Fate of open-field burning up in the air at Florez hearing

By Jeff Goodman, Californian staff writer
Bakersfield Californian, Friday, July 23, 2010

The battle over burning is heating up again.

The local air district has continued allowing open-field burning of agricultural waste in cases where it considers the alternative methods too expensive, prompting State Sen. Dean Florez to schedule a hearing next Wednesday in Sacramento.

Florez, D-Shafter, will question the San Joaquin Valley Air Pollution Control District's statistical data, which a Florez staffer says make it seem like the region's farmers cannot afford to get rid of the waste in more environmentally friendly ways.

"They are greatly underestimating the value of the crops, so their whole economic analysis is false," said Mark Arax, senior policy director for Florez. "They can't tell us with a straight face that certain farmers can't afford to send their waste to biomass plants. Their math is completely wrong."

The hearing follows a late May meeting of the California Air Resources Board, which unanimously concurred with the Valley Air District's decision just days before the burn ban was set to be fully implemented June 1.

The ban, written into law by Florez in 2003, was meant to phase out the practice because of its negative effects on the atmosphere in a region that constantly struggles with air quality.

Open-field burning has been reduced by about 80 percent since the legislation was approved, Valley Air District deputy air pollution control officer Rick McVaigh said, adding that permits are issued only on days when burning doesn't threaten public health.

The exemptions made for grape vineyards, citrus orchards and other crops will be re-evaluated by the air district in 2012, McVaigh said, although the state ARB can withdraw its concurrence before then.

In addition, the air board will hear updated reports in September, which ARB spokeswoman Mary Fricke said gives Florez time to hold a hearing and gather information.

Valley Air District executive director Seyed Sadredin will attend the hearing, McVaigh said. Agricultural experts from the University of California Cooperative Extension and biomass representatives will also be present.

Biomass companies convert agricultural waste into energy.

"The state law requires that we prohibit this burning unless there aren't economically feasible alternatives," McVaigh said. "Eliminating the agricultural burning ultimately would be a good goal, but I'm not sure we can ever get there."

For Florez, that's where the math comes in. Arax said calculations that account for longer, more realistic life spans of certain trees and vines would show that alternative waste removal is well within the means of area farms. The air district contends that the current data are accurate.

Arax said the exemptions send the wrong message to farms that have already found other ways to remove their agricultural waste.

"In an air district that is the worst in the country, we cannot afford that kind of arrogance," he said. "These other alternatives have costs, but you have to say, 'Are these costs reasonable costs?'"

Agricultural burning: A timeline

Sept. 22, 2003: Burn ban, contingent on economically feasible alternatives, written into law by state Sen. Dean Florez as Senate Bill 705

June 1, 2005: First phase of burn ban takes effect

June 1, 2007: Second phase of burn ban takes effect

May 20, 2010: Valley Air District issues report on recommended amendments to Rule 4103, the California Health and Safety Code section on open burning

May 27,2010: Exemptions for certain crops approved by the California Air Resources Board

June 1, 2010: Date when burn ban was supposed to take full effect, as announced in the 2003 bill

July 28, 2010: Florez to hold air quality hearing in Sacramento

September 2010: Air board scheduled to review updated reports, although no action is necessary

2012: Valley Air District scheduled to re-evaluate exemptions

Sludge power plant moving forward

By Gretchen Wenner, Californian staff writer
Bakersfield Californian, Friday, July 23, 2010

A $200 million project outside Lost Hills that will make electricity from sewage sludge will soon head to county planning commissioners for a vote.

The Liberty Energy Center will essentially be a major upgrade of an existing composting facility -- formerly called San Joaquin Composting, now called Liberty Composting -- that opened in 1989. The operation, about 10 miles northwest of Lost Hills, is one of the largest composting facilities in the country. Lost Hills is located roughly 40 miles northwest of Bakersfield.

When fully built, three steam-turbine generators will produce 19.5 gross megawatts -- 15 net megawatts -- or enough electricity to power about 18,000-20,000 average homes.

Pat McCarthy, president of Liberty Compost and Recycling Inc. (which also uses the business name Liberty Energy Inc.), said the renewable energy facility has been in the works for a long time.

"We've been excited about it for seven or eight years around here," he said.

McCarthy traveled to Europe to study existing plants there, where so-called "gasification" is more common. Several gasification plants, which burn biomass to create fuel, already operate in the U.S., he said.

Sewage sludge will continue to be trucked in from southern California and other areas to provide the bulk of the feedstock. Sewage sludge, also called biosolids, is made up of the semi-solid remnants left over from the treatment of municipal sewage, which includes human and industrial waste.

Currently, the material is composted along with other organic waste at the Lost Hills facility and then trucked to Kings County to be spread on land there. Liberty Composting is permitted to accept up to 786,000 tons of organic waste annually.

The gasification facility will be permitted to take in 657,000 tons of feedstock annually. The largest source will be sewage sludge that will mostly come from the Los Angeles basin. The plant will also take in ag waste and green waste. Power, which will be created 24/7, will be sold to Pacific Gas and Electric Co.

New air quality rules prompted the project. Currently, Liberty Composting is an open-air affair. But the San Joaquin Valley Air Pollution Control District's Rule 4565 meant a major upgrade was required to significantly reduce emissions.

The energy plant will be entirely enclosed, and any stored sludge would also be kept in enclosed silos.

Brenda Turner, an air district spokeswoman, said the upgrade will mean a large reduction in volatile organic compounds, though it will increase nitrogen oxide emissions.

The local Sierra Club officials haven't yet read through the facility's environmental report. But Tom Frantz, a Shafter environmental activist with the Association of Irritated Residents, said he will oppose it.

"It's obvious the citizens of Kern County don't want L.A. sewage sludge up here," Frantz said, referring to Measure E, the ban on land spreading of sludge overwhelmingly approved by Kern voters in June 2006.

Frantz said he was concerned about heavy metals in the sewage sludge that could be released into the air from the burning process.

Liberty Energy's three units would be built in phases. McCarthy hopes to have the first operating in 2012, if all goes well.

The first unit would create an estimated 16 on-site jobs and three off-site administrative posts. At full buildout, the numbers would be 20 and four, McCarthy said. The jobs would require some engineering expertise and pay well, he said.

The public has until Aug. 7 to comment on a draft environmental report that is posted on the Kern County Planning Department's website at www.co.kern.ca.us/planning, under the "environmental documents" link. You can also see a printed version at the department's office, located at 2700 M St., Suite 100.

The project is currently scheduled for a planning commission hearing on Oct. 28.

Mow without polluting your yard

By Terri Bennett, McClatchy Newspapers
Sacramento Bee and Modesto Bee, Thursday, July 22, 2010

It is a weekly chore for many this time of year - mowing the lawn. What you probably don't realize is that your gas-powered mower is also contributing to bad air quality, right there in your own backyard. Until recently, gas-powered lawn mowers were not required to regulate emissions. The good news is that new regulations and a selection of greener alternatives can help you Do Your Part to reduce air pollution so close to home.

Gas powered lawn equipment produces roughly 5 percent of the air pollution generated in America. That's quite a lot for such a little engine and it's close to home! The exhaust sends tiny particles into the air creating conditions that are especially unhealthy for young children or anyone with a respiratory illness or disease. Fumes from the engine also contribute to the formation of ground level ozone and smog, another hazardous air pollutant for us all. A study conducted at the University of Florida in 2005 found that gas-powered mowers cause as much as 1,500 times more carbon monoxide, 31 times more nitrogen oxides and nearly 20 times more carbon dioxide than mowers powered by electricity. New regulations will go into effect in the next two years that will reduce emissions from newly built models but gas powered mowers aren't your only option.

Electric mowers also generate pollution but at drastically lower levels and not in your backyard. Electric mowers are more expensive than their gas-powered cousins but they are a lot less expensive to operate and maintain. An electric mower will cost you about $5 a year to operate, which is the cost of electricity to power or charge the mower. If you opt for the more convenient cordless electric mower then you should know that the rechargeable battery contains lead and should never end up in a landfill. Fortunately, there are many resources available for recycling rechargeable batteries of all shapes and sizes.

For ease of operation, electric wins hands down. It starts with the push of a button and you never need to fill up the gas tank or replace the oil. Most come with a mulching feature and some models have the ability to add on accessories for trimming or edging. The electric mower is lighter than its gas-powered alternative and it's much quieter too! But the biggest benefit is that you'll be inhaling the sweet smell of freshly cut grass instead of pollution-causing gas fumes.

Of course, a human-powered reel mower is the greenest option of all and is a practical solution if you have a small area to mow. Today there are many styles to choose from; some even include an attachment to catch grass clippings.

When it's time to choose your next mower, Do Your Part and select a model that won't add to the air pollution problem near your home, your neighborhood or around the planet.

O.C. Register blog, Thursday, July 22, 2010:

Study: global warming will worsen smog

Pat Brennan, science, environment editor

Rising temperatures in coming decades will have one more unpleasant effect in Southern California, scientists say: they will make smog worse as well.

A new report that combines smog statistics with climate models says that in 40 years, global warming could push Southern California toward 25 additional days when smog levels violate federal standards for exposure to ozone.

By 2100, that could rise to as many as 50 days. And that's if emissions remain at about 1990-2004 levels, a reference period used in the study.

The study looked at all of California; the South Coast Air Basin, which includes Orange County, and the San Joaquin Valley were identified as those with the worst ozone problems.

"What we're seeing is that there is definitely a climate penalty for ozone pollution in California," said Michael J. Kleeman, lead author of the study and a professor at UC Davis. "That will have to eventually be offset with more emission controls in order to protect public health."

Ground-level ozone can irritate lungs and aggravate asthma and other lung conditions.

The ozone is "cooked" into existence from ozone precursors in the presence of sunlight. Warmer temperatures speed chemical reactions, Kleeman said, and the emission of the chemical precursors of ozone also rise — for example, evaporation of gasoline from cars.

In fact, an increase in ozone levels because of warmer temperatures is already occurring, Kleeman said.

"We see a climate effect on ozone, even when we look at measurements over the last 20 years," he said. "If you look at warmer days, they tend to have higher ozone concentrations."

There was a small glimmer of good news, he said: the warmer temperatures also could increase wintertime wind speeds in Southern California, flushing out the fine particle pollution that has become an increasing concern for air quality regulators.

They likely won't have any such luck in the San Joaquin Valley, where particle pollution could get worse — although both possibilities are tentative until more modeling can be done, Kleeman said.

And the study did not include an analysis of the effects of expected increases in wildfire, which produces large amounts of particle pollution.

The study, which cost $400,000 to $500,000, was paid for by the State Air Resources Board.