

Smoke still hurting Northern California air quality, but LNU Fire isn't main culprit

By Michael McGough

Sacramento Bee, Monday, Aug. 31, 2020

The air remained unhealthy in the Sacramento area Monday morning as wildfires continue to burn across Northern California, and some of the morning relief that helped out last week is absent.

Monitors from local air quality districts showed AQI readings in the “unhealthy” classification, from 151 to 200, in the early morning hours across the capital region, according to [SpareTheAir.com](https://www.sparetheair.com). Pollutant levels are expected to stay in that range most of the day, with the sky already hazy and the smell of smoke apparent outdoors as of 6:30 a.m.

A couple of days last week, an overnight Delta breeze helped clear some smoke away from Sacramento and kept AQI readings significantly lower until pollutants rolled in around midday. The weather hasn't been quite as cooperative this week.

The Spare The Air forecast page says that a “strong temperature inversion” combined with onshore winds Sunday increased wildfire pollutant buildup for Sacramento. Poor air quality will persist as northerly winds continue.

Smoke has sullied the skies in Northern California for two weeks, ever since dozens of large fires and hundreds of smaller ones sparked during a powerful thunderstorm that brought down thousands of lightning strikes.

For much of that stretch, Sacramento's air pollution has come primarily from the LNU Lightning Complex, which as of Sunday evening had scorched more than 375,000 acres in parts of Napa, Sonoma, Solano, Yolo and Lake counties west of the capital. That fire continues to output smoke as it is 63% contained, Cal Fire said Monday morning.

But now the poor conditions are coming from the August Complex, a 220,000-acre blaze that's been burning in the Mendocino National Forest since Aug. 17, according to a special smoke statement issued Sunday by the U.S. Environmental Protection Agency for the mid Central Valley that's in effect through Monday.

A National Weather Service forecast for near-surface smoke shows a heavy pocket of smoke in the forest, near the convergence of Mendocino, Lake, Tehama and Glenn counties, with winds blowing it in a southwest direction. Some of it is making it to Sacramento, roughly 100 miles away.

At an AQI in the unhealthy range of 151 to 200, residents are advised to stay indoors. If you must go outside, try to limit physical activity, and if you must be active, take frequent indoor breaks.

Spare The Air forecasts show conditions at least in the range of AQI 101 and 150, deemed “unhealthy for sensitive groups,” are expected to persist most of this week across Sacramento, Placer, El Dorado, Yolo and Solano counties.

If you can smell wildfire smoke, that means you are breathing it and it is posing a threat to your health.

Here's what Fresno-area farmers need to know about air quality amid COVID-19 this weekend

By Nadia Lopez

Fresno Bee, Sunday, Aug. 30, 2020

As massive wildfires torched California, smoke engulfed the Central Valley this week, polluting the air and creating a dangerously unhealthy atmosphere.

Already facing a brutal summer of triple-digit temperatures and the coronavirus pandemic, the region's 420,000 farmworkers faced dangerous air during the peak harvest season.

And while air quality in the central San Joaquin Valley improved as the week went on, it remains unhealthy. San Joaquin Valley Air Pollution Control District urged residents to stay indoors over the weekend.

Eugenia Gonzalez, 38, has worked as a farmworker for 10 years, hand-picking and harvesting raisins during the busy summer months to make extra money. But the combination of the air quality and heat has forced her to stop several times throughout the day while she tried to catch her breath.

"I couldn't breathe," she said in Spanish. "It looked foggy, but it wasn't fog, it was because the air was contaminated with smoke. I felt like I was suffocating."

Most regions of the Valley stretching from Sacramento down to Bakersfield earlier this week had AQI readings in the "unhealthy" range between 151 and 200, according to the U.S. Environmental Protection Agency's AirNow live map. AQI readings as of Friday throughout the region slightly improved, showing air quality in the "moderate" range between 51-100 in areas such as Fresno and Bakersfield, while air quality from Sacramento to Modesto hovered around 101-150, considered "unhealthy for sensitive groups."

The quality is measured by how much particulate matter (PM 2.5) is in the air.

Several counties are affected, including San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and parts of Kern County. When the air quality spikes above 151, employers are required to provide workers with masks, according to Occupational Safety and Health Administration standards.

"It's just unfortunate," Fresno County Farm Bureau CEO Ryan Jacobsen said. "We knew there was a potential to be a fire year— not knowing when that was going to start — but it's obviously here upon us at this point."

According to the San Joaquin Valley Air Pollution Control District, the smoke is blowing in from multiple fires including the SCU Lightning Complex Fire east of San Jose, the Hills Fire located in Fresno County west of Avenal near Highway 33, the CZU August Lightning Complex Fire in Santa Cruz as well as the Lake Fire in Los Angeles.

The fires throughout the state have collectively burnt more than 1.6 million acres, destroyed at least 2,492 structures, and killed seven people as of Friday, according to Cal Fire.

Jacobsen said the Farm Bureau had deployed hundreds of thousands of N95 masks on Friday and would continue throughout the following week.

Melissa Creegan, the county's agricultural commissioner, said more than 40,000 masks had already been distributed and with an additional 280,000 in the works. The masks are given to different agricultural groups that pass them on to employers, growers, farm labor contractors, and packing companies that are working outdoors, she added.

Despite using masks, for some workers like Gonzalez, the conditions are proving to be too rough.

She said the masks they use to protect themselves also make it harder to breathe. Now, the air quality, coupled with coronavirus fears, are making the situation worse. Though Gonzalez struggles, she said she worries about some of the older workers and are more susceptible to getting sick.

"We have to wear a mask all the time while we're working, but it's really difficult to work with a mask on because of how hot it is," she said. "If someone is diabetic or has asthma, they won't be able to work. Everything is so difficult in 2020. I hope the situation changes."

Still, Jacobsen said N95 masks offer the best protection from the smoke.

The N95 masks will be prioritized for outdoor employees, but Creegan said 300,000 cloth masks, 40,000 bottles of hand sanitizer, and informational leaflets in Spanish with health and safety precautions are also being distributed to continue mitigating the spread of COVID-19 in farmworker communities.

"It's always important that we provide the resources that keep our workers safe," she said. "Our farming community is incredibly important, not just to our economy in California, but also to our food supply throughout the nation."

Health officials warn that inhaling PM 2.5 pollution can cause serious problems such as asthma attacks, heart or lung disease, and aggravate chronic bronchitis, and increase heart attack and stroke risk.

To prevent overheating, Jacobsen said workers should stay hydrated, adding that employers are taking other measures, such as providing additional break times and adjusting schedules, so workers don't have to be out in the fields during the hottest period in the day.

"In some circumstances, it's going to be bad all day long," he said. "But essentially, we're very cautious when it comes to heat. The difficulty is obviously just the heat and smoke together are truly, truly tough here in the Valley."

Farmworkers can reach the Fresno County Farm Bureau at (559) 237 0263 to receive more information and request resources such as masks. The United Farmworkers Foundation, which provides COVID-19 resources to workers and families, can be reached at (877) 881-8281. Air quality updates can be found at the San Joaquin Valley Air Pollution District's website [here](#).

Bay Area wildfires: Crews continue to gain ground, but smoke not going away any time soon

By Aldo Toleda - The Mercury News

In the Modesto Bee and Sacramento Bee, Sunday, Aug. 30, 2020

SAN JOSE, Calif. - Nearly 16,000 firefighters continued working to contain lightning-sparked blazes across California on Sunday, continuing to gain the upper hand in a second week of pitched battle against the fiery rampage.

For residents in much of the Bay Area, though, the blanket of smoke that has laid over the region in the past two weeks is likely to linger, the National Weather Service said. Winds will slow and warm, dry conditions will be the norm this week.

Since the lightning siege that started on Aug. 15, CalFire officials estimate that 15,800 firefighters, 2,400 fire engines, 345 bulldozers and over 100 aircraft have been fighting to keep the flames at bay. Over two dozen wildfires have burned more than 1.42 million acres, CalFire said.

The LNU Lightning Complex, in the North Bay, the third-largest wildfire in the state's history, stood at 375,209 acres and was 56% contained as of Sunday morning. Three Napa County residents and two Solano County residents have been killed by the fire, which has damaged or destroyed 1,402 structures.

CalFire officials said they lifted some evacuation orders as repopulation efforts continued in many communities throughout the fire zone that have been deemed safe enough to return. About 10,350 structures were still threatened as of Sunday.

Officials said about 2,819 firefighters were on the ground fighting the Hennessey and Walbridge Fires in Napa, Lake and Sonoma counties. Both fires, which are considered part of the LNU Complex, stood around 55% contained Sunday.

The SCU Lightning Complex, in the South Bay and further east, ranks as the second-largest wildfire in California's history, behind only the 2018 Mendocino Complex Fire. It had burned 377,471 total acres and was 50% contained as of Sunday morning, with 62 structures damaged or destroyed. About 20,065 structures remained threatened.

Firefighter teams were battling through dense old growth brush and narrow overgrown roadways in their efforts to keep the fire inside of the control lines, but humidity above 2,000 feet meant the fire remained active overnight, officials said in a Sunday morning update.

The CZU Lightning Complex, in the Santa Cruz Mountains, had burned 84,640 acres and was 35% contained as of Sunday morning. It had taken the life of one Santa Cruz County man and damaged or destroyed over 7,639 residences and hundreds of commercial and minor structures.

Firefighters worked aggressively overnight to build containment lines around the complex in very warm and dry conditions, officials said. Though damage inspection is now about 90% complete, fire officials said the number of destroyed structures may change as teams continue to make progress.

Just across the county line near Monterey, firefighters continued to make progress in counting two large blazes that have been burning for two weeks, aided by favorable weather conditions.

The River Fire, south of Salinas, has burned 48,000 acres since Aug. 16 but was about 87% contained as of Sunday. Fire officials also said the Carmel fire in Carmel Valley was about 89% contained Sunday after it burned 6,900 acres.

All evacuation orders and warnings for the two fires have been lifted and officials said air quality in Monterey County has improved to a level of "good."

A warming trend beginning Sunday won't be as pronounced as it was a few weeks ago, when California set new heat records, but temperatures will rise as much as five degrees through Tuesday as high pressure builds across the region, meteorologist Brayden Murdock said Sunday.

Those conditions are slowing winds down, Murdock said, so he is expecting the shroud of haze and smoke visible throughout the Bay Area will remain stagnant.

But despite drier conditions, there is no sign of a new storm system that could lead to dry lightning, Murdock said, though CalFire officials have said they'll remain on watch for strikes in the northern part of the state and the Sierra Nevada.

"We're holding back any chances for showers or storms," Murdock said. ""For now going into the long-term this high pressure is going to limit seeing any activity that could lead to dry lightning."

While some areas will see humidity sticking around, moisture in places like San Jose and the Tri-Valley will dissipate quickly, leaving little to stop rising temperatures and culminating in lasting, dry air conditions.

"We want to make sure that people are keeping an eye on the heat in the area," Murdock said. "It won't be as excessive as what we saw two weeks ago, but upper 90s is still a concern. Stay hydrated and make sure to have good ways to beat the heat."

Ponderosa ordered to evacuate as Sequoia Complex fire grows in Tulare County

By Joshua Yeager

Visalia Times-Delta, Monday, August 30, 2020

Tulare County officials have issued an emergency evacuation order for Ponderosa and Cedar Slope as the Sequoia Complex Fire grows in the Sequoia National Forest.

"Sheriff Mike Boudreaux wants to ask everyone to take the orders seriously. If you've been told to evacuate, please do so. It's for your safety and that of your family," a news release from the Tulare County Sheriff's Office stated.

Boudreaux issued a voluntary evacuation notice on Aug. 23 after the Castle Fire in the Golden Trout Wilderness grew more than 10,000 acres in a 24-hour period. That fire was eventually renamed the Sequoia Complex.

As recently as Wednesday, though, fire officials believed the Tulare County mountain communities were in "no imminent danger" from the 0%-contained fire due to favorable wind conditions.

That changed on Friday when a combination of shifting winds, unstable conditions and low relative humidity led authorities to order the evacuation.

"Dry conditions caused the fire to get a little active, and it started to push toward the west a little faster than anticipated," said Alex Olow, the fire's public information officer.

Officials hope to safely return the small mountain town's 100 or so resident home soon. Strike teams are on the scene to protect buildings and structures, Olow said.

On Saturday, smoke was so heavy that firefighters were pushed back into safety, SQF Operations Chief Don Smith SQF said.

"The fire is pushing down against the wind," he said.

The lightning-caused Sequoia Complex Fire has scorched 33,925 acres northeast of Ponderosa. A spot fire was discovered on Saturday in Kern Flat, west of Kern River, and has consumed roughly 200 acres.

"Crews will continue with a full suppression strategy to contain and confine the fire utilizing handlines, bulldozers and aircraft using existing roads and trail systems," Forest Service officials reported on Saturday. "Fire engines from Tulare County Fire Department are being used in the Ponderosa, Pyles Camp, Lloyd Meadows and Peppermint Ranch areas to assist with structure protection."

There are currently 485 firefighters battling the SQF Complex, with more help on the way.

"Evacuations for Camp Nelson is, at this point, still a warning," Sheriff Mike Boudreaux said on Saturday. "If that changes, we will you aware."

The Red Cross was asked to establish an evacuation point at Porterville College Gate 2, according to an emergency county text alert. However, the county officials later requested the shelter be closed.

"I'm assuming based on the smaller evacuation, everyone had somewhere to go," said Nicole Maul, Red Cross regional communications manager.

If anyone is in need of assistance from the Red Cross, they are urged to call 1-800-Red-Cross. If you are unable to evacuate and need assistance, please call 911.

Tracy firefighters deployed to fight wildfires around the state, locally

By Bob Brownne

Tracy Press, Friday, Aug. 28, 2020

As soon as lightning storms began to spark fires across California, Tracy's fire department jumped into action.

On Aug. 15, a South San Joaquin County Fire Authority engine and a six-member crew, including a strike team leader and a strike team leader trainee, joined a California Office of Emergency Services team headed to a wildfire in the northern Sierra Nevada. That's where the Loyalton Fire in Tahoe National Forest, along the Sierra and Plumas county line, would eventually burn more than 47,000 acres.

Fire authority Chief Randall Bradley said that, three days later, the South San Joaquin team would be redeployed about 50 miles west to the Claremont Fire, burning in Plumas National Forest along the Middle Fork of the Feather River just south of Quincy. That fire had consumed more than 20,000 acres as of Wednesday and was still mostly uncontained.

Bradley said that crew was still at the Claremont Fire as of Wednesday and is due to be relieved this weekend after two weeks.

The local department also sent crews last week to the Moc Fire, which started Aug. 20 near the junction of highways 120 and 49 near Moccasin on the road to Yosemite.

Meanwhile, a series of small fires sparked on Aug. 16 south of Tracy merged to become the Canyon Zone Fire, which spread northward toward Tracy and eventually joined with the Calaveras Zone as part of the SCU Lightning Complex, the third-largest wildfire in California history.

By Aug. 19, the flames threatened ranches in and around Corral Hollow Canyon.

South County Fire Battalion Chief Scott Arganbright said he and his crew went up the canyon on Aug. 20 to protect the ranches in the area. It was the first of a few trips that local crews made to the front lines of the SCU Lightning Complex.

"Due to the size of the fire and all of the other fires going on in the region, they were really short-staffed on fire apparatus," he said.

Arganbright said they had to navigate their engine along steep and narrow roads to get to the fire. Once he met with the ranchers and took a quick look at the layout of the ranches, his crew got to work.

"We got up there and the fire was within 400 feet of their ranch, so I got some resources up there right away from locally, since there was nobody else available," he said. "There were some hand crews we got in there and some dozers, and we cut lines around while we provided structure defense."

They could protect the buildings, but the flames kept coming.

"While I was there, I got pulled away to another ranch that had an imminent threat with fire coming up the drainage," he said. "So we got up there and helped them out for two to three hours until resources from the incident could come in and help out."

The crew was working in a canyon with dry grass and a lot of oak trees. Arganbright noted that near a fire in a canyon is an especially dangerous place to be.

"When a fire is at the bottom of a drainage, it tends to preheat what's above it and it wants to make a run up the drainage, but what we had that day was favorable winds at our back, so it was keeping it in check and it burned up slowly," he said. "Within an hour, the wind shifted, which happens all the time. That's when it made a run up toward the Connolly Ranch. We happened to be there when it happened."

For a week after lightning strikes hit the hills southwest of Tracy, Mark Connolly was working nonstop to save his family ranch and guide firefighters to stop the spread of one of the state's most extensive wildfires.

"We didn't lose any structures out there, so it worked out," he added. "We were glad we could help out our neighbors out here."

He said the fire did burn some structures along Mines Road on the other side of Crane Ridge on the southwest side of Corral Hollow Canyon, and redeployment of resources to those types of hot spots meant fewer firefighters for spots in the SCU Complex.

"Normally the staffing on a fire this size would have four to five times more people than what they had, but based on the LNU Fire (in Lake, Napa and Yolo counties) and the CZU Fire (in Santa Cruz County), they had a lot more structures being threatened and they're losing them over there."

Bradley said that, in addition to providing crews for the Canyon Zone fires, South San Joaquin County Fire Authority participated in the overall command of the SCU Complex effort.

"Chief (David) Bramell took an administrative role. He worked with incident management team out of Pleasanton and kept close contact and did coordinate evacuation warnings and evacuation orders and actually brought a local perspective to those conversations," Bradley said.

He noted that the local firefighters have a clear idea of the topography in the area, what types of grasslands and woodlands would burn quickest and hottest, as well as where the people are who would need to be evacuated.

"He worked really close with the incident management team to help develop those orders and warnings for those evacuations," Bradley said.

The populated areas nearest to Tracy that could have been threatened included the PAR Estates around Tracy Golf and Country Club, which was under an evacuation warning from Aug. 20 up until Tuesday night. That means residents didn't have to leave, but they were advised to be prepared to leave on short notice.

The rest of the nearby areas under an evacuation warning were southwest of Interstate 580, right across the freeway from new neighborhoods in the Tracy Hills development. Bradley said he did not believe that area was in danger.

"It was a little nerve-wracking at times just because of the size of the fire and the remoteness of the fire, and where it would impact at least the peripheries of the Tracy community," Bradley said.

He added that if the fire were to continue to spread toward Tracy it would have had to come down from the hills, burn across a couple of miles of open grassland, and jump across the freeway, and then it would still come up against bare land that had been graded for construction before it could get close to any homes.

"Areas like Tracy Hills, areas that are actually inside the Tracy city limits, we weren't concerned," the chief said. "We had a very difficult time coming up with a way that the fire could come from that canyon, across the freeway, with these fuel models."

Bradley said the biggest problem through the fire was miscommunication involving social media, which wrongly led some people in town to believe their neighborhoods were under evacuation warnings.

“We had people in the middle of Tracy who were getting evacuation notices. We couldn’t figure out how it was occurring, and finally it occurred to us that some of these automated systems with social media and search engines were picking up these messages and putting them out to a larger footprint.”

CAL FIRE Utilizes California National Guard

By Nick Morris

Press Banner in the Tracy Press, Friday, Aug. 28, 2020

Active wildfires in Northern California have already reached historic proportions and continue to burn. Fires around the state, most of which started after thousands of lightning strikes hit the state on August 16th and 17th, have burned over 1.25 million acres and both the SCU Lightning Complex and the LNU Lightning Complex rank among the state’s five largest wildfires in modern history. Locally, the CZU Lightning Complex has burned over 81,000 acres, destroyed more than 600 structures, and is 21% contained as of August 27th. The size and number of wildfires all burning concurrently have put immense strain on CAL FIRE’s limited resources. According to CAL FIRE Deputy Chief Jonathan Cox 96% of CAL FIRE’s resources are currently engaged in fighting active fires and more resources are needed. Cox serves as the line officer on the CZU Lightning Complex incident. CAL FIRE’s success in fighting the current siege of fires around the state relies on its ability to cooperate with countless supporting agencies around the state and across the country. California’s mutual aid system is the bedrock of this cooperative effort.

Governor Newsom signed a declaration of a state of emergency on August 18th. The declaration allows for the efficient reallocation of resources to emergencies by utilizing California’s mutual aid system. Newsom spoke about this at his August 24th press briefing and said, “We have in-state mutual aid which is just mesmerizing and a point of deep pride.” The governor’s office shared that as of August 24th 2,827 firefighters and 709 engines have been reallocated using the in-state mutual aid system. Cox echoed the governor’s point while noting that the historic nature of this moment has put stress even on California’s well-established system of mutual aid and explained that some delay in receiving resources is due to the finite bandwidth that those resources have to flow through. Newsom’s proclamation also activated the California National Guard, which has a strong partnership with CAL FIRE and a history of supporting CAL FIRE’s firefighters.

The California National Guard deployed its first task force, Task Force 203, on Wednesday to the LNU Lightning Complex. According to Lieutenant Colonel David Chang, Task Force 203 comprises several army units with approximately three hundred soldiers in total. Chang, a battalion chief for one of the units in Task Force 203, also said due to the severity of the wildfires across the state a second task force at Camp Roberts and will leave for active wildfire incidents next week after they complete their CAL FIRE training. The National Guard task forces represent much-needed additional personnel. CAL FIRE Incident Commander for the CZU Lightning Complex Billy See said the National Guard will support CAL FIRE’s effort in Sonoma County, which will free up more experienced firefighters to leave the LNU Lightning Complex to help fight the CZU Lightning Complex instead. The more experienced firefighters coming from Sonoma are more prepared for the difficult terrain of the Santa Cruz Mountains and for the variety of firefighting techniques being used to protect Bonny Doon and the towns along the Highway 9 corridor such as Boulder Creek, Ben Lomond, and Felton. CAL FIRE Battalion Chief Mark Brunton explained how the CZU Lightning Complex has challenged CAL FIRE and has required firefighters to use a variety of techniques to constantly make small wins. Some of the techniques include herding fire around population areas, bump and run to save individual structures, and burn out operations to reduce the amount of available fuel. CAL FIRE Chief Dan Olson serves as the incident’s public information officer and has explained how the cooperative sharing of resources between the incident commanders is similar to horse trading and allows CAL FIRE to utilize each resource available to its maximum potential.

While more experienced Type I firefighters come to complete missions on the CZU Lightning Complex, California National Guard hand crews will help support CAL FIRE’s efforts containing the LNU Lightning Complex. CAL FIRE Captain Sean Sunahara oversaw the training of Task Force 203 at Camp Roberts and explained, “One of the benefits about using the National Guard is they already have that mental toughness...they know how to be professionals and they already know how to act in this type of environment.” CAL FIRE has designed a special five day firefighting training to supplement the basic training National Guard soldiers receive. This supplemental training has deepened the partnership

between the California National Guard and CAL FIRE over the last five years that it has existed. According to Private Second Class Cynthia Portillo the classroom portion of training includes wildfire safety, the effects of weather on fire behavior, and analyzing scenarios from past wildfires while the hands-on field training includes cutting line, hose manipulation, mopping up burn areas, and putting out hot spots. She also highlighted the importance of safety on the fire line and how in the training they learn to use eye contact and constant communication to ensure everyone's safety while working in dangerous situations. Although the National Guard troops are trained, Sunahara explained they always have firefighter support when they go out on the line and are only put into situations that they are set up for success in. The long-standing partnership between CAL FIRE and the California National Guard goes to show the importance of cooperation in times of crisis and the value of California's mutual aid system.

California requires ships, trucks to eliminate thousands of tons of pollution

By CALmatters, Rachel Becker

The Business Journal, Friday, August 28, 2020

Ships and trucks will be required to cut thousands of tons of air pollution in communities near ports, freeways and warehouses under a pair of rules unanimously adopted by the Air Resources Board Thursday.

The rules overhaul regulations for diesel truck exhaust and expand emission reductions from ships idling in California's ports. The two rules, when fully implemented, are expected to eliminate some 10,000 tons of pollution per year, the state's biggest strike against smog in twelve years.

Some of the nation's most powerful businesses — oil companies, engine manufacturers and ports — opposed the new rules, saying the battered economy cannot weather changes that could reach nearly \$7 billion. The air board's hearings on the two rules lasted about more than eight hours, with dozens of people voicing support and opposition.

Moving goods from ship to truck to warehouse accounts for nearly a third of California's economy, but about half of its air pollution. Much of the pollution affects disadvantaged communities and communities of color near ports, freeways and freight corridors.

Diesel trucks are California's number one source of a key ingredient of smog called nitrogen oxides, and they produce about a quarter of cancer-causing soot emitted statewide. Although federal efforts to clean up trucks have stalled, California will nevertheless need to slash nitrogen oxides and soot in order to meet federal health standards.

In June, California adopted the world's first regulation requiring manufacturers to ramp up sales of zero-emission trucks and buses over the next 15 years. But conventional heavy duty trucks will remain on California's roads, spewing fumes in communities near railyards, ports and warehouses.

Traffic and slow speeds prime trucks to pump out nitrogen oxides — but right now, certification tests fail to capture those conditions. The new regulations require manufacturers of medium and heavy-duty engines to test them in ways that more closely mimic real traffic, and to extend the lifetime of emissions-control technologies.

Engines also must meet tighter standards that cut nitrogen oxides by 75 percent starting in 2024, and 90 percent starting in 2027. Particulate pollution standards will be cut in half starting with 2024 models.

The costs of these changes total about \$4.5 billion between 2022 and 2050. A model year 2031 engine would cost roughly \$6,000 more over its lifetime, about a 6 percent increase.

Manufacturers objected to the cost and the timeline.

"The rule is not technically sound or cost-effective, and...fails to provide the legally mandated minimum lead time," said Jed Mandel, president of the Truck and Engine Manufacturers Association. "If implemented the rule will not achieve its air quality goals, and will harm California's economy."

But air board officials said the health benefits are also significant — avoiding 3,900 premature deaths and 3,150 hospitalizations across the state, which translates to health benefits of about \$36.8 billion.

Ivette Torres of the Center for Community Action and Environmental Justice, based in the Inland Empire, called the rule a step in the right direction in resolving the “tremendous health impacts heavy trucks have had on our communities,” which has suffered unhealthy smog levels for most of August.

Home to the busiest ports

Another rule approved this week expands pollution controls on ships that dock in California’s ports thousands of times a year. California is home to some of the busiest ports in the country. Even sitting still in harbors, ships churn out tons of pollutants that drift to neighboring communities, particularly near major ports in Long Beach, Los Angeles and Oakland.

The new requirements bolster clean-air mandates that ports already have implemented over the past decade.

Since 2014, all ships have been required to switch to cleaner-burning fuel within 24 nautical miles of the coastline. And container, cruise and refrigerated cargo ships at California’s six largest ports must reduce their emissions by cutting auxiliary engines and plugging into the electric grid, or capturing the pollution billowing from their smokestacks.

The new standards — to be phased in from 2023 through 2027 — toughen those mandates, and broaden the requirements to include auto carriers and oil and fuel tankers, as well as additional ports and terminals.

That means ships making roughly 6,300 visits to California’s ports every year must comply, up from 4,000 under previous rules. By 2031, the new rule will eliminate roughly 2,000 tons of smog-forming gases and diesel soot per year.

Longshoremen worry that the increased costs of the regulations might push shipping companies to less-regulated ports across the country.

“We depend on the jobs that the port provides for us,” said Danny Miranda, president of International Longshore and Warehouse Union Local 94. “Without a national standard on air quality, we lose competitiveness with the other ports, and it has a great effect on our economy.”

The ship regulation will cost about \$2.23 billion, including installation of shore power and systems that scrub pollution from smokestacks. That will add about \$4.65 per cruise ticket, \$7.66 for each car coming off an auto carrier and less than 1 cent per gallon of fuel in a tanker, according to the air board’s estimates.

Miranda said he was especially concerned given the economic crisis and recent drops in trade during the coronavirus pandemic. Ports are rebounding, however: the Port of Long Beach reported that July was its busiest month ever.

At the board hearing, oil company officials who opposed the rules said that the estimates for how much tankers pollute is overstated. But electrical workers welcomed the new jobs that increased demand for shore power would create.

Bad air around ports

Environmental advocates and residents say the regulations will help clear the air for several million people who live in communities near ports, where pollutants trigger asthma attacks and other health problems. But some said that the regulations don’t move fast enough.

“Keep in mind, these emissions reductions still won’t kick in for another couple years,” said Francis Yang, the Long Beach and South Los Angeles community organizer with the Sierra Club’s My Generation campaign. “That’s more time that ships get to continue to pollute our air. That’s more time for the same frontline communities to have to wait to breathe.”

Within three years, ships and harbor craft are expected to be one of the leading sources of nitrogen oxides in the Los Angeles basin, which is home to some of the dirtiest air in the country.

“These emissions reductions still won’t kick in for another couple years. That’s more time for the same frontline communities to have to wait to breathe.”

Ship engines also spew diesel exhaust, which is a well-documented carcinogen linked to lung cancer, and fine particles that increase the risk of heart attacks and asthma attacks.

The air board estimates that the new regulations will cut the cancer risk from ship pollution by more than half, and will save \$2.32 billion in avoided deaths, hospitalizations and emergency room visits, particularly in disadvantaged communities.

“Our communities do experience high incidences of cancer and other respiratory illnesses and cardiovascular disease,” said Taylor Thomas, a research and policy analyst for East Yard Communities for Environmental Justice, which represents residents of Southeast Los Angeles and Long Beach. “Being able to clean up these industries and especially at the ports will really go a long way in reducing the negative health impacts that our communities experience.”

California’s previous rules cut auxiliary engine emissions from container, refrigerated cargo and cruise ships by about 80 percent, averaged across fleets idling at six major ports including Los Angeles, Long Beach and Oakland.

But this excludes the roll-on/roll-off ships that carry cars and other rolling cargo, as well as tankers that account for about half of the pollution produced by docked ships. That means the communities around ports where these ships primarily dock, such as the Richmond and Stockton areas, don’t see the same protection.

Under the new rules, auto-carriers and tankers must cut portside pollution by roughly 90 percent beginning in 2025, according to air board staff. The targets for tankers start in Southern California, and expand north in 2027. Any terminal that exceeds a 20-visit threshold must comply. Ship and terminal operators can also comply by cutting pollution surrounding the port rather than at-berth, provided the air board approves.

Officials with the South Coast Air Quality Management District, which is responsible for cleaning the air in Los Angeles, Orange, San Bernardino and Riverside counties, advocated for a shorter deadline for some provisions. They worry that the emissions cuts won’t come soon enough to meet federal health standards for ozone, a key component of smog, by 2023.

“We’re facing some hard deadlines,” said Sarah Rees, assistant deputy executive officer in planning for the air district. “Two years is too long.”

Matt Arms, the Port of Long Beach’s director of environmental planning, said that the infrastructure improvements the regulation calls for will take time. For instance, devices that scrub pollution from ship smokestacks, called bonnets, are not one size fits all. The existing ones work for container ships, but bonnets for oil tankers are still under development.

“It’s not like you can go and run another extension cord,” Arms said. “They’re not challenges that can’t be overcome. I’m a little bit concerned about just how quickly they can be overcome.”

Yolo County evacuations still in place as LNU Complex swells in size, jumps highway

By Michael McGough

Merced Sun-Star, Thurs., Aug. 27, 2020

The LNU Lightning Complex cluster of wildfires that has been burning in California’s North Bay area the past 10 days flared up Wednesday, growing by 11,000 acres with no additional containment reported in the past 24 hours, Cal Fire said Thursday morning.

An erratic arm of the LNU Complex jumped Highway 16 Wednesday afternoon and prompted mandatory evacuations starting at 4 p.m. in the northwest corner of Yolo County, including the sparsely populated community of Rumsey and the area near Cache Creek Canyon Regional Park. Those parts of the county, called evacuation zones 1 and 2, remained under mandatory orders as of Thursday morning, the county office of emergency services said.

The LNU Lightning Complex Fire is a group of fires that has burned more than 368,000 acres (575 square miles) across parts of Napa, Sonoma, Lake, Solano and Yolo counties since sparking Aug. 17 during a flurry of lightning strikes, according to a Thursday morning update from Cal Fire.

The fire complex has killed at least five people and leveled close to 1,100 buildings. Cal Fire says 30,000 more homes and businesses remain threatened, according to Thursday morning's incident update, leaving numerous evacuation orders, advisories and road closures in place throughout portions of all five counties. It's one of California's three largest wildfires in recorded history, the state agency says.

The two biggest individual fires that make up the LNU Complex are the Hennessey Fire, which has consumed over 311,000 acres in Napa and Lake counties, at 33% containment; and the 55,000-acre Walbridge Fire, west of Healdsburg in Sonoma County, which was 19% contained as of Wednesday evening.

The complex is a whole is reported at 33% containment, Cal Fire said Thursday morning, the same figure given the previous morning. After soaring in size last week, fire crews made good progress during the weekend and earlier this week as temperatures dropped and weather conditions calmed.

Is Merced's air quality getting better? Here's what experts say you should expect

By Shawn Jansen

Merced Sun-Star, Wed., Aug. 26, 2020

Smoke from a Northern California wildfire and Fourth of July fireworks adds to existing air quality and breathing challenges in the central San Joaquin Valley. By John Walker/Fresno Bee file

Merced's air quality improved slightly on Wednesday, after a week of unhealthy conditions tied to wildfires burning across California.

But wildfire smoke could make things worse again in the coming days, according to Anthony Presto, a spokesperson for the San Joaquin Valley Air Pollution Control District.

"Cooler temperatures and better wind dispersion have provided an improvement in air quality today for most areas of the San Joaquin Valley," Presto said. "However many wildfires are still active throughout California and are expected to continue (to send) smoke into the Valley with the possibility of reaching unhealthy concentrations of PM 2.5 (particulate matter pollution) until these fires are extinguished."

Presto urged residents to monitor air quality using tools such as www.myRAAN.com and the Valley Air app.

Merced's fine particle matter measurement reached Level 5 — the highest level of air pollution — for six consecutive days starting Aug. 19.

When the particle matter pollution reaches Level 5, experts say all residents should avoid outdoor activities.

The air quality spiked at Level 4 on Tuesday. At Level 4, experts advise everyone to avoid vigorous or prolonged activities outdoors, and sensitive individuals should exercise indoors.

The particle matter measurement reached Level 3 at noon on Wednesday, which officials say means sensitive individuals should exercise indoors and avoid vigorous or prolonged activities outdoors.

"If you can smell smoke, you're breathing smoke," Presto said. "And if you see the haze of smoke in your area or smell smoke, treat air quality as Level 4 (unhealthy) and try to stay indoors if possible."

People with respiratory conditions, including those suffering from COVID-19, should stay away from air pollution as much as possible, according to experts.

According to experts, particle matter pollution can trigger asthma attacks, aggravate chronic bronchitis, and increase heart attack and stroke risk.