

## **Dust in the wind**

### **Blustery day in S.J. topples trees, cuts power; air quality worsens**

By Keith Reid

Stockton Record, Monday, Oct. 28, 2013

STOCKTON - Gusting winds that reached highs of 44 mph caused a flurry of downed tree limbs and power lines, and at least one large power outage in Stockton on Sunday night.

Air quality was also downgraded to a status of "unhealthy for sensitive groups."

Pacific Gas & Electric spokeswoman Jana Morris said downed power lines caused an outage for 117 customers in central Stockton from just north of Hazelton Avenue to Charter Way, and from El Dorado Street to Airport Road.

The outage occurred at 4:48 p.m. from a downed wire Morris said, with technicians expected to work until midnight to bring power back online.

Stockton Fire Department dispatchers were busy for several hours taking calls of downed trees and power lines and blown transformers "everywhere throughout the city."

Stockton resident and Taft Elementary School Principal Dee Johnson said a birch tree split in half and landed on her car at her north Stockton home.

"I thought another car hit my car," Johnson said, lamenting the damage on her new 2013 Toyota Highlander. "It didn't do as much damage as I thought, but the roof rack is damaged and the tail light located above the back window is dangling."

National Weather Service forecaster Craig Shoemaker said winds ramped up just before 6 p.m. and were "fairly localized" to between Stockton and Sacramento, coming off the Delta.

He said he winds were expected to die down by 9 p.m.

According to the San Joaquin County Air Pollution Control District's website, air pollutants mixed with the wind were bad enough to advise people to exercise indoors and reduce vigorous outdoor activities.

Weather forecasts call for lighter winds and possible showers today.

## **Manure brings renewable energy project to Merced County**

By Thaddeus Miller

Merced Sun-Star, Friday, Oct. 25, 2013

DOS PALOS — A 10,000-square-foot manure digester here could be a sign of a breakthrough in Merced County and the state, according to Rep. Jim Costa.

Costa, D-Fresno, spoke at the unveiling of a renewable energy project on a 640-acre ranch just south of Highway 152 in Dos Palos on Friday. The thermophilic anaerobic digester system is the first of its kind in the county.

"(The system) might be a breakthrough, a breakthrough in a challenge that has faced the dairy industry throughout this country and in California," Costa said, who grew up on a dairy farm in Fresno.

Costa was praising the partnership between the Antonio Brasil Dairy and Elite Energy, a Carson City, Nev.-based energy management company. He said such partnerships could be an economic boon for dairies and help the environment.

"What we're really talking about here is protecting water resources, protecting the [air quality](#) and climate (and) creating a renewable energy stream," he said. "For Merced County, for our valley, (we're) trying to ensure that, as we go forward, the dairy industry continues to be a critical and important part of the economy."

California's roughly 1.8 million dairy cows make about 35 million tons of manure every day. All of that waste, which is full of [air- and water-polluting nitrates](#), can be a burden.

"These efforts to deal with nitrates are critical," Costa said. "How we handle that byproduct and that waste stream is what today is all about."

Farmers, lawmakers and other interested parties from in and out of the area gathered at the dairy Friday to take a tour.

Brian Mefford, Elite Energy's regional program manager for the state, said the six-tank digester generates about 18,000 gallons of liquid compost a day. It also makes about 25 cubic yards of solid soil "amendment" every day.

A soil amendment is any material added to soil to improve its physical properties. That could be manure, compost or mulch, among other materials.

"The process is pretty simple," Mefford said.

The digester system moves the cow manure and urine through six 20,000-gallon steel tanks, breaking up the solid pieces and heating them to about 135 degrees. Mefford said the tanks essentially pasteurize the waste to make it pathogen-free.

A press at the end of the process separates the solids from the liquids. Both are sold to plant nurseries and farmers.

Merced Assemblyman Adam Gray said the project's ability to convert the waste into electricity could buoy Merced County's economic future and add jobs.

"We have an opportunity before us in the coming decades to become not just a leader in food production, but a leader in energy production," he said.

In order to do that, dairy farmers would need to get behind the process.

Keith Wilson, a consultant with Elite Energy, said each cow produces about 120 pounds of waste in a day. With 3,000 cows on the Brasil ranch, that's 360,000 pounds of manure and urine every day.

"This system can handle about 1,500 cows," he said, pointing to the digester. "So, we'll be taking about 50 percent."

The digester works alongside the ranch's traditional manure removal equipment.

Most dairies operate on a cycle, Wilson said. The cows eat and produce waste, which is used to fertilize the fields where the cows' food is grown.

Wilson said the manure passed through the digester reduces the nitrogen generated on the ranch. "There is a nitrogen problem in the valley," he said.

Antonio Brasil, who built the dairy in 2007, said reducing the amount of nitrogen on his farm might allow him room to expand. He might make a little more money, the 44-year-old dairy farmer said, but that's wasn't his No. 1 motivation to be involved in the project.

"It helps the environment," he said.