

## **Mattresses and mold removal: California to offer unconventional treatments to asthma patients**

By Angela Hart

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MADERA, Calif. — Growing up amid the dusty agricultural fields of the Central Valley, Ruby Marentes-Cabrera can't recall a time when it wasn't difficult to breathe.

Diagnosed with asthma early in childhood, the ninth grader has come to detest the pistachio trees that surround her home because the dust, pesticides and other allergens that blow off the orchards often trigger an asthma attack — even infiltrating her home so that simple chores like vacuuming can be dangerous.

“We live so close to the fields — I breathe the dust and chemicals in,” said Ruby, 14, describing coughing and wheezing fits calmed by puffs from her emergency inhaler or breathing treatments from a nebulizer. “It gets so bad that my back hurts, my head hurts, my lungs hurt. I get sick and it gets really hard to breathe.”

Ruby is among roughly 2 million low-income Californians who have health insurance coverage from Medi-Cal, the state's Medicaid program, and have been diagnosed with asthma, a chronic and expensive disease that costs California billions of dollars per year in health care spending, missed work for parents and lost school days for kids.

The disease — exacerbated by air pollution and indoor threats like harsh cleaning products, cockroach infestations, dust and mold — hits low-income communities the hardest. Medi-Cal patients accounted for half the state's asthma-related emergency and urgent care visits in 2016, even though they represented about one-third of the population, according to data cited by state health officials.

Starting in January, California will embark on an ambitious experiment to control asthma in its most vulnerable patients. Medi-Cal will offer recipients like Ruby unconventional in-home “treatments” not traditionally considered health care: removing mold, installing air purifiers and even replacing carpeting, blinds and mattresses.

These new asthma benefits are just a small part of Gov. Gavin Newsom's sweeping \$6 billion initiative to transform the largest Medicaid program in the country. The initiative, known as CalAIM, will target the state's sickest and most expensive patients and cover an array of new social services, including home-delivered healthy meals; help with grocery shopping, laundry and money management; and security deposits for homeless people in search of housing.

Newsom's goal is to lower soaring Medi-Cal spending — which hit an astronomical \$124 billion this fiscal year — by preventing costly care such as emergency room visits. But state health officials acknowledge the new asthma benefits may not actually save taxpayer money.

Nor will the benefits be distributed equally: Because Medi-Cal managed-care insurance plans have immense power to decide which new services to offer and to whom, the initiative will create a patchwork of haves and have-nots. Of the 25 participating insurance companies, 11 will offer in-home asthma services starting in January in 36 of the state's 58 counties. Within those counties, some Medi-Cal recipients will qualify; others will not.

With less than two weeks to go before the program debuts, many insurers are scrambling to establish networks of nonprofit organizations and private contractors that specialize in delivering in-home asthma services and home repairs.

In San Bernardino and Riverside counties, for example, about 400 patients served by the Inland Empire Health Plan — out of nearly 1.4 million Medi-Cal plan members — will have access to asthma services in the first year, largely because the insurer has identified only one organization equipped to handle the responsibility.

“If we don't do this right, this dream can become a nightmare,” said Alexander Fajardo, executive director of El Sol Neighborhood Educational Center in San Bernardino, which is negotiating a contract with the insurer.

Fajardo said El Sol is frantically preparing. While his organization has experience providing asthma education, it doesn't have expertise in medical billing, patient privacy regulations and managed-care contracts.

"This is new, so we still have to learn," Fajardo said.

Jeanna Kendrick, the Inland Empire Health Plan's senior director of care integration, called the experiment to develop new social services "probably the hardest thing we've ever done." It pushes plans into uncharted territory, she said, contracting with community organizations and teaching them how to handle medical billing, for example.

"We really do need to be creative and have some wiggle room because this is brand-new for all of us," Kendrick said.

Jacey Cooper, California's Medicaid director, argued earlier this year that health plans will start small but add capacity over the five years of the initiative. The state is offering incentive payments to help plans launch new services and has set aside \$300 million for the first half of 2022 alone.

The Department of Health Care Services, which administers Medi-Cal, could not say how many low-income Californians will receive new in-home asthma services, because they are voluntary, and as a result could not predict future costs. But Anthony Cava, a department spokesperson, cited data showing that more than 220,000 Medi-Cal recipients have poorly controlled asthma. The state pays \$200 to \$350 for a typical asthma-related emergency room visit, and \$2,000 to \$4,000 a day for a typical inpatient hospitalization, department officials said.

Agency officials couldn't confirm the asthma benefits will save money, saying the costs will be equal to or less than the costs of traditional medical treatments.

Under the program, health insurers will send contractors into houses and apartments to assess hazards and educate patients about conditions that can trigger asthma attacks. Insurance executives say they will consider approving any service that could help asthma patients — from replacing tattered carpets to buying nontoxic cleaning products and pillow dust covers — within the \$7,500 lifetime cap for each Medi-Cal recipient. The services will be available to both renters and homeowners.

"It's not that somebody can just say they just want a brand-new \$3,000 mattress," said Dr. Takashi Wada, chief medical officer for the Inland Empire Health Plan. "But we do think a lot of these asthma attacks are preventable, and by avoiding illness, you're also avoiding unnecessary hospital and emergency department visits."

Fresno and Madera counties have some of the worst air quality in the state. They also have the highest rates of childhood asthma-related ER visits in California, along with Imperial County on the Mexican border, according to 2019 state public health data.

Ruby and her family, who live in Madera, California, appear to be ideal candidates for state-funded asthma benefits, said Joel Ervice, associate director of Regional Asthma Management and Prevention, which lobbied for the new services. Both Ruby and her sister Yesenia, 20, have asthma and were frequent visitors to the ER during childhood.

But as in the Inland Empire, only a small share of Central Valley asthma patients will receive the new services initially. Ruby and her family hope they will be among the lucky ones but realize they may still have to rely on conventional treatments such as emergency inhalers — and the hospital if necessary.

"I'm taking my medication a lot right now — it would be good if my asthma got better," said Ruby, who wants to be able to play outside her home and excel in outdoor school activities. "I'm having a hard time running the mile in school, so being able to run would be so great for me and my health."

CalViva Health, a major insurer serving patients in the Central Valley, including the Marentes-Cabrera family, so far has identified one nonprofit organization to deliver services and is negotiating with others.

That organization, the Central California Asthma Collaborative, expects to be able to serve up to 500 people across seven counties next year. Unlike other nonprofit groups that are still assessing how to deliver services, the collaborative has already identified private contractors to remove mold, install bathroom or kitchen ventilation, and provide other services, co-director Kevin Hamilton said.

CalViva Health CEO Jeffrey Nkansah said asthma is one of the leading causes of hospitalization among the insurer's enrollees.

"But right now, these conversations around identifying partners to deliver these asthma remediation services are fluid," Nkansah said. "We're still working hard to make sure we can get those services in place for Jan. 1."

For the Marentes-Cabreras, the relentless clouds of dust and other toxins from orchards, combined with seasonal wildfire smoke, are the biggest problem. The particles infiltrate their lungs and their home, covering surfaces and caking the carpet, which they would like to replace. But they don't have the money.

For now, Sandra Cabrera uses nontoxic cleaning products and daughters Ruby and Yesenia track their lung capacity with oxygen meters.

"I am trying to control what's in the house to prevent them from getting sick, cleaning a lot and using different cleaners," Cabrera said in Spanish. "We could use help to do more, but it's really difficult."

## **Fire in Sequoia and Kings Canyon national parks contained**

The Associated Press

The Modesto Bee, Sunday, Dec. 19, 2021

SEQUOIA NATIONAL PARK, Calif.

A huge forest fire in Sequoia and Kings Canyon national parks has been fully contained more than three months after it broke out, officials said.

Fire managers declared the KNP Complex 100% contained on Dec. 16 after significant precipitation in the Sierra Nevada, the National Park Service said Friday.

The fire has not grown in recent weeks but there has been continued activity in remote areas, the service said.

The KNP Complex was ignited by a lightning storm on Sept. 9. Two fires that were spotted the next day eventually merged and scorched 138 square miles (357 square kilometers).

The National Park Service said total containment means that the fire's perimeter is considered secure and no further growth is expected, which is different than a fire being declared out.

"Fire can become established in heavy fuels, such as large, downed trees, and may smolder there through multiple heavy snow and rain events, or even all winter, and become active again after the area dries out," the service said.

The KNP Complex and another fire in the surrounding Sequoia National Forest tore through more than a third of the groves of giant sequoias in California and torched an estimated 2,261 to 3,637 sequoias, according to park officials.

## **'Fuel for the next fire.' Why California can't unload the trees that worsen its wildfires**

By Dale Kasler

The Modesto Bee, Sunday, Dec. 19, 2021

Niel Fischer's company sits on an enormous stack of kindling — a staggering backlog of dead and dying trees that could catch fire again.

Collins Pine Co. was left with 30,000 acres of blackened pines and firs [after the Dixie Fire](#) ripped through the company's private forest in Plumas County this past summer. There's no way Collins' lumber mill can process the trees quickly, and the same goes for neighboring lumber companies struggling with their own stock of burned, dried-out and combustible timber.

“Dead on the stump — I mean dead — we’re estimating 10 to 15 years of supply,” said Fischer, the resource manager at Collins. “They are at a high risk of burning again ... at a higher intensity level than would a green forest.”

California’s wildfire crisis is being fed by a host of problems, notably climate change and drought. The dilemma at Collins illustrates another contributing factor: a shortage of places for the state to process wood.

State and federal officials, as well as forestry experts, say California doesn’t have nearly enough lumber mills to process the trees — dead or alive — that need to come out of the state’s 33 million acres of forestland to reduce the risk of megafires. California suffers from a similar shortage of biomass plants, which make electricity out of trees and brush hauled out of the woods.

So the timber stays in the forests.

“It’s fuel for the next fire,” said Tim Robards, a staff chief at Cal Fire who oversees forest health and wood products issues.

Robards said the problem has worsened in the past two years, during which 6.7 million acres burned. The surge of dead and dying trees is clogging the state’s meager fleet of mills and biomass plants, he said.

The problem is intensifying at the very moment state and federal agencies are trying to reduce the density of California’s forests. The U.S. Forest Service, which manages 20 million acres of California land, says the shortage of mills and plants makes it hard to even plan the fuels-reduction projects it wants to undertake.

“We lack sufficient infrastructure to make as much progress as everyone would like us to do,” said Larry Swan, a wood utilization and biomass specialist with the Forest Service.

There’s no obvious quick fix for “this deficit of capacity,” as Robards called it. The facilities have been in decline for decades — lumber mills have been disappearing since the early 1990s, largely because of environmental restrictions, and the biomass industry has been battered by competition from cheaper energy sources.

“We had this robust infrastructure,” said Mike De Lasaux, a retired forester with UC Cooperative Extension. “Now we see these humongous piles of treetops and small trees that have no place to go.”

How to manage wildfires, forests?

Not everyone believes the remedy to California’s wildfire troubles consists of thinning forests or building more sawmills and biomass plants.

Some environmentalists fight the Forest Service in court over fuels-reduction projects, saying these programs are really an excuse to clear-cut forests of old-growth trees — which are more resilient to fire anyway. They say thinning out forests actually makes them more vulnerable to wildfire by removing shade and leaving the remaining vegetation to dry out in the sun.

When it comes to logging from a burned forest, some environmentalists say the trees should be left alone to provide nesting habitat for woodpeckers, owls and other birds. The Forest Service, in a 2019 study, acknowledges that post-fire salvage logging is “injurious to certain species,” although the impact can be minimized with the right equipment.

Crystal Kolden, a fire scientist at UC Merced, said the fire hazard posed by blackened trees isn’t as severe as timber industry officials argue it is. Even though dry trees are more dangerous, they’re fairly resistant to fire as long as they’re upright, Kolden said. Brush and small trees also often sprout where trees are removed, she said.

Nonetheless, a broad consensus has emerged about forestry and fire. Most wildfire scientists, Kolden included, agree that some form of thinning improves wildfire safety and forest health. It won’t erase the risk, but it can reduce the likelihood of a fire turning catastrophic. Some mainstream environmental groups, such as the Nature Conservancy, have embraced this strategy as well.

Government officials agree. Gov. Gavin Newsom signed a nonbinding agreement with the Forest Service last year that calls for the state and federal governments to eventually treat a combined 1 million acres of woods per year — roughly doubling the current volume of fuels-reduction work.

President Joe Biden's Build Back Better legislation, pending in Congress, would appropriate billions for more aggressive forestry management projects. In September, Newsom signed legislation appropriating \$1.5 billion to make the forests more resilient.

Layers of government are starting to throw money at the infrastructure problem, too. Biden's proposal includes \$1 billion to support facilities making wood products. The state's "climate catalyst fund" has \$47 million to promote biomass facilities, and the budget includes \$50 million to develop a biomass pilot project.

But in the meantime, trees continue to accumulate in the forests, especially the highly combustible smaller ones.

"The estimated number of small-diameter trees that need to be removed exceeds the capacity of the existing mills and processing plants," Kolden said. "It's a bottleneck."

#### Timber industry shrank

For decades, loggers harvested valuable old-growth forests with little interference from government. About 140 mills operated in California as recently as the 1980s.

The industry was already shrinking, though. Annual timber harvests dropped from 6 billion board-feet in the mid-1950s to less than 5 billion in the late 1980s, partly because of "inventory declines" of Douglas firs, according to a Forest Service analysis.

Then the hammer came down. The U.S. Fish and Wildlife Service placed the northern spotted owl under the protection of the Endangered Species Act in June 1990, and a federal judge ordered a halt to logging in the few remaining old-growth forests in California, Oregon and Washington. The Clinton administration allowed logging to resume in 1994 but with strict limits, and annual harvests in California have fallen to 2 billion board-feet or less.

The state has fewer than 30 mills left — not nearly enough to process the cascade of trees that have burned the past two years. The Dixie Fire alone burned more timber on private land — 1.6 billion board-feet — than the state's mills process in a typical year, according to the California Forestry Association, the industry's main lobbyist in the state.

Dead or dying trees can be salvaged for lumber, but after a few years, they rot — if they don't burn first.

"It's truly a crisis," said Matt Dias, president of the forestry association. "The industry at this point is completely overwhelmed with black wood, black logs."

Rebuilding the industry is coming in small pieces. In the Auberry area of Fresno County, where the 2020 Creek Fire ravaged the Sierra National Forest, retired school-district plumber Kirk Ringgold has recently reopened a sawmill that closed almost 30 years ago.

Ringgold isn't likely to become a lumber baron; this is more like a labor of love. He's operating on a \$250,000 Forest Service grant and his personal savings.

"This isn't about a business plan," Ringgold said. "It's just something I've got to do."

He has ample raw material: The Creek Fire burned 379,895 acres. Ringgold is trying to save what's left.

"This is about a forest that's going to burn down and we're not going to have anything anymore."

#### Biomass struggles

When Californians think of the timber industry, they probably conjure up images of logs being sawed into slabs of lumber for construction purposes. But when it comes to consuming wood, biomass is bigger.

Biomass, which feeds off brush and smaller-diameter trees that don't have much value for lumber, takes in about 43% of the wood coming out of California forests, according to a 2016 study by the Forest Service. Just 32% is turned into lumber.

During a brief golden age of the 1980s and 1990s, when state and federal governments began requiring utilities to buy renewable energy, more than 60 biomass plants operated in California, said Tad Mason, an industry consultant in Rancho Cordova.

Then energy economics changed. Solar and wind prices plunged to less than half the cost of biomass. Turning wood into electricity became noncompetitive. Today, California has just 22 biomass plants, Mason said.

"The wind blows for free and the sun shines for free," said Julee Malinowski-Ball, executive director of the California Biomass Energy Alliance. "Biomass energy ... needs to be trucked, chipped, moved to a facility. That takes a lot of manpower, it takes a lot of equipment, and it costs."

PG&E Corp. buys more biomass energy than anyone in California — 260 megawatts' worth, enough to power nearly 200,000 homes. But that's a fraction of PG&E's solar and wind usage.

"We are always looking for the best value for our electric customers," said PG&E spokesman Paul Moreno.

Biomass has its critics. Some environmentalists cite the emissions from the plants. But the industry says the alternative is more megafires.

"It's a tragedy," said Brett Storey, the recently retired biomass manager for Placer County. "All of that material would be utilized instead of going up in smoke every summer."

Storey spent years trying to get a biomass plant built near Lake Tahoe. A proposed site near Kings Beach faltered when residents and local officials objected to an industrial facility opening in the Tahoe basin. County officials then chose a spot near Truckee, but that fell apart four years ago when they couldn't make a deal with the area's electric company, Liberty Utilities, to buy the plant's energy.

Now the county is trying again. After the Caldor Fire nearly burned down South Lake Tahoe this summer, county officials are taking a fresh look at the biomass project.

"There's just a great sense of urgency," said Kerri Timmer, the county's regional forest health coordinator.

The state has tried to revive the industry, with some success. An auction-based program called BioRAM, which requires utilities to purchase biomass power, has enabled some plants to garner higher prices for their electricity than they can negotiate on their own. The program has saved at least one plant that was about to shut down, Burney Forest Power in Shasta County.

But not everyone's eligible.

In the Sierra County town of Loyalton, the American Renewable Power biomass plant was consuming 100,000 tons of wood annually until it closed last year. One reason was price: Because of issues around its connection to the power grid, the Loyalton plant wasn't eligible for the BioRAM program and couldn't negotiate a decent rate for its energy.

Jeff Holland, who runs a logging company near Placerville, purchased the Loyalton site for \$825,000 and is trying to resume operations. But startup costs are higher than expected, and he isn't sure when it will reopen. He thinks the state must do more to support biomass.

"Logical thinking people who are tired of breathing smoke and tired of losing our national treasures believe biomass should be in the picture," Holland said.

Burning wood in the open air

Biomass plants are so limited in number, it often doesn't pay to haul the wood out of forests that have been thinned. Instead, it gets stacked up and burned in the open, polluting the air.

“For a lot of that biomass that’s being produced, particularly in the forested areas, there isn’t a market for it,” said Steve Eubanks, a retired Forest Service official who’s trying to build a biomass plant near Grass Valley. “They’re either leaving it on the ground or piling it or burning it.”

Often, the piles sit a long while. The regional air district has to issue a burn permit. The weather has to cooperate — if it’s too windy, the fire could blow out of control, as when the Caples Fire burned part of the Eldorado National Forest in 2019.

“It’s a struggle to burn our piles, and, yes, we have a backlog,” said Swan of the Forest Service.

It pains Steve Wilensky to watch the wood pile up.

A former Calaveras County supervisor, Wilensky runs a nonprofit called CHIPS that has conducted fuels projects on thousands of acres in the area. He’s also spent years trying to build a biomass plant in Wilseyville, at the site of a shuttered lumber mill.

The idea is to generate income to fund more work in the forests. He’s raised investment dollars and struck an attractive deal to sell power to PG&E.

But the project has run into an obstacle — a labor-backed group called Citizens for Responsible Industry.

The group tried to scuttle the project at a meeting of the county Planning Commission last month. Kevin Carmichael, a lawyer for the group, told commissioners the plant would emit “toxic air contaminants.”

Although the commission OK’d the project anyway, Wilensky said the labor group is appealing to the Board of Supervisors.

Carmichael didn’t respond to requests for comment. Wilensky, though, said the group is trying to “greenmail” the county into forcing him to use union labor at the plant.

Wilensky is a former organizer with the Service Employees International Union. But he wants to hire area residents for this project and thinks what Citizens for Responsible Industry is doing is deplorable.

“All they’ve got is the leverage to kill projects like ours,” he said. “We’ll win this thing, but it won’t be easy.”

‘A catastrophic loss’

The Dixie Fire was 3 weeks old, on its way to becoming the largest fire of 2021 and the second-largest in state history, when it turned its fury on Collins Pine in early August.

Winds of 30 mph drove the fire north toward Collins’ complex in Chester, near the Lassen National Forest. The Collins mill was saved, but portions of the town burned. About 30,000 acres of fir and pine trees belonging to Collins perished, representing about one-third of its forest.

“A catastrophic loss,” Fischer said.

Collins, which is headquartered in Oregon, has a reputation for sustainability; its practices have been certified by the Forest Stewardship Council, an environmental organization from Germany. Fischer said Collins preserves many old-growth trees, and “we never cut more than we grow.”

But now it’s racing to pull damaged trees out of its Plumas County woods as quickly as it can — big and small, young and old.

“Dry fuel constitutes a higher threat,” Fischer said. The problem worsens in future years as brush starts to grow back: “You end up with a very ripe acre for fire.”

Fischer said many of the trees will surely rot before they can be harvested. “We’re doing triage,” he said.

About 30 miles south, in the town of Crescent Mills, Jonathan Kusel is on a mission.

A sociologist who runs the nonprofit Sierra Institute for Community and Environment, he has secured grants to open a small mill near the Dixie Fire burn area.

It’s a modest operation: three machines in a parking lot where a Louisiana Pacific mill closed decades ago.

"If we had \$1 million, this would look different," Kusel said.

But his ambition is enormous. Partnering with J&C Enterprises, a local timber company, Kusel's group has begun carving lumber out of trees burned in the Dixie Fire. He wants to hire people, reduce fire danger and supply lumber for nearby Greenville, which was largely wiped out by the fire.

"It's about rebuilding Greenville," Kusel said. "We are trying to rebuild hope."

Hope is in short supply in the town of 1,200. Greenville lost 400 homes and most of its downtown; the landscape is littered with rubble and heaps of twisted, blackened metal.

Sitting at his desk recently at one of the few open businesses, the Indian Valley Community Services District, Jeff Titcomb said the fire "was really the death knell" for a town already in decline. Titcomb said he and his partner lost their home and a motel to the fire.

Titcomb is treasurer of the Chamber of Commerce but struggles to muster any of the optimism usually associated with that organization. Asked whether lumber from a new sawmill could bring Greenville back, he shrugged.

"Good luck," Titcomb said. "It's going to take two decades to do so."

## **Illegal recreational fires can cost you: The rules even Sacramento locals might not know**

By Brianna Taylor

The Sacramento Bee, Sunday, Dec. 19, 2021

The rules surrounding legal recreational burning in Sacramento — bonfires, fireplaces and wood stoves — are tricky.

And not following them closely could cost you.

So before you pull out the blankets and gather around the fire, check the rules and regulations on recreational burning, according to Sacramento Air Quality Management District.

Here's what you need to know about what type of wood to burn, when it's legal to burn and who's exempt, plus what happens if you don't follow the law:

### **When It's Illegal To Burn**

Recreational fires are illegal on mandatory curtailment days, except for those who have an exemption or waiver.

Mandatory curtailment applies to anyone operating a wood-burning device or lighting a fire in Sacramento County from November to February each year.

Here are the definitions of mandatory curtailment day statuses:

**Stage one:** You are not allowed to burn unless you're exempt. It is illegal to burn unless you're using an EPA-certified fireplace insert, stove, pellet stove without it producing visible smoke.

**Stage two:** All burning is prohibited. It is illegal to burn any solid fuel, including wood, manufactured fire logs and pellets in any device.

Burning is discouraged: The Sac Metro Air Districts ask you to voluntarily not burn.

**No restrictions:** There are no restrictions on recreational burning.

### **When It's Legal To Burn**

To check the day's burning status before you start your fire, visit the Sacramento Metropolitan Air Quality Management District burn page.



## **What Can't Be Burned**

Burning garbage and non-organic waste to dispose of it is considered open burning, not recreational burning — and is illegal in Sacramento County. Burning yard waste is prohibited in most of Sacramento, including all cities within county boundaries.

Burning garbage, including manufactured or treated wood, produces toxic smoke.

To burn natural vegetation from your home, which is known as open burning or rural yard burning, you need a burn permit from your local department.

Check where burning dry natural vegetation from your home is allowed in Sacramento. To check when it's legal to burn, call the burn status line at 279-972-2876.

## **Penalties and Violations**

Violations, including those that create a public nuisance, can result in fines determined by the Sac Metro Air District Mutual Settlement Program.

First-time violators will be issued a notice of penalty, which is \$50. An alternative to paying the penalty is passing the Wood Smoke Awareness Training Exam.

Second-time violators will be issued a notice of violation and subsequent violators will be subject to an increased penalty. There is a review process before any additional enforcement is used.

The maximum civil penalties for violations range from \$5,000 to \$1,000,000 per day of violation, depending on the nature and severity of the violation, according to the air quality violations page.

To report an illegal outdoor fire, call Sac Metro Air District at 1-800-880-9025 or call 9-1-1 if the fire presents a safety hazard.

## **Who is exempt?**

Individuals with financial hardship or those living in homes where wood-burning devices are the only source of heat may be considered for an exemption from the Sac Metro District Rule 421.

Just fill out an exemption request online and return the form in the mail.

If you have any questions about qualifying or questions about how to request an exemption, contact 279-207-1122 (extension 11) or email [burning@airquality.org](mailto:burning@airquality.org).

## **Wood burning appliances**

In Sacramento County, wood burning in fireplaces and wood stoves creates 50% of wintertime air pollution and it's a serious health threat, according the fireplace information page.

The Sac Metro Air District regulates the type of wood burning appliances — fireplaces, wood stoves and pellet stoves — that can be installed in Sacramento County.

The following wood burning appliances are allowed:

- U.S EPA Phase II Certified wood burning heaters
- Pellet-fueled wood burning heaters
- Masonry heaters

Here a few wood burning alternative appliances, according to the United States Environmental Protection Agency:

## **Gas stoves**

Gas stoves are designed to burn either natural gas or propane, which means they produce little pollution, require little maintenance and can be installed almost anywhere in the home.

Gas stoves can be vented through an existing chimney or directly vented through the wall behind the stove.

### **Decorative fireplace gas logs**

Decorative fireplace logs can be installed in an existing fireplace. Although they don't produce a significant amount of heat, they provide an alternative to burning wood.

And because they burn either natural gas or propane, they have low pollution emissions.

### **What Type Of Wood To Burn**

Firewood should never come from the wood of a recently cut-down tree because the material is too moist and will produce excessive smoke when it's burned.

Instead, use dry firewood that has been properly seasoned.

Seasoned firewood is wood that has been thoroughly dried for a proper amount of time. It can be wood that has been cut down on your property, stored in a dried place and allowed to dry for a minimum of six months.

If you need firewood sooner than six months, try kiln-dried firewood, which dries out in around 75 minutes, according to Premier Firewood Company.

When dried in a kiln, which is a type of oven, the internal temperature of the wood is maintained between 140 degrees to 160 degrees, reducing the amount of moisture to around 10% to 20%.

The quick drying process also kills bugs and fungus and since the wood dries so fast, mold and mildew is eliminated too. As a result, kiln dried firewood is good for the environment.

### **Where To Buy Seasoned Firewood**

Here are a few places to buy seasoned and kiln dried firewood in Sacramento, when burning is allowed:

Pak and Save Firewood

Address: 8385 Jackson Rd.

Contact: 916-381-3143

Hillerman's Farms

Contact: 916-922-4453

Urban Wood Rescue

Address: 6045 Midway St.

Contact: 916-974-4336

Capitol Ace Hardware

Address: 1815 I St.

Contact: 916-446-5246

### **Biomass plant near Bakersfield would bury or seal carbon in concrete**

By John Cox

Bakersfield Californian, Saturday, Dec 18, 2021

Kern's carbon management rush has a new entrant with a Southern California company's proposal to gasify local ag waste for production of hydrogen and carbon dioxide that can be injected underground or, in a novel twist, stored in concrete.

The startup, Mote, announced Wednesday engineering work has begun on a \$100 million facility proposed outside Bakersfield that would capture 150,000 metric tons of carbon dioxide per year —

roughly equivalent to taking 33,000 cars off the road — and 7 million kilograms of hydrogen for transportation starting as soon as 2024.

Combining existing technologies with local access to biomass waste and ideal geological formations, the proposal is the latest carbon burial project seeking federal tax credits and different state financial incentives for fighting climate change.

"Carbon removal and clean hydrogen are booming markets right now," Managing Partner Andy Bonsall at London-based climate action investor Counteract, a Mote shareholder, said in Wednesday's news release. "Mote is extraordinarily positioned to scale quickly for huge impact."

Other active proposals by much larger companies aim to accomplish similar goals in Kern but on a larger scale and higher cost, sucking air out of the atmosphere directly or removing it from the emissions stream of a power plant in western Kern. At least one other project unveiled recently would gasify biomass and bury CO<sub>2</sub> with no mention of concrete sequestration.

Mote has not applied for the environmental, injection, air and water permits it would require before beginning operation. But the company said it has a prospective partner developing the CO<sub>2</sub> storage site, whose location it declined to disclose.

The county's top planner and energy-permitting specialist, Lorelei Oviatt, said she has seen more of this sort of thing lately as companies announce agreements and investments without taking initial steps toward the conditional use permits and environmental reviews they would need.

"All the companies are doing this," she said. "It's fine. But no, I've never talked with these particular people."

The county has received a single application for carbon capture and sequestration, from California Resources Corp. The Santa Clarita-based oil producer has disclosed plans for solar- and natural-gas-fueled plants that would either take carbon directly out of the air or remove it from the exhaust of a power plant it operates in Elk Hills.

Oviatt has also heard CO<sub>2</sub> injection proposals from Bakersfield-based Aera Energy LLC, San Ramon-based Chevron Corp. and Bakersfield-based Jaco Oil Co. Others hoping to inject carbon underground in unincorporated Kern "need to come talk to me," she said.

Mote finished top in its class at the Rice University Clean Energy Accelerator. This fall, it announced receiving investor seed money.

The company said it will combine commercial technologies with new efficiency that can be replicated at a scale that lowers the cost of fighting climate change.

Trimming and wood from Central Valley orchards and vineyards have posed problems in California for years. Almond growers and vineyards in particular generate large amounts of wood that if left to decompose produces the potent greenhouse gas methane.

Many power plants that used to burn biomass to generate electricity and steam closed several years ago in the face of competition from solar and wind farms.

Open burning has since increased but its imminent prohibition is expected to result in more whole-orchard recycling in which biomass is shredded and incorporated back into the soil where it originated. Some environmental groups prefer that option to the emissions that come with gathering and transporting biomass — plus, it's another form of carbon sequestration.

Besides federal tax credits, Mote expects to receive recurring revenue from California's Low Carbon Fuel Standard. It also hopes to win grant money from the California Energy Commission's financial support for production of renewable hydrogen.

Mote is in talks with Canadian-based CarbonCure Technologies on potentially storing carbon dioxide in concrete at construction sites.

The company said by email all the energy it would need for carbon storage would come from biomass, but that if it needs to liquify hydrogen it may need to bring in external electricity.

Mote said it expects to put out minimal emissions. Its largest source would be related to wood handling.

## **In a residents vs. business dilemma, Fresno mayor's solution better be the real deal**

By the Fresno Bee Editorial Board  
Fresno Bee, Friday, Dec. 17, 2021

Fresno Mayor Jerry Dyer has proposed a solution to one of the thorniest problems of his first year: how to allow industrial businesses in the city's southwest area to modify their operations without harming nearby residents.

Whether the effort will actually work is a big question. And whether it can satisfy everyone involved is yet to be determined. On the one hand are a group of businesses and property owners who want to modernize their companies and holdings. On the other side are the 40,000 residents of west Fresno — Latino, Black and Asian — who have paid the price long enough for industrial uses that have made their part of town one of the most polluted urban areas in California.

### THE BACKGROUND

Over a year ago businesses in a 92-acre part off South Elm Avenue complained that the zoning they fell under as part of the Southwest Fresno Specific Plan was too constricting. The zoning, called neighborhood mixed use, came about as part of the extensive, two-year process of creating the specific plan. That is the overall guide to how development is to occur in west Fresno.

Previously, the businesses had been under a zoning category known as light industrial. They wanted to return to that so they could get loans for modernization projects, like switching to all-electric power. Banks and insurance companies, they said, would not loan to them since they were considered a legal but nonconforming use under the specific plan. Such a status was "risky" in the lenders' opinion.

But west Fresno residents and community groups like Leadership Counsel for Justice and Accountability pointed out that the specific plan clearly states there is to be no industrial expansion.

West Fresno has some of the worst air quality in the state, due to manufacturing as well as nearby highways and train lines. Residents have higher rates of diabetes, asthma and heart problems than Fresnoans living elsewhere in the city. There are multiple brown fields — land contaminated with chemicals. Some health experts say west Fresno residents have average lifespans that are 20 years shorter than those of people living in the north end of town.

Rather than industrial expansion, west Fresno residents hope to see more housing, as well as commercial and office uses. There is only one supermarket in the area, just a smattering of restaurants, and few shops. Poverty is high and educational attainment is low.

### NEIGHBORHOOD INDUSTRIAL

The mayor's proposal is to create a new zoning designation with the seemingly contradictory name: neighborhood industrial.

Under Dyer's concept, the businesses could modernize. But there could be no greater water use, air pollution, noise or light impacts than exists now.

He points out that the specific plan allowed the industries to remain, and his goal is to find a middle ground in hopes that the businesses can continue operating. About 1,000 people are employed by the firms.

The ordinance creating the neighborhood industrial zoning says it is meant to lead to "the orderly and planned transition" of legal, nonconforming properties to mixed use.

But Leadership Counsel representative Ivanka Saunders questions how temporary the zoning will be. She thinks the industrial uses could continue indefinitely.

She also points out that the zoning would be applied citywide, not just to southwest Fresno. That raises the specter of residential areas in south-central and southeast Fresno being impacted should businesses there seek the same zoning.

## TIME TO SPEAK UP

Review meetings are being held in every City Council member's district. Once that is done, Dyer's proposal will go to the Planning Commission, and ultimately the council.

In July The Bee Editorial Board stated that this dilemma was of the city's own making. Fresno leaders in past decades directed industrial development into the southern and western parts of the city. But over the years, disinvestment became the norm in west Fresno, and today it is a shell of the community it used to be.

The Editorial Board said current city leaders should uphold the Southwest Fresno Specific Plan out of respect for the hard work and extensive community involvement that created it. At the same time, the businesses that located there did so in good faith. So the city should relocate them to a more suitable location — an obviously expensive proposition.

Short of that, Dyer's proposal is on the table. One thing not explained is just how the city would monitor and enforce compliance under the neighborhood industrial zoning. That must happen.

Community involvement is once again critical. West Fresnans, make your opinions heard. Public comments can be submitted by emailing Nicholas Caldera at [Nicholas.Caldera@fresno.gov](mailto:Nicholas.Caldera@fresno.gov).