

## **Almond growers combat dust clouds kicked up during annual harvest**

By Juliana Barbasa, Associated Press Writer  
In the Bakersfield Californian, Wednesday October 6, 2004

FRESNO, Calif. (AP) - Almonds are one of California's most valuable crops, worth \$1.5 billion a year. But harvesting them comes with its own high price, an estimated 11,220 tons of dust.

The dust, kicked up by the shaking of trees and sweeping of orchards, forms yet another airborne health hazard in one of the nation's most unhealthy air basins.

And farmers are taking aggressive actions to make sure less dust is added to the stew of pollutants hovering over the Central Valley, ideal for almonds with its cold winters and long growing seasons.

"Understand that dust is a huge problem for us," said Jack Efird, who also grows walnuts, prunes and grapes. "I've been trying to do everything I can to minimize dust."

Efird and his fellow growers received a directive this summer from the air officials to control dust during the annual harvest, which typically runs from late July through October.

Getting the crop to market - this year, just more than 1 billion pounds of nuts on 550,000 acres - takes three steps.

A machine grabs and shakes each tree, loosening the ripe nuts. Another piece of equipment then goes along each row, raking in the nuts that are within reach and blowing the rest to where they can be reached. A third engine drives by each tree, sucking up the almonds and blowing off most of the leaves, dust and debris.

This process raises nearly 41 pounds of microscopic dust particles each time an acre of almonds is harvested. A single orchard can be harvested up to three times.

By comparison, wheat raises 5.8 pounds of harmful dust per acre harvested and cotton 3.4 pounds, according to the California Air Resources Board.

The Almond Board of California is financing research to measure just how much dust comes off the orchard floor and what kinds of equipment and practices could best help reduce plumes of fine powder kicked up during harvest time.

"We want to give growers as many options as possible, depending on their situation," Colleen Aguiar, the Almond Board's industry relations manager, said from the board's office in Modesto.

Already, growers are using new equipment with more efficient air systems; limiting the number of passes made through orchards for each harvest; harvesting more often at night, when winds are lighter and moisture levels are higher; and watering the roads that surround orchards.

Some practices are within reach of all farmers, said Teresa Cassel of the University of California, Davis, who has been measuring dust in orchards since 1995.

Examples, she said, are driving slowly on dusty roads and trying to harvest two types of almond trees at once so the machinery doesn't have to go up and down each row several times.

Some farmers already are using a new type of sweeper that keeps dust to a minimum.

One is grower Scott Hunter, who recently watched a California Special sweeper as he stood between rows of Butte and Padre trees.

The sweeper shoots some dust, but nothing like the plumes that almond harvesting has been known to raise.

"This industry provides food and jobs for people all over this valley," Hunter said. "We've got to find ways of meeting the needs of the farmer and the environment."

### **California almond industry at a glance:**

California almond production:

- 1984, 590 million pounds
- 1994, 735 million pounds
- 2004, 1.1 billion pounds

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Acreage devoted to almond production:

- 1984, 381,000 acres
- 1994, 433,000 acres
- 2004, 550,000 acres

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Highest producing counties, with acreage and crop value:

- Kern, 89,936 acres, \$280 million
- Merced, 85,476 acres, \$212 million
- Fresno, 65,018 acres, \$189 million
- Madera, 55,200 acres, \$155 million

### **Almond growers combat dust clouds kicked up during annual harvest**

By Juliana Barbassa, Associated Press Writer

In the S.F. Chronicle, Wednesday, Oct. 6, 2004

FRESNO, Calif. (AP) -- The almond harvest is one of the most valuable for California's agriculture industry, worth \$1.5 billion a year and producing 82 percent of the world's almonds.

It also produces a dangerous side-effect. The annual shaking of trees and sweeping of orchards creates an estimated 11,220 tons of dust, forming another airborne health hazard in one of the nation's most unhealthy air basins.

As part of a larger effort to reduce pollutants from farms, almond growers are now taking aggressive actions to make sure fewer particles from their orchards are added to the stew of pollutants hovering over the Central Valley.

"Understand that dust is a huge problem for us," said Jack Efird, who grows almonds, plus walnuts, prunes and grapes near Hanford. "I've been trying to do everything I can to minimize dust."

The local air board told farmers in July that they had to devise plans to control dust during the annual harvest, which typically runs from late July through October.

This year's harvest is expected to produce just more than 1 billion pounds of almonds, approaching the record of two years ago.

Almonds are picky, growing only in Mediterranean climates with cold winters and long growing seasons. The Central Valley offers ideal conditions.

Growing demand has increased the number of acres devoted to almonds, now about 550,000 acres in the valley.

But harvesting the crop is a dirty business. A machine grabs and shakes each tree, loosening the ripe nuts. Another piece of equipment then drives along each row, raking in the nuts that are within reach and blowing the rest to where they can be reached.

A third engine drives by each tree, sucking up the nuts and blowing off most of the leaves, dust and debris.

This process raises nearly 41 pounds of microscopic dust particles -- called PM10 -- each time an acre of almonds is harvested. A single orchard can be harvested up to three times.

By comparison, wheat raises 5.8 pounds of harmful dust per acre harvested, while cotton raises 3.4 pounds, according to the California Air Resources Board.

Among the options almond growers are pursuing to keep dust levels down:

- \* Using new equipment with more efficient air systems to reduce the amount of dust kicked up when orchards are swept.
- \* Limiting the number of passes made through orchards for each harvest.
- \* Harvesting more often at night, when winds are lighter and moisture levels are higher.
- \* Watering the roads that surround orchards.

The Almond Board of California is financing research to measure just how much dust comes off the orchard floor and what kinds of equipment and practices could best help reduce plumes of fine powder kicked up during harvest time.

"We want to give growers as many options as possible, depending on their situation," Colleen Aguiar, the Almond Board's industry relations manager, said from the board's office in Modesto.

The particles that concern the state's air board -- called PM10 because they are under 10 micrometers, or one-seventh of a human hair, in width -- can lodge themselves in the lungs, leading to asthma and respiratory diseases.

The Central Valley has the third highest concentration of particulate matter pollution in the country, behind Phoenix and the greater Los Angeles area, according to state air officials. Besides dust, the particles also consist of diesel exhaust, soot and ash, and organic compounds from dairies.

Teresa Cassel, a researcher at the University of California, Davis, has been measuring dust in orchards since 1995.

"We're trying to understand exactly how much the district could expect farmers to be able to take their PM10 emission into their own control, and how much of it may be outside of their control," Cassel said.

Some practices are within reach of all farmers, she said. Examples are driving slowly on dusty roads and trying to harvest two types of almond trees at once so the machinery doesn't have to drive up and down each row several times.

Some farmers already are using a new type of sweeper that keeps dust to a minimum.

One is Merced County grower Scott Hunter, who recently watched a California Special sweeper as he stood between rows of Butte and Padre trees.

The sweeper shoots some dust, but nothing like the plumes that almond harvesting has been known to raise.

"This industry provides food and jobs for people all over this valley," Hunter said. "We've got to find ways of meeting the needs of the farmer and the environment."

## **Citgo reaches Clean Air Act settlement requiring \$320 million in pollution controls**

By Curt Anderson, Associated Press Writer

In the S.F. Chronicle, Wednesday, October 6, 2004

WASHINGTON (AP) -- Citgo Petroleum Corp. will install \$320 million in pollution controls at six refineries and pay a \$3.6 million fine to settle a federal lawsuit alleging Clean Air Act violations, the Bush administration announced Wednesday.

The settlement requires Citgo to reduce yearly emissions of nitrogen oxide by 7,184 tons and sulfur dioxide by 23,250 tons. Both can cause serious respiratory ailments and worsen cases of childhood asthma.

The refineries covered in the agreement among the company, the Justice Department, Environmental Protection Agency and four states, represent 5 percent of the nation's refining capacity.

"Today's settlement means we're one step closer to bringing all of America's oil refineries into compliance with our Clean Air Act standards, which means cleaner air for our communities and citizens," said Thomas Sansonetti, assistant attorney general for the Justice Department's environment division.

The Citgo refineries are in Corpus Christi, Texas, which has two facilities; Lemont, Ill.; Lake Charles, La.; Paulsboro, N.J.; and Savannah, Ga. The states of Illinois, Louisiana, New Jersey and Georgia joined in the agreement.

The Citgo settlement is the 12th reached under an EPA initiative begun in December 2000. Thomas Skinner, EPA's assistant administrator for enforcement, said the agreements have cut air pollution by 200,000 tons a year at 48 refineries in 24 states.

## **LA's Worsening Traffic Jams Could Bring More Jobs Here**

Valley Voice, Wednesday, Oct. 6, 2004

*San Joaquin Valley* - The news in recent weeks that Southern California has the nation's worse traffic jams followed by the Bay Area may not be a surprise to anyone. While the image of the slow crawl commuters suffer through daily may be the first thing that comes to mind, it is the never ending caravans of backed up supply trucks that may mean more business, warehouses and factories will spill over the Grapevine in coming years to break away from this stifling congestion.

For better or worse, businesses will increasingly look to the San Joaquin Valley as a supply and manufacturing depot to get goods in and out of both the Southland and Bay Area in coming years.

In the past few decades as LA proper has built out, it has been the expansion of the Inland Empire that has been the relief valve for companies to supply the region. But it's no relief today up Interstate 10 as the area east of LA has now received a 500% increase in the amount of time spent in traffic per year from 9 hours in 1982 to 57 hours per year in 2002 making this region the nation's 5th worst urban area for traffic tie-ups.

The rush hour traveler can expect to spend 93 hours a year in LA's traffic jams, says a new report from the Texas Transportation Institute who issued their findings just this month.

Feeding the truck traffic into the San Bernardino area is the connection to the LA/Long Beach port area for goods arriving by ship that are hauled to warehouses and transfer centers in the Inland Empire with some 35,000 truck trips daily. That number is expected to triple in the next two decades.

Boosting port traffic has been the expansion of global trade and the increase in the US trade deficit as America imports more goods from abroad, particularly Asia.

A recent state report suggest that between 1995 to 2012 the state's

- Population will grow 40% to 44 million
- Consumption of goods will grow 50%
- Volume of goods moved will increase by 60%.

It's a scary thought.

As imports of products have surged in the past few years, LA's two big ports - together the world's largest - are helping to clog the highways along with old fashioned urban sprawl. Continued traffic through the big port of Long Beach has increased 175% since 1990, says the port authority.

The expansion of the LA ports like the expansion plans for LAX for air traffic, has generated a major outcry from communities nearby - in part due to [the air pollution effects](#) the diesel fueled ships cause and recent studies of the impacts on children's lungs.

Just to get freight in and out of the big ports they plan is push for nighttime delivery of goods to avoid the awful crunch of traffic on the Southland freeways.

To make matters worse, the state's transportation budget has slowed to a crawl itself as road projects takes a back seat to the state's need to balance its budget. This comes in a time of record home building in the Southland and statewide.

### **Historic supply region**

Tulare County has already been the supply region for LA just 170 miles away. It has become this with a simple business model - relocation here from more costly locations.

Witness the milk and citrus industry that has grown here as a wholesale transfer of the dairies that once existed in the LA basin that have been pushed out by urbanization. Today the food industry remains Tulare County's largest economic sector and with gridlock in LA that industry will grow here because companies need the ingredients for their own products. In the past decade those companies have expanded along the main highway and rail corridors of the Tulare Lake basin. Now the ethanol fuel producers will grow along the same corridors in a few years - uniting food with fuel.

But it's not just food processing and distribution that drive the central valley's economy. There has been big growth in Kern, Kings and Tulare counties in the past decades in warehouses and light manufacturing facilities that supply the California marketplace like the big IKEA furniture warehouse at the base of the Grapevine.

Tulare County EDC president Paul Saldana expects the central valley's strategic advantage to be to attract companies who can consolidate facilities in both the Bay Area and Los Angeles here shipping both north and south, the way Best Buy Electronics in Dinuba does. "Dinuba is their western US distribution center," he says.

One reason why an LA based company (like Big 5) decides to site its distribution hub in the Inland Empire is that their corporate office is there and they can manage their nearby distribution center more easily and put up with traffic, Saldana suggests.

But for a national company with facilities north and south, "consolidation is our best opportunity" to gain the jobs since the company saves big time with one main facility here instead of two more expensive one. Saldana says he expects a steady stream of such consolidations to Tulare County in coming years companies in smaller 50,000 to 150,000 square foot size.

One great advantage for us from both food companies and general merchandise distributors who serve the California market is that it appears less likely they will one day just fold their tent the way many large employers in the central valley have in the past few decades and just go away.

The Allen Group has built more than 700,000 square feet of industrial space at the Visalia industrial park and has several hundred acres available for industrial warehouse users at their Midstate 99 park - a location that offers the opportunity to reach a population of 35 million that's in a 300 mile overnight shipping radius.

Major retailers have found that the central valley is the right place for regional distribution of their goods including Sears in Delano, Best Buy in Dinuba, The Gap in Fresno, Walmart in Porterville and JoAnn Stores in Visalia.

### **Stockton's Plan**

If the LA port facilities, along with Oakland in the Bay Area, are clogged, smaller competitors like Stockton are looking to expand their own port facilities to provide an alternative for big ships likely to come into California. That community is seeking to dredge a deeper waterway to accommodate more ship traffic that will connect to the Highway 99-Union Pacific, BNSF and the I-5 corridor. Plans are underway to triple the size of the port that could bring in an additional 130

ships a year. Of course that would draw more truck traffic and all the [pollution](#) that goes along with both. Cleaner fuels could spell the difference.

Demand for central valley warehouse space has been shown with the purchase of the old Pirelli tire plant in Hanford now offering over 1 million square feet of space for companies looking for a warehouse away from the gridlock and high cost of an urban area. Not surprisingly this project is winning interest from companies looking to expand based in both LA and the Bay Area as a central point in the state to supply both regions. One company is expected to announce it will open next month in the renovated facility.

The Visalia industrial park has added over 1 million square feet of new industrial space in the past few years, not mainly from food companies, but from firms looking to take advantage of overnight shipping options to both the LA and Bay Area metro regions. Companies distributing a variety of goods from car parts to tuxedos, packaging to computers that fill block after block of tilt up concrete buildings just a mile off Highway 99.

Reaching all of California from Visalia has been the marketing mantra of UPS to attract business to its Visalia hub in the industrial park and has attracted several other competitors to do the same. A new truck terminal for Knight Transportation will add 100 new jobs for Tulare next year when the terminal is up and running along Highway 99 across from the Farm Show.

Tulare got some good news in recent weeks when a Paso Robles operation announced an expansion to Tulare to make medical devices because the company was having trouble finding people on the central coast to apply for jobs. The increasing cost of living for companies looking to maintain a steady workforce is getting harder in the coastal area as fewer people can afford homes. Again this has become a reason why companies might look at relocation of their facilities to the state's heartland - one of the few spots you can still buy a new 3 bedroom home for \$150,000.

The Allen Group makes a case for our "strategic location" to ship both to northern and southern California markets since all the major highways and rails come together in the southern part of the valley just a few hours away from each major metro region.

If congestion isn't a good enough reason for relocation - the central valley land cost advantage is convincing here at \$1 a square foot compared to \$4 a square foot in the Inland Empire and \$8 a square foot in LA.

### **Empty Trucks**

One factor cited by the Allen Group as a major reason why the Mid State 99 industrial park is cheaper to ship from than compared to other areas like Ontario or Reno is that there is an imbalance of freight shipped on trucks hauling international freight here from the LA ports, but running empty back to LA. Assuming less than truckfull (LTL) shipping within California, Visalia enjoys a freight advantage over our competitors and shippers here can get a discount shipping into the southland.

Statewide planning to move goods is studying ways to deliver more goods - by rail like Alameda corridor out of the LA port to connect with Union Pacific rail hub near downtown LA. Moving freight by rail has been the plan for the Cross Valley rail corridor recently completed that connects the main UP rail line to the westside of the valley. Plans to put in a High Speed Rail through the valley - with rail stops in the Visalia area - could include shipping of light freight up and down California. A more aggressive plan could have high speed freight trains running on the same line at night if the grades over the mountains are suitable to handle the heavier loads. That would take the pressure off our highways and air quality problems that these inevitable warehouse relocations bring. In fact, the relocation of dairies from the LA area has forced improved management practices and technology applications that are making the relocated dairies more environmentally friendly and more productive. Of course in part due to regulatory pressure and the public's demand for [cleaner air](#).

Relocation of industries from the LA area will typically involve application of new technology and practices that will cut their impacts [on our own airshed](#) if we demand that.

The upcoming overhaul of county general plan will look at increasing at the Highway 99 industrial corridor with new zoning and infrastructure planned and in place to handle both food and distribution companies who need locations along what we hope is a 6 lane Highway 99 with high speed rail right next door. Putting the two side by side will create a synergy that can't be matched with the two not together. If you want to have cleaner industries in the future, site them along rail corridors where as technology improves, they can ship more quality and more cleanly. Just one reason why we need a rail stop on the high speed rail line in Tulare County. The city of Visalia thinks that location could be Caldwell and 99. The county already has gained funds to tie 99 to the Visalia industrial park by Betty Drive in Goshen that will mean less congestion and pollution on our own byways. Goshen, like much of the 99 corridor, will be a supply depot and transfer station for much of the goods heading in and out of the big metro areas north and south.

Our economy is based on trade and the government's job is to ensure the goods move without fouling this big bathtub we all live in.

[Letter to the Modesto Bee, Wednesday, October 6, 2004](#)

### **Be aware of deadly lung disease**

An invisible killer is in our midst called COPD. COPD stands for chronic obstructive pulmonary disease, which includes emphysema; it is the fourth leading cause of death in the United States.

COPD is a progressive, terminal disease, which causes the airways and alveoli in the lungs to lose their elasticity and cause the airway walls to collapse, closing off smaller airways and narrowing the larger ones. It is chronic and incurable. Long-term smokers and people exposed to air pollution are most at risk of contracting the disease.

November has been proclaimed COPD Awareness Month; World COPD Awareness Day is Nov. 17. Funding for research is very limited and needs to be increased if we are going to develop better treatments and, eventually, a cure. Please urge your representatives to increase spending on research. If you are at risk for COPD, please ask your family doctor to test you - COPD is not usually diagnosed until symptoms have developed and you've already lost over 50 percent of your lung capacity. If you are a smoker, quit!

For more information, go to [www.emphysema.net](http://www.emphysema.net) <<http://www.emphysema.net>>.

**DEIDRE CODONI**

Modesto