Kettleman City reaps toxic harvest of Calif. castoffs [The Fresno Bee]

By Mark Grossi, The Fresno Bee McClatchy-Tribune Information Services

Jan. 13, 2014--KETTLEMAN CITY –
Maria Saucedo cried as she spoke of the two babies she has lost in Kettleman City -- one to birth defects and the other in a miscarriage.
There's no proof, but she blames the toxic landscape surrounding her town. She and others who have suffered in Kettleman City say they live in a nasty soup of pollution. They make a compelling case.
Just west is the largest hazardous waste landfill this side of the Mississippi River. Electricity buzzes overhead along tall towers supplying power up and down the state. Pesticide is sprayed in nearby orchards. Diesel smoke wafts from Interstate 5 and Highway 41.

"It's a nightmare," Saucedo told state health authorities last year.

The latest: Treated human sewage from more than 5 million people in Los Angeles County is supposed to be composted on farmland east of town. The first deliveries could start as soon as late summer.
"When somebody flushes a toilet in Los Angeles County, it will end up in Kings County," says Jonathan London of the University of California at Davis, which published a study in late 2011 about health risks in the San Joaquin Valley.

Indeed, the Valley may lead the world in farming, but tiny Kettleman City reaps a harvest of California castoffs. The town is the most obvious example of the Valley's habit of hosting businesses that nobody wants for a neighbor, but there are others.

You also will find America's biggest ammonia-choked dairies in Tulare County, nearly 1 million animals. Fleets of diesel trucks at distribution centers have moved in along Highway 99, up and down the Valley. Kern County has become a prime destination for tons of treated human sewage from Los Angeles County. Tainted groundwater supplies the homes in many rural towns. And the Valley's notorious air quality triggers more asthma and other lung problems for small town residents than folks in larger cities.
Scientists can't prove what Maria Saucedo says, but they have enough evidence now to suggest people living closest to these industries and pollution die younger because of it.

Researchers say polluting businesses often locate near communities of color where public outcry is muted, if there is any outcry at all. Nearly one-third of the Valley's 4 million residents live with increased risk because of surrounding environmental threats, says London and several other researchers. Their analysis of the Valley is called "Land of Risk, Land of Opportunity."

The people living in Kettleman City are surrounded by the pollution described in the study. Now some townfolk worry about L.A.'s sewage, which is treated to kill off bacteria and dried out so that only a chunky sludge remains. Such sludge already is trucked over the Grapevine, mostly into Kern from Long Beach, Beverly Hills and other cities. Kern has fought it for the last decade.

A Kings County farm not far from Kettleman City is in line as the next biggest destination for sludge, especially if Kern successfully fights off Southern California legal challenges to its ban. The ban was passed years ago by voters, but it has been held up in court.
If Kern's ban is upheld, 17 cities in Los Angeles County would still have the option of annually sending up to 500,000 tons of sludge to be composted at a farm not far from Kettleman City.
Residents call it "agua negra" or black water.

The yuck factor

Forget the hazardous waste landfills near Kettleman City and Shafter in Kern County and the manure mountains from 1.5 million dairy cows in the Valley. You might not want to live near those businesses, but treated human sewage might have a bigger yuck factor. Leaders at the Sanitation Districts of Los Angeles County say they understand the feelings. That's why they're investing in a $120 million sludge-composting project set to begin soon in Kings County, says the department's supervising engineer, Ajay Malik. It will be state of the art and low profile on the northern shoulder of the Tulare Lake Basin.

At the same time, it's a good investment and a sweet deal for the sanitation districts, which bought scrubby farmland here for the composting operation. The sludge will be hauled to hardened, saline Kings County ground that costs a small fraction of open land in Southern California locations.
The department bought 14,500 acres from farmer Ceil Howe, whose sprawling Westlake Farms is about 15 miles from Interstate 5. In other words, it's not a long drive from one of the state's main north-south arteries.

Even more attractive, Howe plans to use the compost to perk up his cropland and help improve yields. The department has a ready buyer. Malik said the sanitation department is voluntarily investing in the environment. For instance, the group is spending $9 million on a special fabric to trap ozone-making volatile organic compounds on huge composting piles.

The biosolid mixing will be done in a building, not out in the open.
"All the air in the building will be pulled out through a filter to trap volatile organic compounds and odors," he said. It will still be cheaper than disposing the sludge by burying or burning it in Southern California, say experts. The cheapest option would be sending the treated sewage to the Pacific Ocean -- except that ocean discharges were outlawed in 1992. The ban came after federal agencies discovered ghastly bacteria-laced coastlines, syringes in sand castles and pungent slicks off shore in the 1980s.

By the early 1990s, recycling fever was spreading across the country, and sludge became part of it. Waste treatment agencies began spreading the treated sludge on land. By 1993, the U.S. Environmental Protection Agency began regulating the activity. But a few years later, the yuck factor caught up. A nationwide investigation found more than 300 people who claimed they were suffering some kind of bad reaction to sludge. It led to higher levels of sewage treatment.

Composting further distills the treated sewage, using natural decomposition to kill off what is left of the pathogens. As such, composted sludge has been part of commercial soil amendment used in home gardens for many years. Still, many farmers don't use it because they don't want their crops associated with sewage sludge. Some scientists worry about the composted sludge. They say no amount of treatment will eliminate metals, such as mercury or lead.

There are federal thresholds for the metals and periodic testing is required. In high doses, the metals can cause kidney disease, hypertension, liver damage and problems with reproduction. Chemicals from sludge can accumulate in plants, says Chad Kinney, associate professor of chemistry at Colorado State University. Could there be enough accumulation to affect a human being?

"The picture is still incomplete," Kinney said. "There has not been a clear, field-based experiment under normal agricultural conditions." That kind of uncertainty spawned the sludge war in Kern County where many farmers campaigned for a ban to protect the reputation of their multibillion-dollar businesses.
In 2006, Kern voters overwhelmingly approved a sludge ban. Los Angeles, Orange County and others immediately sued.

Six years later, the legal action continues. But so far, the major part of L.A.'s sludge stream still is going into Kern County. Kings County would be a much-needed backup plan for Southern California, if the lawsuit fails. Farmer Howe says he sees no danger in using the sludge compost. He plans to incorporate it into his soil to grow cotton, wheat, alfalfa, pomegranates and almonds. Says Howe, "I've got 34,000 acres where I can use the compost. We will be testing the soil and monitoring it carefully."

Layers of risk

Asked how she felt about the new sludge project several miles from Kettleman City, resident Maricela Mares-Alatorre, 38, answers quickly: "How would you feel? How would you like to have all these toxins around your home and your children? We don't like it any more than you would."

Mares-Alatorre heads El Pueblo para el Aire y Agua Limpio, a community activist group. The group sees any possible new source of pollution as a threat. To them, it's another layer of risk on top of the hazardous waste buried fewer than four miles from town.

In the hazardous waste landfill, there is asbestos, pesticides and petroleum products. In 2011, several thousand tons of materials with a banned chemical called PCB, linked to cancer and birth defects, rumbled into the landfill in trucks. PCBs are polychlorinated biphenyls, which are used in electrical transformers and oil additives.

Waste Management Inc., the landfill owner, spends about $700,000 each year testing, inspecting and monitoring. In 2010, the company was fined more than $300,000 for improper handling of PCBs. Last year, the company was fined $400,000 and ordered to invest another $600,000 for lab equipment replacement and other measures. All of which validates their fears, say Kettleman City activists. But it still misses the bigger worry, they say.

Nobody is investigating those increasing layers of environmental threat -- the hazardous waste, diesel exhaust, pesticides and tainted drinking water. The government enforces tough environmental and monitoring regulations on the air and water, but nobody looks at the entire picture. Five years ago, environmental activists from Greenaction, based in San Francisco, decided to take a closer look at residents in Kettleman City. The group went door-to-door with a health survey, expecting to find asthma and cancer victims.

Instead, they learned five babies were born with cleft lip or cleft palate over a 15-month period that ended in November 2008. Three of the babies died. Greenaction stirred an outcry and an investigation by the state Department of Public Health and the federal EPA.

A government investigation turned up no connections to pollution in the water, air or soil. Also, authorities determined the number of birth defects was not high enough to be considered unusual.
But when state leaders went to Kettleman City last June to give residents an update on monitoring data, they got an angry response. Some residents said the state should have come into the town to talk directly with people, instead of simply analyzing data.

In Spanish, Maria Saucedo said: "You don't understand what it's like to live here. You need to speak with us." Researcher London at UC Davis agrees. He says the whole life experience of residents should be explored. "Risk is never just one thing," he said. "The layering of risks is cumulative. You need a holistic view. You need to know about where people work, play and pray."