

CalGEM Public Health Rulemaking Summary of Input from Email Comments

received February 18, 2020 through April 21, 2020

Beginning in February, the California Geologic Energy Management Division (CalGEM) of the Department of Conservation began soliciting comments regarding public health regulations for oil and gas operations near sensitive receptors. Emails sent to <u>calgemregulations@conservation.ca.gov</u> were analyzed for issues of concern and recommendations from the public.

• During the period of February 18 through April 21, CalGEM received a total of 2,936 email comments regarding the public health regulations

Concerns expressed by Commenters included:

- Increased vulnerability to COVID-19
- Carcinogenic and toxic chemicals (benzene), asthma attack-inducing emissions, threat of catastrophic accidents or explosions
- Disproportionate impacts/sacrificial communities, low-income communities of color
- Noise, odor, fluid releases, blowouts and spills, casings
- Plugged and abandoned wells, idle or orphan wells
- Proximity to wells and refineries increases health risks, emissions most dangerous at source
- Asthma, respiratory illness, low birth weights, premature births, cancer, premature mortality, silicosis, chronic obstructive pulmonary disease, kidney disease, lower IQ in children, risk of diabetes and high blood

pressure, difficulty thinking, migraine headache, heart function changes and heart disease, death, gastrointestinal, corrosion, depression, pulmonary edema, brain and nervous system problems, impaired learning and developmental health, fertility and reproductive issues

- Contamination of soil, water and air
- Environmental impacts
- Public health impacts
- Climate change; GHG emissions
- Extreme extraction techniques
- Fossil fuel industry subsidies
- Equity and social justice; environmental justice and injustice
- Effect on future/descendants
- Extreme fire seasons, flooding events, landslides, drought

- Occupational health and safety of oil field workers
- Smell of natural gas leakage, foul odors
- Effect on other species
- Truck and traffic accidents; truck generated pollution
- Workers, jobs, just transition
- Corruption and undue influence by the oil and gas industry
- Chumash Heritage National Marine
 Sanctuary
- Safety, security, opportunity for children
- Refineries, distribution and use of fossil fuels
- Toxic substances such as hydrochloric acid, hydrofluoric acid, xylene, 2-butoxy ethanol and ethylbenzene, known carcinogens and endocrine disruptors
- Water use, conservation and waste water
- Corruption of local officials

- Status of cleanup of decommissioned Petrochem refinery off Highway 33
- Migration of poisons underground to contaminate drinking water
- Earthquakes caused by fracking
- Health of trees and forests, impacts of airborne toxins on trees and people
- Exposure to NOx, H2S, CO and other pollutants, vulnerability of human endocrine system
- Cat Canyon oil field expansion
- Environmental reviews
- County's ability to communicate regarding emergencies and community threats
- Contamination of drinking water aquifers
- Deaths caused by pipelines not well maintained in proximity to people
- Science and data-based decisionmaking
- Relaxation of federal pollution
 regulations

Some participants indicated that additional regulations were not needed. Comments included:

- Operators in compliance with regulations run clean operations
- There are no well-vetted reports of drinking water contamination in CA; evidence must be provided
- Imports require ocean going vessels with greater source of NOx and other contamination
- CA has most stringent environmental regulations in the world with multiple emission controls
- Mobile source emissions are the greatest polluter in the State
- Air monitoring program such as SNAPS in Lost Hills have shown no toxic emissions above safe levels
- No proven link between oil production and negative health impacts

- Public health accusations as ulterior motive to end fossil fuel production
- Production contributes tax dollars that pay for studies and supports thousands of well-paying jobs while keeping cost of fuel at pump low
- Loss of production means loss of tax revenue and increased cost for gasoline and goods
- Operators put health and safety first, have departments dedicated to safety
- Air near freeways has positive correlation to asthma, why no setback?
- Pollution has many complex sources
- Further study on the air near petroleum sites needed before taking action
- There is no scientific basis for the 2500-foot setback distance
- Increase CA oil production for energy independence while improving world's carbon footprint

Other participants suggested actions that could be taken to address the concerns, such as:

- Buffer/minimum setback of 2500 feet between oil and gas operations and the places where people live, work, recreate, and learn, sensitive receptors, neighborhoods, homes, hospitals, medical clinics, nursing homes, churches, workplaces, senior centers, commercial buildings, daycare centers, agriculture and food production, parks, fields, schools and playgrounds, prisons, immigration detention centers, COVID-treatment centers, anywhere people are likely to congregate (alt. 1200 miles, 1 mile)
- End oil drilling through/near our drinking water supplies (protected aquifers); no aquifer exemptions
- End drilling in high fire hazard zones
- Place strict limitations on trucking hazardous materials through communities
- New and effective measures to prevent ongoing hazardous exposures
- Phase out all oil production / end all fossil fuel use
- Facilitate/plan a just transition for workers with healthy family-supporting jobs that preserves health care and pension benefits
- Require all leases between operators and subsurface owners to be accessible on the Internet to the general public
- Conduct a thorough assessment of the Playa Vista gas storage facility for strong odors and releases of gas; evaluate the lateral extent of subsurface stored gas to determine whether any belowground gas storage extends into the county as opposed the facility fence-line
- Require operator at Linn Energy Brea Olinda Field to remove scrap metal and concrete located throughout the field

- Eliminate the practice of allowing operators to drill "by right" without oversight by the County
- Following precautionary principle, halt approvals of new oil and gas wells including permits for various forms of enhanced extraction, until regulations are effective
- Rescind the recent approval of 24 new hydraulic fracturing permits
- Flaring and venting prohibited (safety excepted)
- No new cyclic steaming; phase out steam extraction techniques
- Prohibit steam injection in old existing wells that may have cracked annular seals due to seismic activity
- Increase bond requirements
- Help companies safely shut down existing operations, deny new operations, and insist companies complete all necessary rehabilitation to return sites to healthy ecosystems
- All ground contact shall include adequate barriers between operations and ground to reduce permeability across the contact to 10\-15 cm/sec for all water, fluids and liquids. Barriers shall extend upward to 6 feet above adjacent ground level of higher to reflect tanks and well blowout of fluids
- Enclose/contain all groups of wells (3 or more) well pads and related processing before pipeline transfer away from pad; provide continuous emission monitoring through roof opening and any other opening of 1 sq. foot or more.
- Eliminate within five years all single-double wells without enclosure and containment and remediate/clean site
- Contain with six-foot impermeable walls around all wells, pads, and related processing
- Use pipelines instead of trucks to save lives and improve air quality; no drilling that adds tanker truck traffic
- Prohibit oil tanker traffic on dangerous roads, critical escape routes and close to communities
- Incorporate all of the guidance given by the Fifth District Court of Appeals decision relating to Kern County's oil and gas permitting ordinance
- No disposal of produced water and any other hazardous materials into or near drinking water aquifers
- Require oil companies to provide full funding for frequent and greatly broadened testing of groundwater for contaminants resulting from oil-industry activities
- Comprehensive monitoring and correction of methane emissions
- Greater incentives against idle wells and prompt plugging of non-active wells
- Permits should expire when not used
- Consideration of all health impacts of exacerbated climate change in all permitting processes
- Shut it down, leave it in the ground, moratorium on all exploration and extraction

- Close down oil and replace with solar and wind
- Disallow unsafe practices and materials such as hydrofluoric acid
- Immediate moratorium on cyclic steam oil drilling in area near Oxnard where petroleum-related gases where discovered in the Fox Canyon Aquifer system
- Air quality monitoring should always be required
- 10% phasing back of current permits; reduction of 10% per year for 7 years
- No new permits for drilling; extension permits with new EIR only
- Moratorium on fracking
- Stop irrigating crops with produced water
- Develop a plan and timeline to reduce and ultimately cease oil and gas extraction and production in alignment with IPCC climate goals
- Do not permit drilling that would increase a region's greenhouse gas emissions
- Much more severe consequences for oil field worker deaths and injuries
- Much more severe consequences for repeat violations and chronic spills
- Approval of sales should be required
- Require water and soil testing near operations
- Monitoring and correction of methane emissions
- Tar sands extraction should no longer be permitted
- New drilling and permits must require at least a 5 to 1 ratio of abandoning idle wells
- Implement surveillance studies of health in proximity to O&G
- Strengthen the permit process to evaluate and mitigate any potential health impacts prior to approval of new wells or expansion of existing wells
- Improve exposure monitoring of chemicals and water
- Institute more stringent regulation of chemicals
- Utilize best emission controls
- Hold oil and gas companies financially liable for all necessary clean up including adequate surety bonds from the time the infrastructure is created
- No new oil operations until USGS studies completed and findings integrated
- Incorporate guidance given by Fifth District Court of Appeals to Kern County
- Community air monitoring; provide public with FLIR cameras to monitor emissions

Additional comments received via email after April 21 will be summarized in separate document. CalGEM will review all the comments and recommendations received as it develops a regulator proposal to address public health concerns from oil and gas production.