-effective incentive programs we have. We're anxious to use the funds that we have to reduce the air pollution."

The rule outlines a stepped approach to cutting back on emissions and upgrading engines, with the oldest and dirtiest being the first to go. Upgraded diesel engines will meet standards put in place by the Environmental Protection Agency. EPA Tier 1 and Tier 2 engines should be phased out by 2010 in order to meet Tier 3 standards. By 2015, or 12 years after the installation of the newer engines—whichever is later—they hope to meet EPA Tier 4 limits and standards.

Not every farmer will be affected by the new ruling. The rule affects only those with engines stronger than 50 horsepower. But most farm equipment is stronger than that. Area farmer Brian Blain says he has dozens of engines that are going to need to be upgraded.

It is important for grant and incentive programs to be available to farmers because, unlike in many other industries, it is harder for farmers pass higher production costs onto consumers and stay afloat.

There are a few alternatives. If farmers choose to switch to electric engines rather than stay with diesel-powered engines, PG&E and Southern California Edison have reduced rates for them. And incorporating solar power is an option currently gaining popularity.

Better air quality is not a matter of if—it's a matter of when. The sooner improved technology is put to use, the sooner we'll be able to breathe, and see those mountains, more easily.

Another primary contributor to the Valley's poor air quality is cow methane, but for the time being it is easier to cut emissions from inefficient internal combustion engines than cattle.

For more specifics on which engines will be affected when, and to learn about the District's heavy-duty engine incentive program, please visit [www.valleyair.org](http://www.valleyair.org).

## **Proposed pollution rule could slow development**

By Doug Keeler, Midway Driller City Editor  
Taft Midway Driller, July 6, 2005

A proposed new rule designed to cut air pollution in the San Joaquin Valley could have a chilling effect on new development.

One local developer said if the San Joaquin Valley Air Pollution Control District adopts Rule 9510, it would immediately affect a housing development being planned for west Taft.

Bob Colston said after reading the proposal from the SJVAPCD that adoption of the new rule would force him to cut a new Parkview Village development from 66 homes to 49 homes to avoid potentially expensive compliance costs.

If adopted by the agency, charged with overseeing air quality in the region, the new rule would require all substantial new development - residential or commercial - to come up with, mitigation for the air pollution caused by automobile traffic generated by the homes or businesses.

The air basin is still not in compliance with federal clean air standards, so the SJVAPCD is required by law to implement more stringent regulations to curb air pollution.

Rule 9510, called Decreasing Emission Significant Impact from Growth and New Development (DESIGN), would apply to any development expected to create at least two tons per year of pollution emissions to take steps to reduce emissions by on-site mitigation steps such as making developments bicycle and pedestrian friendly, designing energy efficient buildings, incorporating mass transit and installing infrastructure for telecommuting and video conferencing.

If those measures aren't enough to curb additional pollution to acceptable levels, then the developer would be required to purchase off-site reductions.

The reductions would be obtained through the air district's incentive programs that fund projects such as low-emission fleet vehicles, bicycle infrastructure, public transportations subsidies and a proposed vehicle scrapping program.

It is those costs that have Colston concerned.

He is still in the planning stages of what he hopes will be a 66-home development in western Taft.

But he said last week that Rule 9510 could force him to cut the size of the development to just 49 homes to avoid the potential higher costs.

He said the measure could increase the cost of new homes and curtail new construction.

Rule 9510 applies to all residential development of 50 homes or more; commercial buildings with 2,000 square feet or more of space; 10,000 square feet of government space, 25,000 square feet of industrial or education space and 50,000 square feet of office space.

## **Kettleman City Landfill To Add Bioreactor Just Add Water**

by Miles Shuper  
Valley Voice Newspaper, July 7, 2005

Kettleman City - A new test facility designed to break down trash faster resulting in maximizing landfill space should be in operation by the end of this year at the huge Chemical Waste Management dump site near Kettleman City.

Last month the Kings County Planning Commission gave unanimous approval for Chemical Waste to proceed with plans for it's bioreactor, allowing trash to be broken down quicker by soaking it in wastewater. Company officials claim the bioreactor process will allow the company to take into 600 more tons of municipal waste daily and extend business operations on Saturdays.

The dump site, which contracts with Kings County to receive non-recyclable garbage from unincorporated areas also receives trash from the cities of Hanford, Lemoore and Corcoran in addition to Tulare County and the City of Visalia.

Chemical Waste Management is the nationwide company which operates the huge disposal site in the Kettleman Hills three and one half miles southwest of the residential areas of Kettleman City.

About 560 tons, (about two dozen truck loads) of non-recyclable trash is trucked to the Kettleman City site daily from Waste Management transfer station on Lovers Lane in southeast Visalia.

Bioreactor technology isn't something new, it's been around for at least a decade, but Kettleman Hills will be the first in the San Joaquin Valley and only the second in California. A Yolo County landfill currently is operating a bioreactor.

Waste Management, which operates about 290 landfills across the country has 10 other bioreactors running, according to Bob Henry, operations director of the Kettleman hills facility. Henry thinks bioreacted landfills will become more commonplace soon because they are more efficient, reduce air pollution as well increase a site's capacity.

Henry detailed four beneficial aspects of bioreactors: (1) added capacity in landfills, (2) accelerated rates of at which organic gases are emitted and disposed off, reducing overall air pollution, (3) generation of sufficient gases allowing more co-generation fuels, and (4) economic disposal system of waste water.

In approving the conditional used permit, the Kings Planning Commission adopted a mitigation monitoring plan to insure Waste Management's project lives up to its promises. An environmental impact report, prepared by CH2M Hill, an engineering firm, found that there will be no threat to groundwater posed by potential seepage from the plastic lined landfill.

Adding a bioreactor to an existing landfill, such as Kettleman Hills, increases the capacity by 25 percent. A new landfill starting out with such a system would expect to have an increased capacity of up to 40 per cent, he said. Using those calculations, the company expects to be able to take in the estimated 600 tons per day. With landfill operations costing more and more local governments could feel some relief.

With faster generation of gases, mainly methane, comes a faster burn-off, thus reducing the amount of air pollution. Traditionally, Henry explained, where gases might seep out into the air slowly for up to sixty years. A bioreactor landfill should burn out in 15 years, because the amount of gas produced per minute is about tripled in arid climates.

The waste water used to breakdown the garbage will come from normal seepage in the compressed garbage. In addition, waste water from other sources, especially facilities producing beverages, such as soft drinks or others with some sugar content, will be trucked into the site. This not only creates a cheaper means of disposing of waste water, but also cuts the amount of waste water going into municipal and private waste treatment facilities, he explained.

## **Planada's blueprint for growth OK'd**

Scott Pesznecker

Merced Sun-Star, July 6, 2005

The county-approved blueprint for Planada's growth does not violate the California Environmental Quality Act, a judge decided.

Merced County Superior Court Judge Ronald Hansen struck down a lawsuit two weeks ago that has been blocking the Planada Community Plan for more than a year.

A signed judgment is expected in the next few weeks, Merced County Counsel Ruben Castillo said.

With local environmentalists' lawsuit no longer a threat, Merced County officials will start working to rezone areas of Planada as called for in the community plan. Among the changes: The center of town will be rezoned as "mixed use" to allow for a blend of residential, office and commercial space, Merced County Planner James Holland said.

"It's a good plan," Holland said. "It's being supported by the community, and it's a product of the community's thinking. We as a county and planning department are looking forward to getting down to business and getting it implemented."

Environmentalists filed suit because they said the county should have paid for an environmental impact report to study the plan before adopting it.

The group that filed the lawsuit includes the San Joaquin Raptor Rescue Center, Protect Our Water, Central Valley Safe Environment Network, the Planada Association and Plainsburg resident Bryant Owens.

Marsha Burch, the group's Davis-based attorney, could not be reached to comment about whether her clients plan to appeal the ruling. Lydia Miller, director of the San Joaquin Raptor Rescue Center, also could not be reached.

Castillo did not want to comment on the chance of an appeal.

Merced County planners said an appeal wouldn't surprise them, but they said they won't stall the plan anymore.

"We can't just sit and hold everything static all the time," Planning Director Bill Nicholson said. "We've waited a year and a half already."

The 170-page community plan, which supervisors approved in December 2003 to become part of the county's general plan, is intended to guide the rural, unincorporated area's growth in coming years.

At an April court hearing, Burch said the plan doesn't adequately address how new traffic in Planada will affect air quality, or how the town's wastewater treatment plant will accommodate new housing. She also said the plan can't guarantee the protection of agricultural conservation land. She also said the plan gives too much leeway to developers.

Burch also said the county should have updated its general plan before adopting the Planada document.

County attorneys said previous studies of the Planada area nullified the need for an EIR. Also, county planners have pledged to approve no new major developments in Planada until new infrastructure is guaranteed.

Holland said he's glad the lawsuit is done.

"My hope will be that we can move forward," Holland said. "I see this as being in the best interest of the community to move on and get this thing implemented."

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## **News from the San Joaquin Valley**

The Associated Press

Published in the San Francisco Chronicle, July 6, 2005

Fresno, Calif. (AP) -- Fireworks set off during Fourth of July celebrations rained down a shower of dust, soot and other tiny lung-damaging particles over the Central Valley, sending pollution levels skyrocketing, local air regulators said.

Bakersfield was the most affected by the pollution. For about an hour, particulate pollution there jumped to nearly 10 times the level at which the air is considered unhealthy. In Fresno, pollution

was three times higher than the health standard. In Modesto, it was four times higher, and in Corcoran, it was six times higher.

"We're not sure if we're getting those high numbers because the monitors are downwind of a fireworks display or what," meteorologist Shawn Ferreria of the San Joaquin Valley Air Pollution Control District said of Bakersfield's particularly high ratings.

He said the air cleared "quite a bit" after midnight, but there were some lingering effects of the explosions the next day.

The tiny flecks - they're called PM 2.5, because they're 2.5 microns in diameter - can contain metals from the coloring of the fireworks.

The specks are microscopic. About 30 of them can fit in a cross-section of a human hair. But they can trigger asthma and lead to long-term lung disease.

It's unusual for the Central Valley to have violations of the particle pollution health standard in the summer. Normally that's a problem in winter, when fireplaces are adding soot to the air. During the summer, the biggest problem normally is smog, which forms when exhaust and other chemicals bake in atmosphere at high temperatures.

## **Railroad smog deal draws fire**

By Chris Bowman, Bee Staff Writer  
Sacramento Bee, July 7, 2005

A quietly negotiated pact between California smog regulators and the nation's two largest railroads is engineered, all sides agree, not only to hasten the cleanup of smoking train yards but also to derail local efforts to pass tougher rules, much to the fury of Southern California smog enforcers and activists.

The critics have three big complaints. They say the deal excluded the public, particularly railyard neighbors; allows railroads to buy their way out of cleanup; and inhibits other agencies from taking stronger action.

The agreement, which took effect last week, requires Union Pacific Railroad and Burlington Northern Santa Fe Railway to "significantly" reduce diesel emissions in and around railyards statewide over the next 10 years.

Locomotives are among the least regulated and most polluting sources of toxic soot and smog in the Sacramento region, particularly in neighborhoods downwind of the busy Union Pacific hub in Roseville, and in the Los Angeles basin.

Air-quality regulators in the Sacramento area said they have no quarrel with the statewide deal, though they were surprised they had not been included in the negotiations.

The accord does not override a local pact that contains many of the same emission-reduction promises for the Roseville yard. It does, however, effectively preclude any effort to adopt more stringent regulations.

Measures in the statewide deal include the elimination of "nonessential" idling, conversion to cleaner-burning diesel fuel six years earlier than federally required and prompt repair of locomotives spewing dark smoke.

Officials with the South Coast Air Quality Management District and advocates for railyard neighbors in Los Angeles and San Bernardino counties say the agreement undercuts far stronger emissions restrictions under consideration by the state Legislature and the South Coast air district.

The railroads won a provision that discourages regulatory agencies or state lawmakers from imposing tougher controls.

For example, if a local air district imposed a time limit on locomotive idling that is tighter than that in the state agreement, the railroads could back out of idling reduction programs in every other region of California. "This provision is intended to stymie local government efforts to address community problems," said Barry Wallerstein, executive officer of the South Coast district.

State air board officials said they believe the South Coast proposals either duplicate rules they've already drafted for statewide adoption or invite litigation from the railroads.

In announcing the agreement on June 24, the state air board, known for aggressively regulating the cleanup of automobile engines, said it does not have nearly as much authority over railroads.

Federal law protects railroads, airlines and shipping lines from most state and local intervention on grounds that control by multiple jurisdictions could hobble interstate commerce. The federal Environmental Protection Agency does require cleaner-burning engines in new and rebuilt locomotives. But it will take years to see significant results; locomotive engines last 30 to 40 years.

State air board officials said they believe their nonregulatory approach (a memorandum of understanding, which is akin to a contract) will avoid legal battles and clean up railyard pollution much faster than would occur under federal EPA rules.

"We don't see how we could have done much better, given that we can't set our standards for locomotives," said Michael Scheible, the air board's deputy executive officer.

For the railroads' part, officials say the agreement that covers all 36 railyards in California provides the certainty and uniformity needed for efficient transport of goods. "We are really a traveling factory statewide, so to have regulations that apply only within Southern California would make operations impossible," said Kathryn Blackwell, spokeswoman for Union Pacific.

South Coast air district officials say their proposed measures would not interfere with rail operations. But the railroads would not be able to buy their way out of pollution cleanup, they said.

Under the statewide deal, the railroads can't be forced to clean up - but only to pay penalties.

For any locomotive idling in excess of the limits in an urban railyard, the state can impose fines up to \$400 for the first day of violation, \$800 for the second and \$1,200 for the third, and for any subsequent day in the same year. Additional penalties up to \$40,000 per month apply if a railroad simply fails to implement any one of seven required cleanup measures.

Fourteen environmental and neighborhood groups have petitioned the state smog agency's governing board to suspend the accord signed by its executive officer, Catherine Witherspoon, until the public and the board members themselves have reviewed it. "It is precisely the pressure from outside sources that could have helped strengthen the MOU (memorandum of understanding) and removed its many loopholes," the coalition states in its June 30 request.

Barbara Riordan, the board's interim chairwoman, earlier rejected a similar request by the South Coast air district, noting that the agreement requires ample public participation as part of required health risk studies at the railyards.

## **Ag News**

Valley Voice Newspaper, July 7, 2005

Farmers have a new incentive to convert their irrigation pumps to electricity from diesel power. The California Public Utilities Commission has approved a program that offers **lower electricity rates to farmers who convert their pumps**. A California Farm Bureau spokeswoman says the new rates could be a significant help to farmers who make the switch. Air quality regulators have enacted stricter rules governing use of diesel engines for pumps and other equipment.

## **Gaylord A. Nelson, Founder of Earth Day, Is Dead at 89**

By Keith Schneider

New York Times Online, July 4, 2005

Gaylord A. Nelson, a former senator from Wisconsin who was one of the architects of America's modern environmental movement and the founder of Earth Day, died yesterday in Kensington, Md. He was 89.

The cause was cardiovascular failure, Bill Christofferson, a family spokesman, told The Associated Press.

A liberal Democrat who also served as governor of Wisconsin, Mr. Nelson was known for his candor and independence. He was one of only three senators who voted against the \$700 million appropriation that began the nation's expanded involvement in the Vietnam War.

But Mr. Nelson was most distinguished on Capitol Hill as an early and ardent environmental leader. On March 25, 1963, in his first Senate speech, he framed the declining condition of the nation's air and water as a national issue. "We need a comprehensive and nationwide program to save the national resources of America," he said. "Our soil, our water and our air are becoming more polluted every day. Our most priceless natural resources - trees, lakes, rivers, wildlife habitats, scenic landscapes - are being destroyed."

The speech coincided with Mr. Nelson's successful private effort to lobby President John F. Kennedy to embrace environmental protection as a priority. In September 1963, President Kennedy embarked on a five-day, 11-state tour to talk about conservation.

The president's attention stirred political interest. In 1964, Mr. Nelson was part of the group of lawmakers who sponsored the Wilderness Act, which permanently safeguarded millions of acres of federal land. He worked with the Johnson administration to pass the federal Wild and Scenic Rivers Act in 1968. Among the first eight rivers protected by the law were the St. Croix and the Namekagon in Wisconsin. He also helped the Interior Department establish national scenic seashores and lakeshores, including the Apostle Island National Lakeshore in Wisconsin along Lake Superior.

Still, Mr. Nelson was unsatisfied. "All across the country, evidence of environmental degradation was appearing everywhere, and everyone noticed except the political establishment," he said years later.

On a speaking tour of the West in 1969, Mr. Nelson came up with an idea for what he called "a huge grass roots protest" modeled after that era's campus "teach-ins" to oppose the Vietnam War. At a conference in Seattle in September, he announced that the protest would take place the following spring. The date chosen was April 22, 1970, a Wednesday.

More than 20 million Americans marked the first Earth Day in ways as varied as the dragging of tires and old appliances out of the Bronx River in White Plains and campus demonstrations in Oregon. Mayor John V. Lindsay of New York closed Fifth Avenue to vehicles. Congress shut its doors so lawmakers could participate in local events. Legislatures from 42 states passed Earth Day resolutions to commemorate the date.

"The reason Earth Day worked," Mr. Nelson said, "is that it organized itself. The idea was out there and everybody grabbed it. I wanted a demonstration by so many people that politicians would say, 'Holy cow, people care about this.' "

Months later, President Richard M. Nixon established the Environmental Protection Agency. In 1970's, Mr. Nelson was at the center of legislative activity that resulted in the 1970 Clean Air Act, revisions in 1972 to the Clean Water Act, and passage of the Endangered Species Act. Mr. Nelson was a principal sponsor of laws that preserved the 2,000-mile Appalachian Trail, established fuel efficiency standards in automobiles, sought to control damage from strip mining and led to a ban on the insecticide DDT.

In 1995, President Bill Clinton awarded Mr. Nelson the Presidential Medal of Freedom, the nation's highest civilian honor. "As the father of Earth Day, he is the grandfather of all that grew out of that event," President Clinton said. "He inspired us to remember that the stewardship of our natural resources is the stewardship of the American dream."

Mr. Nelson was defeated in 1980 in the race for his fourth Senate term. He joined the Wilderness Society as a counselor, where he worked until his death.

Gaylord Anton Nelson was born on June 4, 1916, in Clear Lake, Wis. His father was a physician and his mother was active in civic life. His great-grandfather was a founder of the state Republican Party. When Mr. Nelson was a boy, his father took him to hear Robert M. LaFollette, the leader of the Progressive Party, deliver a speech from the back of a train, an event that the future senator said inspired his interest in politics. After graduating from San Jose State College and the University of Wisconsin Law School, Mr. Nelson served about four years in the Army and saw action as a first lieutenant on Okinawa.

Mr. Nelson's political career began in 1946 when he ran as a Republican for a State House seat and lost. Two years later, after changing parties, he won a State Senate seat and served 10 years. In 1958 he was elected governor. Among his most notable achievements was enacting the Outdoor Recreation Acquisition Program, a \$50 million state land preservation program financed by a 1-cent per pack tax on cigarettes that was the first conservation program of its kind in the nation. In 1962 Mr. Nelson defeated a four-term Republican senator, Alexander Wiley, to win his first Senate term.

He is survived by his wife of 57 years, Carrie Lee Nelson; two sons, Gaylord Jr. and Jeffrey; a daughter, Tia; and three grandchildren.

## **Biggest U.S. Power Generator Goes on Trial**

By Erica Ryan, Associated Press Writer

Published in the San Francisco Chronicle, July 6, 2005

(07-06) 15:51 PDT Columbus, Ohio (AP) -- The nation's biggest power generator broke clean air rules by failing to cut emissions at plants in four states that foul the air in the Northeast and harm health, a federal lawyer argued Wednesday.

The case against Columbus-based American Electric Power is the biggest among several filed in the waning days of the Clinton administration against utilities in the Midwest and South.

The government and eight states say AEP broke the law when it made major modifications to nine coal-burning plants without installing equipment that would have cut pollution drastically.

The absence of the equipment means the plants continue to spew sulfur dioxide, nitrogen oxide and soot that cause acid rain, smog and haze downwind from Ohio. The government says the pollutants lead to severe respiratory problems, including asthma and bronchitis.

"The plaintiffs expect to establish that AEP's conduct has resulted in environmental harm," government attorney Leslie Bellas said in opening statements.

AEP and the utilities have argued that work done on the plants was routine maintenance, which doesn't trigger the requirements for expensive pollution controls.

AEP might be required to pay billions of dollars for pollution controls and millions of dollars in penalties if the judge decides it violated the Clean Air Act.

The work done at the plants was common throughout the company and the industry, AEP lawyer Mike Miller said. He said such projects "do not necessarily translate into increased generation or emissions."

Bellas said the modifications extended the life expectancy of the plants built in the 1950s and '60s from 35 or 40 years to 50 or 60 years. The changes also enabled the plants to produce more electricity, which increased pollution, she said.

Judge Edmund Sargus ruled for the government in the first case to go to trial - against an Ohio Edison plant. The company, owned by Akron-based FirstEnergy, later agreed to pay \$1.1 billion for equipment to control emissions at its W.H. Sammis plant and three others and \$33.5 million in fines and environmental initiatives.

A ruling in a similar case in Virginia gave a victory to a utility company last month. The 4th U.S. Circuit Court of Appeals said Duke Energy Corp. did not need the EPA's permission for improvements made between 1988 and 2000 at eight of its plants.

The Bush administration has rewritten the EPA regulations that Clinton used to sue the utilities. Those new regulations have been placed on hold while federal courts review challenges to them.

The government has settled nine cases against power generators that it says will reduce emissions by 940,000 tons a year through the installation of \$5.5 billion worth of pollution controls.

The states suing AEP are New York, New Jersey, Connecticut, Massachusetts, Vermont, New Hampshire, Rhode Island and Maryland.

AEP has more than 5 million customers in 11 states. Its nine plants on trial are in Ohio, Indiana, Virginia and West Virginia.

### **Where coal is king, everything else is sacrificed**

#### **The air is foul with soot and poison gases, and the farmers' land is dry and sinking**

San Francisco Chronicle

Jehangir S. Pocha, Chronicle Foreign Service, July 7, 2005

Xia Shi Gou, China -- For miles in every direction from this dusty coal-mining village, the soil, plants and trees are gray with soot, as if a light fall of black snow has just fallen. The air is heavy with eye-stinging fumes, and the land is rutted.

This is the dark underbelly of modern China, the industrial reality that everyone knows exists, but no one wants to see.

China's miracle economy -- the world's fastest-growing, at about 8 percent -- is largely fueled by coal, which provides roughly three-fourths of its energy. Villages just like this one in Shanxi province produce a quarter of the 2 billion tons of the coal China will burn this year. That's almost 20 percent more than last year -- and China's demand for energy is expected to double over the next decade.

Over the last 10 years, reckless mining by two massive, rusty, smoke-spewing state-owned coal companies has fill the air here with particulates. As the companies have dug into the earth, they have damaged underground water supplies that have drained away, depleting the local water table.

"The gap this left in the earth has caused the topsoil to crack and collapse," said Guo Ai Mi, 43, a local farmer. Lengths of highways and entire fields have fissures running through them, and more appear all the time.

Since Shanxi is one of the driest places in China, and the Fen River, a local tributary of the mighty Yellow River, ran dry years ago, farming here is now almost impossible, Guo said.

As a result, many people here have done the only thing they could to survive -- they've begun mining illegally for coal themselves.

"There's so much of it around here, people just go anywhere they like and start digging," said Wu Zhan Wei, 43. "What else can we do?"

Coal is responsible for making China one of the world's worst polluters. Last year alone, China discharged more than 25 million tons of acid rain-causing sulfuric, nitric and calcic emissions into the atmosphere, according to the Chinese Research Academy of Environmental Sciences. With industrial growth still running at about 9 percent a year, economists estimate China's energy consumption will double by 2010. Coal will continue to supply about half of China's energy, despite the country's increasing investments in wind, solar, hydro and nuclear energy.

Since there also is no accounting of exactly how much coal is produced in China's illegal coal mines, there are no reliable estimates of how many additional tons of greenhouse gases they spew into the atmosphere. Illegal coal is generally of poor quality and sold to private homes and small businesses with inefficient burners, so the pollution it produces is estimated to be twice the normal amount, according to China's State Environmental Protection Administration.

Local authorities in Shanxi say more than 500,000 people work as illegal miners in about 15,000 so-called cottage mines that have sprouted across the province over the last two years. Some of these mines are less than 20 feet deep, dug by families who then take the black rubble they collect to local wholesalers. Others are large, full-scale operations that produce as much as 10,000 tons of coal a month.

The illegal miners ignore health, safety and environmental rules, such as those on protective equipment and clothing miners must use, the depths to which mines can quarry in dangerous zones, and the ecological restoration of exploited areas.

Though in recent months the government has closed many of these mines, Guo says it is routine for illegal miners to bribe officials to get them reopened.

"It's hard to argue with demand," said Wu Gang, a journalist who covers Shanxi's coal industry. "Even big power and steel companies come here to buy the illegal coal. They have no choice; they need it."

Not only does China need coal, it needs cheap coal. Illegal miners sell theirs for as little as \$10 a ton -- about 20 percent less than the market price.

The provincial government declined to discuss the problems associated with illegal mining. But for local residents, the collateral damage from the presence of these low-cost operations is often catastrophic.

"We're dying early here," said Ma Jun Sheng, 43, the only doctor within miles of this village. "It's dry. There's coal dust everywhere, which causes lots of disease -- lung cancer, tuberculosis, asthma. And then there are the accidents. I've been here 16 or 17 years, and there is one every month. The most common problem is collapses. Sometimes the people don't know about the gases that get released, and so explosions also happen."

At a large-scale illegal mine a mile outside Xia Shi Gou, a rusty old derrick connected to a dilapidated, almost toy-like railway track groaned as it hauled coal out of a quarry below. Men wearing no protective gear, not even face masks to keep coal dust out of their lungs, shoveled the "black gold," as it is called here, into open trucks. All the winches, rails and sluices around were so rickety that they seemed to operate only thanks to the prayers local women confess to saying every time their men leave for work.

In the villages around here, it's easy to tell which men -- and sometimes children -- work the mines. Their hands and clothes are covered in soot, and their gait seems strained because of the weight of the heavy equipment they use all day. Their breathing is raspy and their eyes yellow from the toxic gases that get released when coal is quarried.

Yet coal mining is good work for peasants in China's interior provinces, where government cuts in social spending forced by Beijing's market reforms have made life hard.

Ye Yuen Wen, 39, a farmer from southwestern Sichuan province, said he had come here to work because his six-person family made only \$600 a year from farming back home. Ye said he earned three times as much for carrying coal from mine shafts to waiting trucks.

Though he said he knew the work was dangerous, he had no idea just how deadly it could be.

No precise statistics exist for the injuries and deaths suffered by workers in illegal coal mines. However, their safety record is bound to be worse than that of China's official mines, which are the deadliest in the world. Almost 6,000 miners died in China's legal mines last year, according to government reports. That's about 75 percent of the mining deaths in the world, even though China produces less than a third of the world's coal.

China's dismal safety record does not result from inadequate mining laws, "but their poor implementation as well as insufficient investments in safety, poor construction, lax management and inadequately trained workers," said Li Yizhong, the minister in charge of the State Administration for Work Safety.

But for Guo, the farmer, the problems from coal are hitting closer to home. His house is falling apart because of the movement in the ground from excessive mining. The floor is cracked and wobbly, and there are six-inch-wide gaps at the corners.

"We've been demanding the government move us all to a new village, but they're not offering us enough compensation," said Ma Zhen, 42, Guo's sister. "They're the ones who forced us to go to the coal mines, and now they're blaming us for bringing our own homes down."

## EDITORIAL

### **Odd Man Out**

LA Times, July 7, 2005

President Bush conceded Wednesday that global warming is a real environmental problem and that human-caused pollution worsens it. "Listen, I recognize the surface of the Earth is warmer," Bush told reporters in Denmark, "and that an increase in greenhouse gases caused by humans is contributing to the problem."

Finally, in the hours before the G-8 summit, he grudgingly joined the other leaders of developed nations in showing respect for the research on climate change instead of calling for more studies and appointing oil-industry lobbyists who soft-pedal scientific reports.

But the president's new stance throws into even starker relief his refusal to join with other nations in taking substantive steps against climate change. The potential for long-term disaster, as Bush's strange equation adds it up, isn't equal to the importance of short-term economic protection.

Instead of capping carbon dioxide emissions, Bush wants the G-8 nations to invest in alternatives to fossil fuels. He should do both; companies under regulatory mandate to stem environmental damage typically respond with technological breakthroughs.

The president remains the odd man out in global environmental affairs, especially compared with Gov. Arnold Schwarzenegger, who made an international splash over the weekend with a bylined article in London's Independent newspaper that called for stronger action against global warming. Bush appeared isolated from world opinion and from a progressive Republican outlook at home.

Nor was it diplomatic of the president to refer to his let's-all-share-technology proposal as the "post-Kyoto era," as though the international agreement to combat global warming hadn't taken effect in February. The U.S. was not among the 141 nations that signed on, even though it is the world's biggest emitter of greenhouse gases.

Ranked second, though, is China, and this is where Bush has been unfairly ignored on his biggest complaint about the Kyoto Protocol. Developing nations were exempted from emission reductions, no matter how bad their pollution might be. China, where greenhouse-gas emissions are quickly rising, could soon eclipse the U.S. as the top global-warming polluter. If it goes ahead with construction of dozens of coal-fired plants, the added pollution could outweigh measures by other nations to cut back.

With gridlocked cars replacing bicycles as primary transportation, and Chinese oil company CNOOC Ltd. bidding to buy Unocal Corp., China looks less like an underdeveloped backwater and more like an industrialized nation ready for the big leagues. Its game should include commitments to long-term caps on carbon dioxide.

That doesn't excuse the more prosperous U.S., with a far smaller population than China and higher pollution output, from responsibility to lead instead of lagging behind with hopeful talk of voluntary cutbacks.

China, along with India and Brazil, two other big greenhouse-gas polluters, will have representatives at the G-8 meeting, and British Prime Minister Tony Blair was expected to push for more emission controls in China as well as the United States. If Blair succeeds, Bush will have no more excuses for his "post-Kyoto" rhetoric.