I. Introduction

The California Geologic Energy Management Division (CalGEM) has a historic opportunity and mandate to reform its work to meet the existential climate and pollution crisis facing our state. Until recently, environmental justice and environmental advocates’ working relationship with DOGGR (now CalGEM) was non-existent. Relationships were antagonistic, with little political opportunity for any real collaboration with the agency. However, with a new administration, CalGEM’s newly clarified mission and leadership, and decades of advocacy, there is now an opportunity to create positive change at the Division during this transformative moment.

This roadmap seeks to outline the authoring organizations’ engagement with CalGEM, and provide key recommendations for the Division’s strategic plan update, including existing and future policies and programs. These recommendations include high-level changes that should be Division-wide, labeled as “CalGEM Staffing and Governance,” to ensure that staff capacity and overall frame for analysis and approach promote environmental justice (EJ) and public health. Under “Permitting, Enforcement, and Community Health,” we propose several technical changes to current practices to strengthen the rigor of CalGEM’s permitting and enforcement activities for improved health and safety. Finally, and most importantly, this roadmap concludes by calling on CalGEM to work with stakeholders and related agencies to develop an aligned strategy for a “Managed Decline and Just Transition.” This is especially needed to meet CalGEM’s new mission, avoid continued harm to frontline communities, and stop exacerbation of the growing climate crisis in California and around the world.

II. Past and Current Context

CalGEM’s history is riddled with conflicts of interest and failure to adhere to its mandate to prevent damage to life, health, and the environment. In 2015, then-Governor Brown fired two top oil and gas regulators in response to their efforts to ensure operators’ compliance with the
federal Safe Drinking Water Act and the California Environmental Quality Act.¹ That same year, it was publicly revealed that DOGGR “for years inadvertently allowed oil companies to inject wastewater - from fracking and other production operations - with high levels of benzene, a carcinogen, into hundreds of wells in protected aquifers, a violation of federal law.”² In 2018, seven senior CalGEM staff disclosed investments in a dozen of the world’s top petroleum companies, including companies directly regulated by the Division.³

CalGEM’s long-standing legal mandate has been to “prevent, as far as possible, damage to life, health, property, and natural resources” in its supervision of oil and gas operations pursuant to Public Resources Code, Section 3106(a). Despite years of advocacy from frontline communities and ample academic research illustrating broader public health and climate risks, CalGEM has continued to permit oil and gas activities in low income communities of color without considering or addressing the health impacts of these operations on residents and workers.

Last year, AB 1057 (Limón) clarified and also modified CalGEM’s mandate to provide that CalGEM must “protect . . . public health and safety and environmental quality, including reduction and mitigation of greenhouse gas emissions associated with the development of hydrocarbon and geothermal resources in a manner that meets the energy needs of the state.”

CalGEM’s new public health mandate and leadership provides opportunities to collaborate with the agency to incorporate EJ policies and programs into its daily function. Furthermore, fossil fuel production has been in a natural decline, spurred in part by its lack of economic viability alongside demand reduction measures responding to the climate crisis.

Governor Newsom has shown a willingness to approach the critical need to phase out fossil fuels in order to mitigate the climate crisis. He has instituted a set of carbon neutrality studies on reducing transportation-related fossil fuel demand and emissions, and on identifying a strategy for the managed decline of transportation-related fossil fuel supply. His recent Executive Order N-79-20 provides for the end of new fossil-fuel-powered vehicles by 2035 and directs various state agencies to develop “and expeditiously implement a Just Transition Roadmap” to support the transition away from fossil fuels.⁴ The policy direction set by these actions charts a new course for CalGEM, and requires that the Division move in step.

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Despite the managed decline of fossil fuels both signaled and triggered in action by the Newsom administration, CalGEM has instead increased permitting of oil and gas activities.\(^5\) Under “the Newsom Administration, [CalGEM] issued 1,623 permits during the first quarter of 2020.”\(^6\) It also approved 48 fracking permits after a nine-month moratorium.\(^7\) Since Newsom took office in January 2019, CalGEM has issued 7,071 total permits, as of September 2020.\(^8\) Permits for conventional oil and gas production increased 190 percent,\(^9\) in contravention to both the direction of the administration and AB 1057.

Local impacts of oil and gas production and permitting continue to overburden frontline communities, and production declines leave resource-dependent regions economically vulnerable. Climate change events also have severe health and economic impacts on frontline communities. California urgently needs a just transition away from a fossil-fuel based economy.

In recognition of this transformational need and opportunity, CEJA engaged in multiple conversations with Supervisor Ntuk, as well as CalGEM and Department of Conservation (DOC) staff, regarding the above-mentioned changes at the Division. Supervisor Ntuk communicated his desire to transform the Division to incorporate diversity, equity, inclusion and environmental justice principles throughout CalGEM. He also indicated plans to adopt environmental justice policies, hire environmental justice staff, and take other actions as part of the implementation of CalGEM’s new mission to protect public health and safety.

The authoring organizations offered to share our vision for environmental justice at CalGEM in the form of this roadmap. We respectfully urge CalGEM to adopt the measures presented in this roadmap to achieve the Division’s mission and meet the needs of this pivotal moment.
III. Recommendations

The authoring organizations identified areas of concern which can be improved through the implementation of internal and external environmental justice policies. Our recommendations are grouped as follows:

- CalGEM Staffing and Governance
- Permitting, Enforcement, and Community Health
- Managed Decline and Just Transition

A. CalGEM Staffing and Governance

While many California agencies have embraced and are acting upon the need to develop and deepen their environmental justice policies and staffing, CalGEM is trailing far behind. Despite the documented disproportionate impacts of oil and gas production on low-income and communities of color, CalGEM currently lacks any environmental justice policies, guidelines, or staff positions.

According to CalGEM data, over 800,000 Californians live within 2,500 feet of one or more of the 9,835 active wells in the state,\(^\text{10}\) the majority of which are people of color and lower income people. Inadequate governance has further harmed already overburdened communities by impacting health, safety, and livelihood.

The Division’s lack of transparency and cozy relationships with the entities it regulates has fomented distrust from EJ communities. For example, in the past, the Division relied on oil industry groups to write regulations governing the oil industry that it would then adopt.\(^\text{11}\) In order to serve the public interest and gain its trust, the Division must be transparent and accountable to the public.

Because the Division’s work has a direct and serious impact on communities’ health, the integration of environmental justice principles requires CalGEM to increase its public health capacity and integrate public health analyses as a matter of practice and pattern throughout its work. Historically, DOGGR/CalGEM regulations have relied on limited methodological approaches which fail to comprehensively and accurately account for important costs and other pertinent impacts. For example, economic evaluations have focused on business interests and industry financial impacts, and neglected impacts associated with harms to public health, community safety, and costs to residents and the state.

The Division lacks staff with expertise and background in public health, despite its mission to protect public health and the environment. Because science and methodology inform agency decision-making, CalGEM has the responsibility and opportunity to develop new


regulatory approaches that are premised upon protecting public health and the commons. This includes incorporating what are traditionally and negligently considered “externalities” to capture the true costs of fossil fuel operations and use in its analyses. This would ensure more accurate assessments of proposed policies and regulations for more equitable and informed decision-making.

Below is a non-exhaustive list of environmental justice policies and practices we urge CalGEM to adopt and implement, including meaningful inclusion of and respect for EJ communities, as well as intersectionality within its policies and programs. We emphasize the importance of integrating environmental justice into the Division’s daily function and overall governance, and not just including these in a staff position or other superficial ways.

a. Staff Resources

i. Create an Office of Environmental Justice and Tribal Affairs, which should include at least twelve full-time dedicated EJ and tribal affairs staff, including at least one position with executive level leadership, one position for public participation and community engagement, one community liason or ombudsman, and one position for tribal affairs.

ii. Increase inspection and enforcement staff to levels adequate for inspecting active and idle wells every three years and otherwise meeting CalGEM’s legal obligations to conduct field inspections, issue enforcement orders, and assess environmental and health risks from all current and proposed projects.12

iii. Increase health expertise within the Division by hiring at least five public health experts.

iv. Revise employee duty statements to reflect the new public health mission and define what that means for employee responsibilities to the public.

b. Conflict of Interest

i. Go beyond the DOC’s Ethics Manual13 and adopt a robust conflict of interest policy to prohibit staff from having a financial interest in any entity that is currently or may be regulated by CalGEM in the future, without exception.

ii. Require any staff with a current financial interest in any entity that is currently or may be regulated by CalGEM to immediately divest from it.


iii. Firewall staff formerly employed by a regulated entity from any decisions or activities that would affect their former employer, such as prohibiting them from learning or receiving information about and influencing the matter.

iv. Increase recruitment of new staff from high school and college programs in frontline communities and invest in on-the-job training to reduce reliance on industry hires.

c. Public Outreach and Engagement

i. Form an Environmental Justice Advisory Group (EJAG) that has decision-making power and is composed of community members and advocates of frontline communities to advise on Division matters. Hold quarterly meetings between leadership and other senior staff and representatives from frontline community groups.

ii. Hold quarterly public meetings in regions impacted by oil and gas production.

iii. Commit to having leadership or their representatives proactively inform community stakeholders of significant developments such as violations, permit decisions, or regulatory changes that would impact their respective communities.

iv. Allow and respond to public comments prior to issuing permits, including permits to drill new wells.

v. Update the CalGEM website to allow for easy site-specific and general searches for past, current, and on-going permitting and enforcement activities. Provide timely updates to impacted residents and other stakeholders regarding any changes.

vi. Improve the Division’s chemical disclosure website to increase accessibility and provide timely updates to impacted residents and other stakeholders regarding any changes.

vii. Enforce quality assurance for all updates shared to ensure that the information, including what is provided by industry, has been vetted by the Division for accuracy.

viii. Codify the best practices used in the public outreach and engagement processes for the 2020 health and safety pre-rulemaking, including:
   1. Translate public notices and any other public documents into Spanish and any other language spoken by at least 5 percent of the potentially impacted population.
   2. Conduct meetings in Spanish with English simultaneous translation if a significant number of residents affected by a proposal or topic are Spanish-speaking.
   3. Host meetings and events in the evenings or on weekends at a location accessible to community stakeholders.
   4. Develop multiple methods of accepting public comments.
5. Provide at least one week of notice (in English and Spanish) about significant activities and events.

ix. Provide food and childcare or contract with local organizations to provide food and childcare at public meetings.

d. Prioritize EJ Communities

i. Prioritize inspection and enforcement resources in areas most vulnerable to environmental harm as measured by CalEnviroScreen 3.0.

ii. Prioritize well closure and safe, proper abandonment in areas most vulnerable to environmental harm as measured by CalEnviroScreen 3.0.

iii. Increase bonding requirements for wells near vulnerable communities as measured by CalEnviroScreen 3.0 in recognition of the higher risk of harm associated with idle/inactive wells in these areas.

e. Centering Public Health

i. Create a dedicated CalGEM health advisory group with representatives from local health departments, public health NGOs, independent research institutions, and organizations representing clinical health professionals and community health experts. Specifically, this health advisory group could offer guidance to CalGEM in evaluating the health harms of chemicals used in oil and gas extraction, interpreting the health implications of excursions and leaks and translating this information for the public, evaluating the health implications of new requests for permits, and developing a better framework for understanding cumulative impacts.

ii. Develop and execute a funded memorandum of understanding (‘MOU’) with Tracking California\textsuperscript{14} to ensure a more robust understanding of health impacts. This program has been a good partner to EJ constituencies and can serve as a basis for creating a stronger public health and risk prevention focus at the Division.

iii. Adopt a precautionary principle policy that would require CalGEM to act on early warnings and account for worst-case possibilities. “A precautionary approach to health and environmental policy extends the same mode of thinking to public protection of our common future; it does not require, and is not improved by, guesses about the monetary value or precise probability of uncertain benefits.”\textsuperscript{15} Key elements of the principle include taking precaution in the face of scientific uncertainty; exploring alternatives to possibly harmful actions; placing the burden of proof on proponents of an activity rather than on victims or potential victims of the

\textsuperscript{14} See https://trackingcalifornia.org/.

activity; and using democratic processes to carry out and enforce the principle - including the public right to informed consent.

iv. Build a comprehensive environmental profile of hazardous chemicals and substances used during oil and gas production and development (such as in fracking fluids), and use these profiles to restrict allowable chemicals and substances based on their health and safety impacts.

f. True Cost Accounting

i. Include public health and environmental costs in CalGEM’s processes and decision-making evaluations, such as Standardized Regulatory Impact Assessments (SRIA).

ii. Replace traditional, industry-oriented risk assessments and cost-benefit analysis with assessments based on the best available science and measurements of social costs and other impacts associated with the production and use of oil and gas, including how these impacts vary across different populations. Traditional assessments do not factor in uncertainty and often treat the absence of data as proof of safety, as well as undervalue externalized costs, including downstream impacts of fossil fuel use.

B. Permitting, Enforcement, and Community Health

Scientific literature shows growing evidence of adverse health and safety impacts associated with human exposure to petroleum extraction.\(^{16}\) Severity of risks and harm increases with proximity to drilling operations.\(^{17}\) A single drill site typically operates for decades and the extraction process produces emissions of multiple health-hazardous air pollutants and emissions, including benzene, toluene, ethylbenzene, xylene, formaldehyde, hydrogen sulfide, and methylene chloride. Many of these compounds are known to be toxic to human health and are classified as carcinogens, as causing respiratory harm, and as endocrine disruptors. Many of them also cause long-term developmental or reproductive harm—a consideration for health


across generations. California-based studies published in 2020 from both UC Berkeley and Stanford indicate negative impacts to pregnant mothers, resulting in increased preterm births and low birth weights, which cause various health complications for children.

Nevertheless, CalGEM continues to issue permits for oil drilling and other operations in dangerous proximity to homes, schools, and other sensitive receptors. CalGEM has a terrible history of failing to conduct CEQA review for requested permits. When it has, CalGEM’s review has been improper, as exemplified in the South Belridge oil field in Kern County, one of the state’s most active fields, now operating for more than a century. CalGEM neither analyzed nor required mitigation for any of the site-specific impacts from the production wells in the field, and never considered the cumulative impacts of a field with over 30,000 wells.

Furthermore, DOGGR/CalGEM’s enforcement staff levels have been and continue to be woefully inadequate, at one time employing just one inspector for every 2,800 wells. CalGEM’s failure to properly enforce and regulate oil and gas production has resulted in numerous disasters and harms, including undetected spills, leaks, and contamination in already overburdened communities. Given the Division’s poor history and ability to monitor and enforce existing regulations, and the general lack of strong public health and safety regulations, there is an urgent need for serious improvement. CalGEM must invest in hiring and training enforcement officers and be proactive in responding to safety issues and complaints, including from frontline residents.

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21 See Assn. of Irritated Residents, et al. v. Cal. Dept. of Conservation, Div. of Oil, Gas, & Geothermal Resources (Apr. 8, 2020, F078460 [nonpub. opn.]).


In order to fulfill its new mandate and mission, CalGEM must adopt comprehensive measures that protect public and environmental health. The current CalGEM public health and safety rulemaking provides an opportunity to address many of these concerns.

a. Reduce Risks to Communities
   i. Adopt a 2,500 foot setback between oil and gas extraction and sensitive receptors that applies to new and existing operations.
   ii. Order operators to file additional upfront bonding up to $30,000,000 to reflect true costs of abandonment and remediation, with higher bonds required for wells near sensitive receptors due to increased risks to life, health, and property.
   iii. Develop protocols to reduce the impacts of maintenance activities, such as those that increase pollution or otherwise pose nuisance to communities. Require advanced public notice\(^\text{26}\) of maintenance activities and possible health and safety risks to communities in proximity to maintenance sites.
   iv. Require advanced public notice\(^\text{27}\) through an accessible early warning notification system regarding all other activities that could pose health, safety, and/or nuisance risks to community members.
   v. Establish containment standards, protocols, and best practices for “low-energy” spills.\(^\text{28}\)
      1. Require environmental review when these containment systems are constructed.
      2. Treat these containment systems similar to illegally tapped wells, including collection of appropriate penalties if accessed.
   vi. Immediately prohibit use of diesel engines at oil production sites.

b. Conduct Proper Environmental Review
   i. Ensure compliance with all legal requirements pursuant to the letter and intent of CEQA.
   ii. Adopt policy guidance on CalGEM’s implementation of CEQA, such as the City of Los Angeles’ policy for enhanced CEQA review.\(^\text{29}\)
   iii. Analyze the site-specific impacts from each project together with the cumulative health and safety impacts, as well as the GHG emissions.
   iv. Ensure equitable and transparent opportunities for public participation and comment, including holding a public hearing prior to making determinations on whether to approve a project, and by providing notice of

\(^{26}\) See recommendations for public notice best practices in section A, subsection c, item viii of this document.
\(^{27}\) See recommendations for public notice best practices in section A, subsection c, item viii of this document.
\(^{29}\) City of Los Angeles, Office of Zoning Administration, ZA Memorandum No. 133. See Attachment.
all proposed projects or activities for which an Initial Study or EIR is prepared to all property occupants and owners within 2,500 sq ft of the outer boundary of the project site.

v. Prohibit CEQA exemptions for proposed projects and permits to drill, re-drill, deepen or convert a well, or expand infrastructure, including pipelines.

vi. Prepare an EIR on any application or project seeking to drill, re-drill, deepen or convert a well, or expand infrastructure, including pipelines.

vii. Conduct health impact assessments for proposed projects and permits to drill, re-drill, deepen or convert a well, or expand infrastructure, including pipelines.

viii. Deny permits for projects that pose a health and/or safety threat to EJ communities.

c. Protect Water

i. Prohibit high pressure steam injections, hydraulic fracturing, acidizing, and other forms of harmful extreme extraction methods that contaminate water, the earth, and communities.

ii. Do not permit operations in and near aquifers, including aquifers that do not qualify for protection under the federal Safe Drinking Water Act, to prevent leaching into and cross-contamination of usable groundwater sources.
   1. Stop approving aquifer exemption applications.
   2. Ban all new injection well and disposal projects to protect the state’s dwindling water resources, regardless of their current designated use (which has potential to change status in the future and should not be discounted as unusable). Rapidly phase out existing injection projects and disposal wells.

iii. In the absence of an outright prohibition, improve injection well regulations by meeting requirements to identify nearby abandoned wells, requiring more frequent (every 12 weeks) and comprehensive testing for leaks, and ensuring inspection of wells within a minimum two-mile radius for water contamination.\textsuperscript{30} Class 2 wells in particular are not held to strict enough standards, and there is a lack of staff capacity for quality assurance and enforcement, which needs to be urgently addressed.\textsuperscript{31}

iv. Proactively address water contamination from oil and gas extraction activities by mitigating pollution from the source and prioritizing clean up of contaminated sites.

d. Improve Monitoring and Reporting


i. Strengthen the regulation of the chemicals used in oil and gas drilling, requiring full disclosure by privately owned companies of the toxicity, use, and disposal of all chemicals involved in oil and gas drilling, extraction, maintenance, odor control and all other uses.

ii. Establish quality assurance protocols for chemical disclosure requirements and materials submitted during the permitting process.

iii. Revoke permits for operators that fail to comply with disclosure requirements and for activities that pose a threat to nearby communities.

iv. Increase exposure monitoring, including monitoring for excursions and leaks with real-time public disclosure.

v. Increase installation of air monitors in community-identified areas of concern for community-identified contaminants of concern.

vi. Work with community-based organizations to develop and adopt civic science policies that allow members of the public to evaluate and report suspected violations or other concerns.

e. Improve Inspections and Enforcement

i. Substantially increase inspection of active and idle wells to at least once every three years, and order immediate remediation or plugging for any well whose mechanical integrity may be compromised.

ii. Develop a protocol for accepting community-generated data and information and following up with further investigation or enforcement action.

iii. Adopt a policy that any complaint received will receive an initial response and follow-up within one week.

iv. Develop a method of accepting and tracking community complaints which will be available to the public.

v. Create and publicize a complaint phone line and a complaint link on the CalGEM website.

vi. Ensure timely administration and resolution of all civil penalty appeals.
   1. Ensure that Chevron and any other responsible party pay fines due to CalGEM pursuant to Section 1724.11 of Title 14 of the California Code of Regulations for violations, and that any ongoing surface expressions in Kern County are halted.

vii. Enforce Section 1770 to ensure evaporation sumps are not in natural drainage channels or connected to freshwater-bearing aquifers.

viii. Enforce Section 1776 to ensure that all well sites are fully remediated once they are no longer being used.

ix. Enforce Section 1772 to ensure that idle wells are properly abandoned and in the meantime are regularly tested to ensure they are not leaking methane into the atmosphere and toxic fluids or gases into groundwater.

x. Enforce Section 3300 of the Public Resources Code to ensure that wells are not leaking methane.
xi. Provide annual reports on CalGEM’s efforts to enforce Sections 1724.11, 1770, 1772, 1776, and 3300.

C. Managed Decline and Just Transition

It is impossible to meaningfully address public health concerns or our growing climate crisis without a comprehensive strategy to reduce the production of fossil fuels in our state. Doing so requires not only working across stakeholders and other state agencies, but also a robust strategy for workers displaced by our transition away from fossil fuels.

a. No New Permits

i. Do not issue any new permits for new and existing oil and gas activities, especially within 2,500 feet of a sensitive receptor.

b. Timely Phase-out of Fossil Fuels

i. Begin a rapid phase out of existing oil and gas projects within 2,500 feet of a sensitive receptor.

ii. Work with frontline community groups to identify a strategy for reducing oil and gas extraction in California by a date certain.

iii. Order well closure and remediation when well operators fail to pay idle well fees or file an idle well remediation plan and order operators to plug and abandon wells that have been idle for 25 years or longer, have a low chance of re-opening, and/or wells that are leaking methane. CalGEM should prioritize wells within 5,000 feet of sensitive receptors and wells in the most vulnerable census tracts as measured by CalEnviroScreen 3.0.

1. CalGEM should develop a list of priority oil wells by documenting the wells that need to be plugged and abandoned, ranked by highest threat to communities and the environment, including a timely schedule for remediation. Wells within 5,000 feet of sensitive receptors and wells in the most vulnerable census tracts as measured by CalEnviroScreen 3.0 should be prioritized.

c. Worker Strategy

i. Engage in a multi-agency, community-led process for developing a strategy for workers in disadvantaged communities impacted by the transition to ensure economic stability of resource dependent regions.

ii. Create real job opportunities by ensuring project labor agreements (PLAs) for oil well remediation in impacted communities.

IV. Next Steps
We appreciate your careful consideration of these recommendations as part of CalGEM’s strategic planning process. We would appreciate the opportunity to speak with you and your team to discuss these ideas further once you have been able to review them, and at least quarterly thereafter. It is our plan to use these recommendations as a foundation for the 2020 CEJA Agency Assessment and future analyses of CalGEM’s progress, and we look forward to working with you to bring long-needed transformation to this critical state regulatory entity. In the meantime, any questions or comments can be directed to:

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