West Oakland
Environmental
Indicators
Project

RECLAIM OUR POWER!
Utility Justice Campaign

LOCAL
CLEAN
ENERGY
ALLIANCE

April 22, 2026

Bay Area Air Quality Management District
375 Beale Street
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VIA EMAIL
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To Air Pollution Control Officer Dr. Fine, Clerk of the Board, and Board of Directors,

Pursuant to California Government Code § 11340.6, the undersigned Petitioners submit the attached Petition to address transparency and public health and environmental harms from stationary compression ignition (diesel) engines used at data centers. Petitioners request a response within 30 days.

Sincerely,

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PETITION TO THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT TO ADDRESS TRANSPARENCY AND PUBLIC HEALTH AND ENVIRONMENTAL HARMS FROM STATIONARY COMPRESSION IGNITION (DIESEL) ENGINES USED AT DATA CENTERS

Pursuant to California Government Code § 11340.6, the Center for Biological Diversity, AllAI Consulting LLC, MediaJustice, West Oakland Environmental Indicators Project, Alliance of Californians For Community Empowerment (ACCE), Dreaming Collaborative, Silicon Valley Youth Climate Action, 350 Bay Area, California Alliance for Community Energy, Young Community Developers, the Clean Coalition, Sierra Club, Food & Water Watch, Reclaim Our Power: Utility Justice Campaign, The Climate Center, and the Local Clean Energy Alliance, Communities for a Better Environment, Marie Harrison Community Foundation, San Francisco Bay Area Planning and Urban Research Association (SPUR), and Frontline Catalysts submit this petition ("Petition") to the Bay Area Air Quality Management District ("BAAQMD") to amend its regulations to address a pressing air quality problem in California: the proliferation of stationary compressions ignition (diesel) engines (hereafter "diesel backup generators" or "diesel BUGs") to power the explosive growth of data centers. While a handful of these generators were once the occasional back-up power supply for some homeowners and emergency facilities like hospitals, in recent years they have become standard equipment for data center projects proliferating across the state, including in the Bay Area, where there can be 20 to 50 diesel backup generators at each data center site.

Because data centers insist on operating at the industry standard of "five 9's" (or 99.999% of the time), and existing regulations too liberally permit using these diesel backup generators, they are causing concrete public health and environmental harms that BAAQMD currently does not but must address. Moreover, under current regulations, operators: determine and self-report the nature of the emergency warranting use; in those instances are not subject to any operational limits; and are not even required to publicly disclose the emissions from or reasons for use of these diesel BUGs.

Accordingly, to protect air quality and promote transparency, BAAQMD should amend its regulations to require operators of data centers to:

1. Publicly report their diesel BUGs emissions information, including daily hours of use and a description of the reasons for operation.
2. Obtain permit authorization for *all* of the multitude of diesel BUGs used at each data center site as a *single* source of air pollution.
3. Strictly limit the "emergency" conditions under which diesel BUGs are permitted to operate.
4. Comply with operational limits for diesel BUGs at data centers during times of qualified emergency.

In addition, BAAQMD should develop new standards for back-up generation at data centers that are consistent with state climate and clean energy targets and equity policies. In particular, as discussed below, data centers can achieve their need for uninterrupted power by relying on available battery storage backup alternatives.

As detailed below, these new requirements are necessary to protect public health and the environment, and would be consistent with the U.S. Environmental Protection Agency's ("EPA") implementation of the federal Clean Air Act ("CAA"), as well as with the California Environmental Quality Act ("CEQA"), and the federal Endangered Species Act ("ESA"). BAAQMD has the authority to take the action requested.[1] As a public agency of the state, BAAQMD is required to respond to this petition within 30 days.[2]

I. Background.

The History of Regulation of Diesel BUGs.

In 1998, the California Air Resources Board ("CARB") identified diesel particulate matter emissions from diesel BUGs as a toxic air contaminant. Subsequently in 2000, CARB adopted the Diesel Risk Reduction Plan to reduce emissions from diesel BUGs in California by the year 2010.

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1 Gov Code §11340.6(a)-(c).

2 Gov Code § 11340.7(a).

As part of the Diesel Risk Reduction Plan, in February 2004, CARB adopted the Airborne Toxic Control Measure for Stationary Compression Ignition Engines ("ATCM").[3] The ATCM was designed to mitigate the impacts of diesel BUGs by reducing diesel particulate matter emissions approximately 90 percent from 2000 levels. Local air districts implement and enforce the ATCM requirements. While aspects of the ATCM have been amended,[4] the stringency of the standards and those implemented by BAAQMD (including through Regulation 2, Rule 5 and Regulation 9, Rule 8) has remained largely the same since 2004. In general, the regulations are intended to limit the use of these generators to emergency situations, as determined by the operator, and uses necessary for maintenance and testing.

Development of the ATCM required CARB, with the participation of local air pollution control districts, to develop rules based on the "need and appropriate degree of regulation."[5] To determine the need for, and appropriate degree of regulation, regulators had to consider "the rate and extent of present and anticipated future emissions and estimated levels of human exposure,"[6] the "anticipated sources of [diesel particulate matter],"[7] and overall, the "potential adverse health, safety, or environmental effects that may occur as a result of implementation of an [ATCM]."[8]

The requirements of the ATCM were driven by the analysis of the Diesel Risk Reduction Plan. Development of the Diesel Risk Reduction Plan estimated an emission inventory and risk associated with diesel particulate matter emissions, including estimated statewide potential cancer risk levels.[9] At the time of drafting the Diesel Risk Reduction Plan, CARB contemplated regulation of the approximately 11,000 "emergency/standby engines . . . typically used for emergency back-up electric power generation or the emergency pumping of water," in use in California.[10]

The Diesel Risk Reduction Plan further projected diesel particulate matter emissions from emergency/standby generators (diesel BUGs, highlighted) up to 2020, estimating a total statewide engine population of 13,200 as shown in the table below.[11]

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[3] Cal. Code of Regulations § 93115.15.

[4] The 2007 amendments to the ATCM focused on renumbering and reorganizing, adding citations to statutory authority, adding new exemptions, and emissions standards for certain types of engines used in agricultural contexts, and creating an option for an Alternative Compliance Demonstration (§ 93115.13(f)). The 2011 amendments were similarly limited. Further, the Final Statements of Reasons for each round of amendments also do not suggest intentions to strengthen the ATCM.

[5] Cal. Health & Safety Code § 39665(a).

[6] Cal. Health & Safety Code § 39665(b)(1).

[7] Cal. Health & Safety Code § 39665(b)(3).

[8] Cal. Health & Safety Code § 39665(b)(7).

[9] CARB, Diesel Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (October 2000) *available at* https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rrpfinal.pdf.

[10] *Id.* at 8.

[11] *Id.* at 13.

Table 4: Estimated Statewide Diesel PM Emissions Inventory – Diesel-Fueled Engines and Vehicles (2020)

Category	Engine Population	Diesel PM (tons per year)	% of Total Diesel PM Emissions
STATIONARY			
Prime	4,400	350	1.9
Emergency/Standby	13,200	149	0.8
MOBILE			
On-road	610,200	4,900	26.0
Off-road (Excluding Portable Equipment)	527,800	12,800	67.9
Portable	55,200	660	3.5
TOTAL	**1,210,800**	**18,900**	**100.0**

Notably, at the time, these estimates purported to take "into account growth in engines due to population and economic growth."[12] And even based on these estimates, which turned out to be far too low, CARB concluded that "diesel particulate matter is a major contributor to potential ambient risk levels and accounts for approximately 70 percent of the ambient air toxics cancer risk."[13]

While the ATCM concerns diesel particulate matter pollution, CARB's Diesel Risk Reduction Plan also noted that "several local air pollution control and air quality management districts have rules that regulate NOx and CO emissions" from diesel BUGs. BAAQMD regulates NOx and CO from diesel BUGs with Regulation 9, Rule 8. However, similar to BAAQMD regulations implementing the ATCM, that regulation was also developed in 2007—prior to the boom of data centers and associated diesel BUGs—and is outdated, contemplating only a handful of diesel BUGs at stationary sources.

Setting a minimum baseline, the ATCM regulatory framework allows data center operators to obtain a permit for each individual diesel BUG.[14] This approach precludes the adequate analysis of the cumulative impact of the multitude of diesel BUGs operating concurrently under true emergency scenarios. BAAQMD defines "emergency" as any "event of unforeseeable failure of regular electric power supply," or "the failure or imminent failure of a . . . source of power, but only for such time as needed to repair or replace the primary . . . source of power,"[15] and allows data center operators to determine and subsequently self-report the nature of the emergency. Data center operators are required to maintain those records of their diesel BUG use for 36 months, including reasons for use, onsite and available for review by regulators.[16] BAAMQD does not require those records to be made publicly available.

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[12] *Id.* at 11.

[13] *Id.* at 16.

[14] *See* Cal. Code of Regulations § 93115.10.

[15] BAAQMD Regulation 9, Rule 8-231.

[16] Cal. Code of Regulations § 93115.10(f).

The Regulations Never Contemplated the Vast Number of Diesel BUGs at Data Centers.

When the existing diesel BUGs regulations were established, California regulators wildly underestimated how many of these polluting generators would be put into use across California, since they were generally for home use or for emergency facilities like hospitals. For example, although the Kaiser Permanente San Jose Medical Center serves more than 200,000 patients and employs 400 physicians and 3,250 support staff, that massive facility only has eight diesel BUGs.[17]

What regulators missed was the explosive growth of data centers, and their heavy reliance on these polluting pieces of equipment to keep operating at all times. The proliferation of data centers and associated diesel BUGs is projected to keep increasing at an astonishing rate. In 2025, PG&E reported plans to power a total of 3,500 megawatts for data centers over the next few years, amounting to capital spending between $1.7 billion and $5.6 billion.[18] By current industry practices, that means that the Bay Area may expect up to an additional 4,200 to 7,000 megawatts of diesel BUG capacity to meet projected data center development.[19] This far exceeds the estimated growth of diesel backup generators projected by the ATCM and BAAQMD's implementing regulations.

Today, the diesel BUG landscape is continuing to radically change to meet the skyrocketing demands of the data center industry. Currently, it is industry standard for data centers to have power available 99.999% of the time, which amounts to only approximately 5 minutes of downtime per year.[20] To meet this standard, data centers often deploy a higher-capacity of diesel backup generation compared to the maximum power demand for operations.[21] For example, if the maximum demand at a data center is 100MW, it might deploy 120-200MW of diesel backup generation.[22] Additionally, today, diesel BUGs are running more frequently than historically projected due to climate change and challenges with grid operations.[23]

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[17] Kaiser Permanente Northern California, San Jose, *available at* https://residency-ncal.kaiserpermanente.org/about/locations/san-jose; *see also* Attachment A, Initial Start Up Date for 8 generators include: 2006, 2006, 2006, 1995, 1986, 1995, 2010, and 1990.

[18] Government Technology, *San Jose, Calif., Racing to Become Region's Data Center Capital* (December 22, 2025) *available at* https://www.govtech.com/products/san-jose-calif-racing-to-become-regions-data-center-capital

[19] *Id.*

[20] Inside Climate News, *Data Centers' Use of Diesel Generators for Backup Power Is Commonplace—and Problematic* (November 12, 2025) *available at* https://insideclimatenews.org/news/12112025/data-center-diesel-generators-noise-pollution/

[21] Better Data Center Project, Diesel Generators at Data Centers: Status, Impacts, and Protective Practices (March 2026) at 7, *available at* https://betterdatacenterproject.com/wp-content/uploads/2026/03/Diesel-Generators-at-Data-Centers-Status-Impacts-and-Protective-Practices.pdf

[22] Hannah Beckler, et al., *How Business Insider investigated the true cost of data centers*, (June 17, 2025), *available at* https://www.businessinsider.com/how-calculate-data-center-cost-environmental-impact-methodology-2025-6

[23] *See e.g.* Bay Area Air Quality Management District Letter to CEC Re: CA3 Data Center-Vantage DEIR Comment Letter, (March 9, 2022) at 2.

Moreover, while each data center generally operates numerous diesel BUGs simultaneously for a common purpose, under existing regulations each generator is permitted individually. This of course masks the true extent of operational and cumulative impacts and subsequent public health and environmental harms from these diesel BUG aggregations. Making matters even worse, during self-reported operation during emergency instances (non-maintenance and non-testing), *diesel BUGs at data centers have no operational limits*.

Exacerbating this regulatory gap, data centers are often clustered together, further concentrating harmful pollution from diesel BUGs. Yet, they are permitted on an *individual* basis, rather than as diesel BUG aggregations. This permitting approach not only excludes the pollution from other diesel BUGs at the same data center, but also the pollution of nearby data centers' diesel BUGs. BAAQMD itself has expressed concern about data center and diesel BUGs clustering and the associated cumulative health impacts and recommended mitigations to respond to the concentration.[24] Thus, as discussed below, it is imperative for BAAQMD to implement more stringent protections and emission limits to adequately reflect the changing diesel BUG landscape.

Diesel BUGs at Data Centers Exacerbate Environmental Injustices.

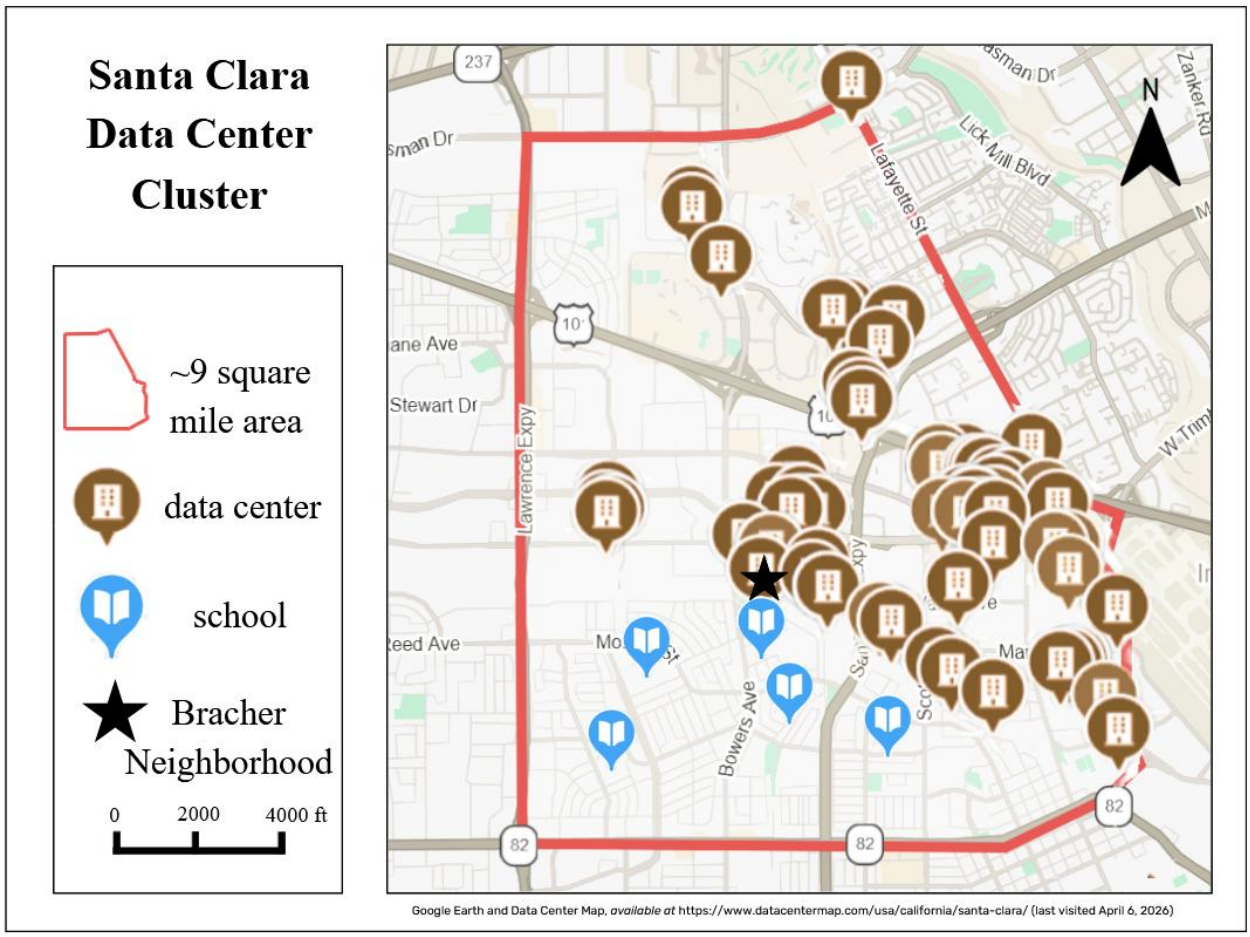
Since the development of ATCM standards in 2000, California has also passed legislation requiring CARB and the local air districts to consider and address the disproportionate impacts of air pollution on low-income communities of color.[25] This environmental justice regulatory framework emphasizes the importance of and need for adequate regulation of clustered data centers that exacerbate pollution hotspots in areas already overburdened by pollution.

Data centers are often clustered in areas that already face significant environmental injustices. For example, as illustrated in the map below, in the city of Santa Clara, 73 data centers operate across a nine-square-mile area.[26]

[24] *See e.g.* Bay Area Air Quality Management District Letter to CEC Re: CA3 Data Center-Vantage DEIR Comment Letter, (March 9, 2022) at 2.

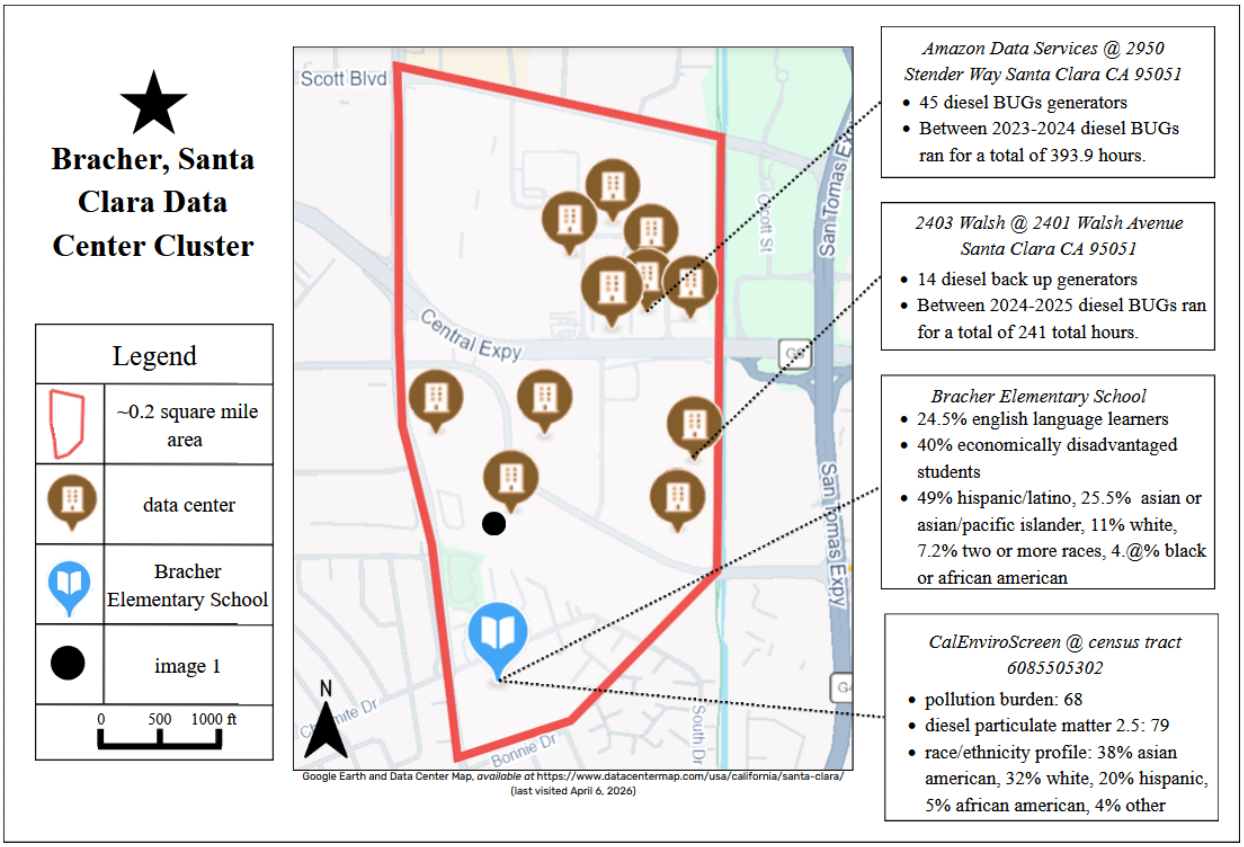
[25] *See e.g.* Assembly Bill 32 (Global Warming Solutions Act of 2006).

[26] *Santa Clara Data Centers*, Data Center Map, *available at* https://www.datacentermap.com/usa/california/santa-clara/



Taking a more granular look, as illustrated in the map below, the Bracher Neighborhood in Santa Clara includes 11 data centers across a 0.2 square mile area.[27] In this cluster, Amazon Data Services deploys 45 diesel backup generators that operated for approximately 394 hours during 2023-2024.[28] Additionally, 2403 Walsh Ave deploys 14 diesel backup generators that operated for approximately 241 hours during 2024-2025.[29] Data is unavailable for the other nine data centers in the cluster.

[27] *Id.*
[28] *See* Attachment A.
[29] *Id.*



The closest of these 11 data centers is located approximately 700 feet away from a residential neighborhood that faces significant pollution and public health harms. The Bracher neighborhood ranks in CalEnviroScreen's 68th percentile for pollution burden, 79th percentile for diesel particulate matter 2.5, and the community's racial/ethnic profile includes 38% Asian American, 32% white, 20% Hispanic, and 5% African American.[30]

The same data center is also approximately 1000 feet away from Bracher Elementary School. That school's student body includes 40% economically disadvantaged students and 25% English language learners, while the schools' racial/ethnic breakdown includes 49% Hispanic/Latino, 25.5% Asian or Asian/pacific islander, 11% white, and 4% black or African American.[31]

[30] OEHHA, CalEnviroScreen 4.0, Data from Census Tract 6085505302, (May 1, 2023) available at https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/CalEnviroScreen-4_0

[31] U.S. News & World Report, Bracher Elementary, *available at* https://www.usnews.com/education/k12/california/bracher-elementary-240118#scores

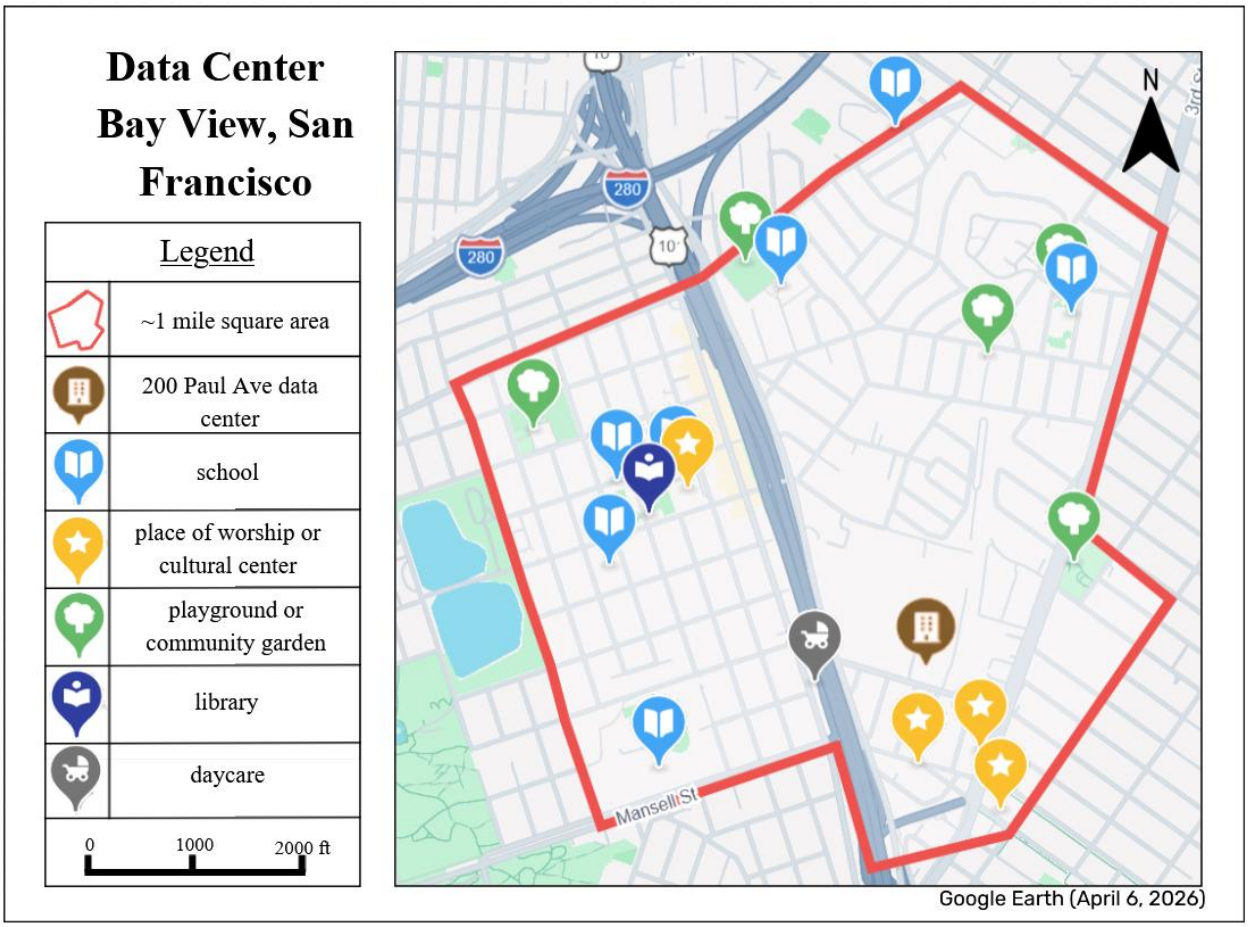
This example shows the especially problematic practice of clustering data centers, and associated diesel BUGs, near communities facing environmental injustices. Additionally, even non-clustered data centers with associated diesel BUGs are often located centrally in active neighborhoods that also face environmental justice concerns.

For example, as illustrated in the map below, 200 Paul Avenue LLC, c/o Digital Realty Trust, in Bay View, San Francisco, is permitted to operate several diesel BUGs only 50 feet away from homes on Paul Avenue.[32] There are also seven schools, five playgrounds, four places of worship, a public library, and a children's day care all within a square mile.[33] Other pollution sources also border the data center and the Bay View community: the Union Pacific Railroad operates 100 feet away, and Highway 101 crosses about 800 feet from the data center.[34]

[32] Google Earth, Bay View San Francisco, Imagery from the dates:12/14/2015–1/1/2021, *available at* https://earth.google.com/web/@37.48955326,-122.09791035,-0.8063465a,109473.9700659d,30y,0h,0t,0r/data=CgRCAggBOgMKATBCAggASg0I_____AR AA

[33] *Id.*

[34] *Id.*



The Bay View community ranks in CalEnviroScreens 81st percentile, 68th percentile for pollution burden, 100th percentile for diesel particulate matter, and 96th percentile for asthma.[35]

Quite simply, data centers are developing and deploying diesel BUGs in the heart of communities that already face the disproportionate impacts of pollution.

Pollution from Diesel BUGs Impose Significant Impacts to Public Health.

Diesel generators emit toxic pollutants such as particulate matter, nitrogen oxides, carbon monoxide, sulfur dioxide, and volatile organic compounds detrimental to public health and the environment.

Diesel exhaust is known to increase lung cancer, cardiovascular disease,[36] intensify

[35] OEHHA, CalEnviroScreen 4.0, data from census tract 6075023300, (May 1, 2023) *available at* https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/CalEnviroScreen-4_0

[36] Benbrahim-Tallaa, L., et al. 2012. Carcinogenicity of diesel-engine and gasoline-engine exhausts and some nitroarenes. The Lancet Oncology 13, 663–664. DOI: 10.1016/S1470-2045(12)70280-2; *see also* American Cancer Society, *Diesel Exhaust and Cancer Risk* (Updated February 26, 2024).

asthma symptoms and premature death.[37] Additionally, individual pollutants within diesel exhaust, such as particulate matter 2.5, are associated with mortality. In California, particulate matter 2.5-associated deaths ranged from 12,700 to 26,1700, 53% attributable to in-state anthropogenic emissions.[38]

Although data center clusters are already apparent in the Bay Area, because the state of Virginia has the world's highest concentration of data centers, developments there help predict the future impacts we can expect for the Bay Area.[39] Since 2023, data center developers have deployed an enormous number of diesel backup generators in Virginia to serve the growth in data centers. Recent research shows how all this additional pollution is estimated to have resulted in 14,000 asthma symptom cases and an associated $300 million in health care costs.[40]

Furthermore, some neighborhoods in Virginia now face higher emissions from diesel backup generators at data centers than they do from a nearby 600MW natural gas plant.[41] Data center NOx emissions exposure also exceeds that from the Prince William Co. landfill.[42] The health impacts from the diesel backup generators in Northern Virginia has also been felt in surrounding states.[43]

Health impacts from diesel backup generator operations can also disrupt learning and development for students. Specifically, in California, consistent exposure to particulate matter 2.5 has likely already decreased students' test scores.[44] This exposure impairs students' development and increases school absences.[45] Because school success correlates with future earnings and economic mobility, allowing these diesel BUGs to operate near schools poses a

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[37] Sydbom, A., et al. 2001. Health effects of diesel exhaust emissions. Eur Respir J 17, 733–746. DOI: 10.1183/09031936.01.17407330; *see also* Weitekamp, C.A., et al. 2020. A systematic review of the health effects associated with the inhalation of particle-filtered and whole diesel exhaust. Inhal Toxicol 32, 1–13. DOI:10.1080/08958378.2020.1725187

[38] Tianyang Wang, et al., *Mortality burdens in California due to air pollution attributable to local and nonlocal emissions*, (December 2019) *available at* https://www.sciencedirect.com/science/article/pii/S016041201932447X

[39] Ryan Murphy and Emily Feng, *Why more residents are saying 'No' to AI data centers in their backyard*, (July 17, 2025) *available at* https://www.npr.org/2025/07/17/nx-s1-5469933/virginia-data-centers-residents-saying-no

[40] Yuelin Han, et al., The Unpaid Toll: Quantifying and Addressing the Public Health Impact of Data Centers, (October 2025) at 3 *available at* https://arxiv.org/pdf/2412.06288

[41] *Id.* at 17.

[42] *Id.* at 9.

[43] *Id.* at 18.

[44] Robert W Wassmer and Michael D Turgeoun, *Particulates Matter: The Influence of Cumulative Local Air Pollution Exposure on Sixth-Grade Academic Achievement in California*, (2024) available at https://edopportunity.org/papers/ParticulatesMatter_Wassmer_Turgeon.pdf#:~:text=What%20do%20the%20findings%20mean?%20California's%20primary,produce%20equitable%20and%20cost%2Deffective%20test%20score%20gains.

[45] *Id.*

tremendous threat to the future of California's students.[46]

Pollution from Diesel BUGs Impose Significant Impacts to Biodiversity

Fossil fuel combustion from diesel BUGs emits toxic nitrogen oxide (NOx) pollutants including nitrous oxide (N_2O), nitric acid (HNO_3), nitrate (NO_3^-), and ammonia (NH_3).[47] NOx air pollution has contributed to a significant increase in nitrogen deposition throughout the United States,[48] significantly impacting species and ecosystems.[49] The nitrogen deposition from vehicle pollution is scientifically linked to harming federally endangered species of the Bay Area.

The bay checkerspot butterfly (*Euphydryas editha bayensis)* is a federally endangered species exclusively found across patches of serpentinite soil in the San Francisco Bay Area.[50] NOx pollution from vehicles has contributed to the decline and local extirpation of the species.[51] An increase in nitrogen deposition has encouraged exotic grasses to replace native forbs, the larval host plant and adult nectar source for the bay checkerspot butterfly.

For example, the population of bay checkerspot butterflies at the Edgewood Natural Preserve in San Mateo County was extirpated due to non-native plants outcompeting the native larval host plant, diminishing 80% of the available habitat.[52] The Fish and Wildlife Service's 5-year review for the bay checkerspot butterfly found "nitrogen deposition . . . was responsible for creating soil conditions that allowed the observed grass invasion."[53] The 5-year review

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[46] Raj Chetty et al. *How does your kindergarten classroom affect your earnings? Evidence from Project STAR* (November 2011) *available at* https://academic.oup.com/qje/article-abstract/126/4/1593/1923939 and J Lawrence Aber et al. *Middle childhood success and economic mobility*, Centers on Children and Families at Brookings Institute (2012) *available at* https://www.brookings.edu/wp-content/uploads/2016/06/15-education-success-economic-mobility-aber-grannis-owen-sawhill.pdf and Gary E. Chamberlain, *Predictive effects of teachers and schools on test scores, college attendance, and earnings* (2011) *available at* https://www.pnas.org/doi/abs/10.1073/pnas.1315746110

[47] Fowler, David et al., The global nitrogen cycle in the twenty-first century, 368 Phil Trans R Soc B 20130164 (2013).

[48] *Id.*

[49] Fenn, Mark E., Ecological effects of nitrogen deposition in the Western United States, 53 BioScience 404 (2003); Hernandez, Daniel L. et al., Nitrogen pollution is linked to US listed species declines, 66 BioScience 213 (2016)

[50] U.S. Fish and Wildlife Service, Bay Checkerspot Butterfly (*Euphydryas editha bayensis*) 5-Year Review: Summary and Evaluation, Sacramento Fish and Wildlife Office (2009); Tzankova, Sdravka et al., Can the ESA address the threats of atmospheric nitrogen deposition? Insights from the case of the Bay Checkerspot Butterfly, Harvard Environmental Law Review, Vol. 35 (2011); Hernandez, Daniel L. et al., Nitrogen Pollution is Linked to US Listed Species Declines, 66 BioScience 213 (2016)

[51] Weiss, Stuart B., Cars, cows and checkerspot butterflies: nitrogen deposition and management of nutrient-poor grasslands for a threatened species, 13 Conservation Biology 1476 (1999)

[52] Fenn, M.E. et al., Nitrogen critical loads and management alternatives for N-impacted ecosystems in California, 91 Journal of Environmental Management 2404 (2010)

[53] U.S. Fish and Wildlife Service, Bay Checkerspot butterfly (Euphydryas editha bayensis) 5-Year Review: Summary and Evaluation, Sacramento Fish and Wildlife Office (2009) at 13.

concluded that the most significant threat to the species is nitrogen deposition, causing habitat modification.[54]

Similarly, Presidio clarkia (*Clarkia franciscana*), is a federally endangered flowering plant found exclusively in the serpentine grasslands of the San Francisco Bay Area.[55] Nitrogen deposition gives a competitive advantage to non-native species. The Fish and Wildlife Service 5-year-review found nitrogen deposition as a principal threat to the species as "elevated inputs of atmospheric nitrogen deposition from air pollution have further accelerated the encroachment of native shrubs and nonnative shrubs and nonnative grasses and forbs…into *Clarkia franciscana* habitat."[56]

The skyrocketing projection of data centers and diesel BUGs has and will continue to increase NOx emissions across the San Francisco Bay Area, significantly contributing to the decline of the bay checkerspot butterfly and presidio clarkia. Continuing data center business as usual under BAAQMD's current regulations further threatens the biodiversity of the San Francisco Bay Area.

II. BAAQMD Should Grant the Petition to Protect Public Health and the Environment from Exposure to Air Toxics and Other Pollutants and Bring Diesel BUGs Regulation In Line With the Clean Air Act, California Environmental Quality Act, and the Endangered Species Act.

Before adopting new or amending regulations, the BAAQMD Board must make a finding of "necessity" and "authority."[57] The transparency requirements and permitting refinements sought by the Petition meet these requirements.

A. Granting the Petition is Necessary.

"Necessity" means that a need exists for the regulation, or for its amendment or repeal, as demonstrated by the record of the rulemaking authority.[58] As Section I demonstrates, the BAAQMD regulations implementing the ATCM were simply not developed to address the massive increase in diesel BUGs and associated cumulative impacts imposed by the increasing proliferation of data centers in the Bay Area. Given the explosion of these polluting diesel BUGs, it is necessary for BAAQMD to update its regulations pertaining to diesel BUGs at data centers to protect public health and the environment, particularly in environmental justice communities, in four respects: first, by making the emissions and reasons for emissions of diesel BUGs at data centers public record; second, by permitting diesel BUGs at data centers in the aggregate as a single source for a common purpose; third, by revising the definition of

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[54] U.S. Fish and Wildlife Service, Bay checkerspot butterfly, 5-Year Review (2022) at 9, 12, 13, 24.

[55] Hernandez, Daniel L. et al., Nitrogen pollution is linked to US listed species declines, 66 BioScience 213 (2016) at Table 3.

[56] U.S. Fish and Wildlife Service, *Clarkia franciscana* (Presidio clarkia) 5-Year Review (2010) at 43; U.S. Fish and Wildlife Service, *Clarkia franciscana* (Presidio clarkia) 5-Year Review (2024) at 10.

[57] Cal. Health & Safety Code § 40727(a).

[58] Cal. Health & Safety Code § 40727(b)(1).

"emergency" and requiring operational limits during those situations; and fourth, ultimately replacing diesel BUGs with clean zero emission alternatives. Overall, granting the petition is necessary to enable BAAQMD to meet its goal to be "diesel free by 2033."[59]

In regards to transparency, although BAAQMD can request to view diesel BUGs emission records, those records are "retained on-site, either at a central location or at the engine's location, or at an offsite central location within California."[60] Moreover, a BAAQMD request to review records would yield a "monthly summary" that lists hours and reasons for operation.[61] A monthly summary that aggregates daily information precludes adequate identification of potential permit violations, and the impact and frequency of peak emissions events, especially in regards to nearby sensitive receptors. It is unlikely that BAAQMD has the staff capacity to inspect the thousands of log entries (one for each diesel BUG at each data center) each month to ensure compliance with even inadequate permitting requirements. Accordingly, it is necessary for BAAQMD to amend its regulations to make these records publicly available to help ensure compliance and allow the public to monitor these pollution emissions.

BAAQMD should similarly address the loophole on data center operators self-defining "emergency," especially given this current limitation to enforcement. During those emergency situations, current regulations allowing for unfettered operation of diesel BUGs is also inadequate to protect public health and the environment. BAAQMD should therefore tighten and clarify the definition of emergency.

Finally, the current regulatory framework allows data center operators to diminish the overall impact of operating diesel BUGs by "piecemealing" their harms through individual permit applications, even though it is reasonably foreseeable for many, if not all of the generators to operate concurrently under true emergency conditions. Permitting all of the diesel BUGs at a data center in the aggregate will begin to cure this regulatory gap where data center operators may certainly be avoiding major source review.

BAAQMD should ultimately strive to replace diesel BUGs with clean zero emission alternatives, consistent with state climate and clean energy targets and equity policies. And as detailed below, it is also necessary to grant the petition to bring these regulations into closer compliance with the CAA and CEQA. In addition, under the ESA's consultation provision, BAAQMD must ensure that the activities it regulates do not impair imperiled species or their habitats.[62] As noted, the substantial and cumulative pollution from diesel BUGs threatens listed species in California. Accordingly, granting this petition will also help foster BAAQMD's compliance with the ESA. Absent the relief sought in this Petition, BAAQMD cannot close the gap in regulating diesel BUGs at data centers.

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[59] *See* BAAQMD, Diesel Free by 2033, *available at* https://dieselfree33.baaqmd.gov/.

[60] Cal. Code of Regulations, Title 17, §§ 93115.10(f)(2).

[61] Cal. Code of Regulations, Title 17, §§ 93115.10(f)(1).

[62] *See e.g.* 16 U.S.C. § 1536.

B. BAAQMD Has the Authority to Grant the Petition.

"Authority" means that a provision of law or of a state or federal regulation permits the regional agency to adopt, amend, or repeal the regulation.[63] BAAQMD implements the ATCM through its current rules, including Regulation 2, Rule 6. It is well settled that BAAQMD can enact stricter regulations than the ATCM. "Local and regional authorities may establish stricter standards than those set by law or by the state board for nonvehicular sources."[64] Accordingly, BAAQMD plainly has the authority to grant the Petition under state law.

In addition, as detailed below, BAAQMD has the authority to grant the Petition to bring its regulations into closer compliance with the CAA and CEQA.

(i) EPA's Implementation of the Clean Air Act Indicates That Public Disclosure of Emissions Data is Necessary and Appropriate.

The permits to operate diesel BUGs at data centers are part of the data center's synthetic minor facility operating permit, governed by BAAQMD Regulation 2, Rule 6. Importantly, these synthetic minor facility operating permits must include "quantifiable and *practically enforceable* permit conditions" in order to ensure that the facility need not undergo Title V major source review under the Clean Air Act.[65] Moreover, monitoring, recordkeeping, and reporting permit conditions must be "*sufficient to determine compliance* with the emission limits."[66]

As noted, under current BAAQMD regulations data center operators or owners maintain diesel BUG emission records in a District-approved log for at least 36 months from the date of entry.[67] Log entries are retained on-site, either at a central location or at the diesel BUG's location, and must be made immediately available to the District staff upon request.[68] BAAQMD staff have confirmed that because these "log entry" records are kept at the data center or other site, and not at the Air District, *they are not public records*.[69]

This approach is inconsistent with EPA's interpretation of Clean Air Act requirements. In particular, EPA has explained that "a requirement to provide records to the state only on request, without any required periodic reporting to the state, is inconsistent with CAA and

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63 Cal. Health & Safety Code § 40727(b)(2).

64 Cal. Health & Safety Code § 39002. *See also Hardesty v. Sacramento Metro. Air Quality Mgmt. Dist.*, 202 Cal. App. 4th 404, 409 (2011) ("[CARB] has exclusive responsibility for control of emissions from motor vehicles, while the local and regional districts have primary responsibility for control of air pollution from all sources other than emissions from motor vehicles.")

65 BAAQMD Regulation 2, Rules 423.2.1. and 423.2.2 (emphasis added).

66 *Id.*, Rule 423.2.3 (emphasis added).

67 BAAQMD Regulation 2, Rule 501.

68 *Id.*

69 Email response from BAAQMD Public Records Specialist in response to Center for Biological Diversity Inquiry on BAAQMD Public Records Request No. 2025-08-0394 (October 14, 2025).

regulatory requirements for enforceability."[70] EPA reasons that, "to be enforceable, [the rule requirements] must be legally and *practically enforceable*," as also required by BAAQMD Regulation 2, Rule 423.2 for synthetic minor operating permits.

"Practically enforceable" requires citizens' ability to participate in the enforcement of permit conditions, as authorized by CAA section 304.[71] But "if there is no requirement for these records to be submitted to the [Air District] absent a request, then unless the [Air District] requests the compliance records and then makes them *publicly available*, no parties other than the state or the EPA under its CAA section 114 authority will have practical access to the basic information necessary to determine compliance by the regulated entities under these rules."[72] In other words, in order to impose practically enforceable permit conditions pursuant to the CAA, BAAQMD must make data center diesel BUGs emissions and reasons for emissions public records. That is currently not the case.

On March 11, 2026, in response to a Records Request, the Center for Biological Diversity received what *is* publicly available regarding diesel BUGs emissions information from BAAQMD, the "Internal Combustion Engine CHIRP Data-public" spreadsheet. The Center isolated the spreadsheet reporting information to data centers, attached as Attachment A. A review of the spreadsheet shows that BAAQMD reports some but not all of the required emissions information. The spreadsheet requires reporting of Total Reported Hours (of operation), Maintenance and Testing Reported Hours, Emergency Reported Hours, and the Reporting Period Start and End Dates. But the spreadsheet does not include information required by either the ATCM or BAAQMD's Regulation 2, Rule 6 (governing reporting of diesel BUGs emissions reporting) for several reasons, including:

- Several entries are "NULL"[73]
- There is no consistent reporting period.
- Reporting is aggregated to annual emissions.
- There is no description of the nature of the emergency.

To address this lack of transparency, in addition to making these records public, BAAQMD must ensure adequate reporting by each facility, require reporting of daily emissions information, and include the reasons for operation, including whether for maintenance or testing purposes and in particular, the nature of or a description of the emergency.

To assist in verifying compliance with permit conditions, especially given the multitude of generators at issue, BAAQMD should also consider requiring operators of data centers in

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[70] *See e.g.* Air Plan Approval, Conditional Approval, Limited Approval and Limited Disapproval; Colorado; Serious Attainment Plan Elements and Related Revisions for the 2008 8-Hour Ozone Standard for the Denver Metro/ North Front Range Nonattainment Area, 88 Fed. Reg. 29827-29828 (May 2023).
[71] *Id.*
[72] *Id.* (emphasis added).
[73] While the Internal Combustion Engine CHIRP Data-public spreadsheet notes that "if an engine has not reported any usage data, columns AQ through AU would display NULL," the transparency issue renders it impossible to determine whether NULL constitutes zero usage or a failure to report.

communities overburdened by diesel particulate matter and other diesel BUG pollution to install a "fence-line monitoring system or other appropriate real-time, on-site monitoring," especially in coordination with affected school districts.[74] This would further benefit BAAQMD's limited understanding of the cumulative impacts of these generators, especially if they are all operating concurrently.

Finally, petitioners emphasize that there is nothing confidential about the information at issue here concerning the operation of diesel BUGs. While data center owners have tried to assert in other contexts that information about energy usage for training AI models at data centers is somehow proprietary, that argument holds no water. Thus, for example, as the Assembly Committee on Privacy and Consumer Protection correctly assessed, "*the amount of energy consumed [data centers for AI models] does not necessarily correlate with the quality or innovation of the models themselves*," and is therefore not proprietary.[75] That is why, as the Committee explained, companies have disclosed the energy usage for training large language models, "without suffering any apparent loss of competitive advantage," and why the Committee concluded that "the argument that disclosing energy usage alone constitutes a protectable trade secret appears to lack strong support in practice."[76]

(ii) Considering The Cumulative Use and Emissions of All Diesel BUGs at Each Data Center Site Collectively as a Single Source, Rather Than Considering Each Diesel BUG in Isolation is also Necessary and Appropriate To Make BAAQMD Regulations Consistent with the Requirements of the CAA and CEQA.

Under existing BAAQMD regulations, regulators look at each individual diesel BUG and permit it individually, rather than considering the collective emissions and impact of large diesel BUG aggregations that exist at each data center. This approach of course masks the adverse impacts of these aggregations, often sited near environmental justice communities, as previously discussed. Accordingly, in addition to requiring transparency, BAAQMD should amend its permitting approach to consider diesel BUG aggregations as a single source, and thus take into consideration their collective adverse impacts.

This new approach would also bring BAAQMD regulations more in line with the CAA. The CAA directs BAAQMD to regulate "stationary sources," defined as "any building, structure, facility, or installation which emits or may emit a regulated New Source Review [NSR] pollutant." A "building, structure, facility, or installation" includes "all of the pollutant-emitting activities which (1) belong to the same industrial grouping, (2) are located on one or more

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[74] *See e.g.* Cal. Health and Safety Code § 42705.5(c) ("any stationary source that emits pollutants in, or that materially affects, the highest priority locations to deploy a fence-line monitoring system or other appropriate real-time, on-site monitoring, taking into account technical capabilities, cost, and the degree to which additional data would materially contribute to an understanding of community risk.")

[75] Assembly Committee on Privacy and Consumer Protection, Hearing on AB222 (May 1, 2025) *available at* https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=202520260AB222# (emphasis added).

[76] *Id.* The Committee similarly rejected arguments that these disclosures could pose any national security risk.

contiguous or adjacent properties, and (3) are under the control of the same person (or persons under common control)."[77] The courts have determined that EPA should aggregate sources together in air permitting if the aggregation fits within the ordinary meaning of "building, structure, facility or installation."[78]

Aggregations of diesel BUGs at a single data center site fall squarely within this definition of a single stationary source. Indeed, permitting each diesel BUG individually is exactly the scenario that EPA has stated the NSR regulations are designed to prevent: "a source . . . carv[ing] up a higher-emitting project into two or more lower-emitting 'projects' and avoid[ing] triggering major NSR requirements."[79]

Instead, BAAQMD should aggregate multiple diesel BUGs at the same or contiguous data center building or facility together as one source for permitting purposes. Multiple diesel BUGs belong to the same industrial grouping by being the same kind of source, are located on the same contiguous property, and are under the common control of the data center operator.

Furthermore, project aggregation is appropriate in this context under EPA's current policy definition of a single source, which emphasizes physical proximity and inquires if projects are "substantially related" when determining if different units comprise a single source and if projects should be aggregated.[80]

Indeed, existing BAAQMD guidance adopts EPA's policy on aggregating nominally separate projects by considering the following factors in determining whether projects should be considered in the aggregate:

(i) whether the facility submits multiple applications for successive minor projects (below the "major modification" threshold) simultaneously or within a relatively short period of time;
(ii) whether the facility characterizes the successive projects as a single project for purposes of financing the project;
(iii) whether the facility's projections of consumer demand that the facility will need to meet can only be met by the multiple projects together;
(iv) authorized statements by facility representatives regarding plans for operation of the facility;
(v) independent analysis of the economic purpose and viability of the facility; and

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[77] 40 CFR §§ 52.21(b)(5)-(6).

[78] *Alabama Power Co. v. Costle*, 636 F. 2d 323, 397 (D.C. Cir. 1979).

[79] *See* Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR): Aggregation; Reconsideration, 83 Fed. Reg. 57324, 57325-26 (Nov. 15, 2018).

[80] *See* EPA, Interpreting "Adjacent" for new Source Review and Title V Source Determinations in All Industries Other Than Oil and Gas, Draft for Public Review & Comment, Sept. 4, 2018, at 6, *available at* https://www.epa.gov/sites/default/files/2018-09/documents/draft_adjacent_policy_memo_9_04_2018.pdf; 83 Fed. Reg. 57331.

(vi) other relevant factors.[81]

A review of permit applications for diesel BUGs at data centers shows that this is exactly the situation requiring project aggregation as a single source. Data centers are applying for multiple diesel BUGs as minor sources, not only in quick succession, but concurrently. The data center industry practice of operating at five 9's further illustrates that consumer demand requires simultaneous use of all of these generators, at least in the event of a true qualified emergency. The multitude of diesel BUGs are, moreover, certainly part of the same project and would be redundant absent the overall and universal purpose—to serve the data center.

In addition to being in the public interest and maintaining consistency with the CAA, permitting diesel BUGs at data centers as a single source would also be consistent with CEQA requirements. Granting the petition to permit diesel BUGs as a single aggregated (data center) source would be a first step in addressing BAAQMD's concerns with deficient cumulative impacts analyses, as discussed below in Section II.B.(iv).

For example, in *San Franciscans for Reasonable Growth v. City & County of San Francisco*, the court held that the city planning commission failed to adequately consider the cumulative impacts of other projects under consideration in conducting its CEQA analysis for four proposed high-rise buildings.[82] The court rejected arguments that projects that had not yet been approved were not reasonably foreseeable because their construction was not yet a certainty. The court reasoned that a "common sense" determination that projects which are under review are reasonably foreseeable. It would be "illogical" for the agency to evaluate the direct impacts of one project "but completely ignore the cumulative impacts of that project's siblings in the same category."[83]

It would similarly be illogical for BAAQMD to ignore the fact that applications for the diesel BUGs at data centers are for the exact same type of equipment at the same location submitted by the same owner for the same purpose and at the same time. Instead of permitting each individual diesel BUG separately, BAAQMD should permit all diesel BUGs in the aggregate, with the data center as a single source of air pollution.

A revised permitting scheme should also take into account the "inversion layer" in the Bay Area. BAAQMD's current cumulative health risks assessments consider the "combined total risk values of each individual source within the 1,000-foot evaluation zone."[84] The models

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[81] BAAQMD, *Complex Permitting Handbook for BAAQMD New Source Review Permitting* 27-28 (Sept. 2016), https://www.baaqmd.gov/~/media/files/permits/permitting-manuals/nsr-guidance/complex-nsr-permitting-handbook_sept-2016-pdf.pdf.

[82] *San Franciscans for Reasonable Growth v. City & County of San Francisco,* 151 Cal. App. 3d 61, 67-68, 74-75 (Ct. App. 1984).

[83] *Id.* at 68, 74; *see also Gray v. Cnty. of Madera*, 167 Cal. App. 4th 1099, 1127-28 (2008) ("We conclude that any future project where the applicant has devoted significant time and financial resources to prepare for any regulatory review should be considered as probably future projects for the purposes of cumulative impact.")

[84] *See e.g.* CEC, San Jose Data Center Draft Environmental Impact Report (December 2021) at 87.

used for risk assessment assume that any air pollution generated by the facility will begin to dissipate at that 1,000 foot line.[85] But the Bay Area is under a near daily inversion layer that "serves as a barrier that prevents pollution from escaping and limits the amount of clean air that reaches the ground."[86] In permitting diesel BUGs in the aggregate at data centers, BAAQMD should also recognize that pollutants don't dissipate at 1,000 feet during a temperature inversion, and take into account other exacerbating factors, such as the increasing frequency of climate-change-induced heatwaves, where pollution poses even more significant impacts on public health and the environment.[87]

(iii) BAAQMD Has the Authority to Redefine Emergency Conditions for the Operation of Diesel BUGs at Data Centers and Impose Operational Limits During Emergency Conditions.

As a preliminary matter, BAAQMD should ensure that data center operators are not using maintenance and testing practices to actually assist in powering non-emergency operation of a data center. Given the lack of transparency of diesel BUGs emission records, this is a valid concern, especially as permitted testing and maintenance windows seem excessively long. BAAQMD should also consider further limiting those permitted times to test/maintain diesel BUGs at data centers.

As noted, under existing BAAQMD regulations data centers may operate diesel BUGs during any "emergency," defined as any "event of unforeseeable failure of regular electric power supply," or "the failure or imminent failure of a . . . source of power, but only for such time as needed to repair or replace the primary . . . source of power."[88]

BAAQMD regulations further define "unforeseeable" as "not able to be reasonably anticipated and demonstrated by the owner or operator to the satisfaction of the Air Pollution Control Officer to have been beyond the reasonable control of the owner or operator," and make clear that "the enforcement of a contractual obligation the owner or operator has with a third party or any other party is foreseeable" and therefore does not qualify as an emergency.[89]

This means that where a data center operator has a contractual obligation to operate at five 9's, the data center operator should not be permitted to deem any interruption of power supply that affects achievement of five 9's to be an emergency. Not being able to maintain a contractual obligation or preferred business practice of five 9's should not amount to an actual failure of power supply, such as a power safety/power shutoff event.

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[85] *Id.* at 111.

[86] Awair, *Why California Cities Rank Highest for Air Pollution*, *available at* https://www.getawair.com/blog/why-california-cities-rank-highest-for-air-pollution

[87] *See e.g.* Governor's Office of Planning and Research, California Energy Commission, et al., California's Fourth Climate Change Assessment, *available at* https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf.

[88] BAAQMD Regulation 9, Rule 8-231.

[89] BAAQMD Regulation 9, Rule 8-237.

Contrary to these regulations, however, currently certain data centers utilize power controls which "automatically switch data center operations to backup power in the event of momentary grid disturbances."[90] Thus, although such grid disturbances are frequently temporary and if the only reason the diesel BUGs are activated is to achieve the five 9s contractual obligation, these diesel BUGs would be operating under foreseeable circumstances. This practice enables data center operators to game BAAQMD's rules. BAAQMD should amend its regulations to clarify that momentary grid disturbances are not emergencies allowing diesel BUG usage.

In short, given the significant public health and environmental impacts imposed by the operation of diesel BUGs at data centers, BAAQMD should implement a more protective definition of emergency.

(iv) BAAQMD Has the Authority to Require Clean Alternatives to Diesel BUGs at Data Centers in Line with State Climate, Clean Energy and Equity Targets.

While the ATCM establishes emission standards,[91] data center operators can demonstrate compliance with even those outdated standards by installing certain equipment, including a Tier 4 certified Compression Ignition engine or other equipment that emits no more than the 0.015 g/bhp/hr particulate matter standard.[92] BAAQMD has further determined Best Available Control Technology ("BACT") and Best Available Control Technology for Toxics Regulation ("TBACT") to also be EPA Tier 4 Emission Standards.[93] Complying with these standards requires a certified, compliant or retrofit Tier 4 engine.[94] To put the associated public health and environmental impacts into perspective, however, Tier 4 engines are the same engines used in locomotives.[95]

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[90] Better Data Center Project, Diesel Generators at Data Centers (March 2026) *available at* https://betterdatacenterproject.com/wp-content/uploads/2026/03/Diesel-Generators-at-Data-Centers-Status-Impacts-and-Protective-Practices.pdf; *see also* Data Center Dynamics, *Virginia narrowly avoided power cuts when 60 data centers dropped off the grid at once* (March 2025) *available at* https://www.datacenterdynamics.com/en/news/virginia-narrowly-avoided-power-cuts-when-60-data-centers-dropped-off-the-grid-at-once/

[91] Cal. Code of Regulations, Title 17, §§ 93115.6-93115.9.

[92] *See e.g.* Cal. Code of Regulations, Title 17, § 93115.13(f)(6).

[93] *See e.g.* Best Available Control Technology (BACT) and BACT for Toxics (TBACT) for Small to Medium Sized Standby Diesel Engineshttps (October 2024) *available at* http://www.baaqmd.gov/~/media/files/engineering/workshops/diesel-bact-102124/bact-tbact-webinar-presentation-21oct2024-pdf; Revised BACT Guideline for Diesel Backup Generators > 1000 BHP, Frequently Asked Questions (FAQs) (March 17, 2021) *available at* https://www.baaqmd.gov/~/media/files/engineering/backup-diesel-generators/faq_bact_for_large_diesel-pdf.pdf?la=en

[94] *Id.*

[95] CARB, Locomotive Factsheet, *available at* https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california/locomotive-fact-sheets.

BAAQMD has identified that between September 1, 2019 and September 30, 2020, "nearly half of the identified data centers in Santa Clara, San Jose, and Sunnyvale operated backup diesel generators for reasons other than routine testing and maintenance . . . with 40 or more generators operating concurrently at two facilities; and with one facility running diesel generators for approximately 400 hours."[96] In which case, at two facilities, the equivalent of 40 or more *stationary* locomotives ran at the same time. And in one facility, the equivalent of more than one *stationary* locomotive ran for 400 hours in areas already overburdened by pollution.

The ATCM and existing BAAQMD regulations never contemplated this scale or cumulative impact of such diesel BUG operation at data centers. BAAQMD should therefore either strengthen BACT and TBACT for diesel BUGs at data centers, or utilize its permitting authority to require clean alternatives. Indeed, CARB's Diesel Risk Reduction Plan itself explained that:

> While the principal focus of this plan is the reduction in emissions of diesel PM, *staff are well aware that there are a number of viable alternative technologies*, such as . . . electrification that in many cases could be used to accomplish the same results. *It is staff's full intent*, as it develops the regulations proposed in this plan, to fully explore and engage in dialogue with interested parties concerning *opportunities for using these alternatives* to reduce diesel PM emissions.[97]

This is also not a novel concept. In one comment to the California Energy Commission ("CEC") regarding a proposed data center, BAAQMD itself urged the CEC: in an area that has "long been disproportionately impacted by air pollution and is identified as a priority community by the State of California as a Senate Bill 535 disadvantaged community, the Air District is concerned about the potential for any increase in emissions that could result from the Project . . . [and thus] the Air District encourages the CEC to go beyond current regulatory requirements and require the project applicant to adopt the use of cleaner, non-diesel technologies."[98]

In another similar comment letter to the CEC regarding a data center, BAAQMD recommended onsite mitigation measures, including "[i]mplement green infrastructure and fossil fuel alternatives in the development and operation of the Project, such as solar photovoltaic (PV) panels, electric heat pump water heaters, and solar PV back-up generators with battery storage capacity, and commit to pursue carbon-free electricity service if on-site renewables do not meet the full electricity demand."[99]

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[96] BAAQMD Letter to California Energy Commission Re: CA3 Data Center – Notice of Preparation (September 21, 2021).

[97] CARB Diesel Risk Reduction Plan at 2 (emphasis added).

[98] BAAQMD Letter to California Energy Commission Re: CA3 Data Center – Notice of Preparation (September 21, 2021).

[99] BAAQMD Letter to California Energy Commission Re: STACK Trade Zone Park Draft Environmental Impact Report (March 13, 2023).

In a third example, BAAQMD urged the CEC to "incorporate additional alternative technologies such as solar, battery storage and/or fuel cells."[100]

BAAQMD has further opposed certain data center industry practices of offsetting emissions: "[t]he Air District does not support the use of Emission Reduction Credits to offset NOx emissions to mitigate CEQA related impacts. Such banked emissions credits may have resulted from past and/or non-local sources, and *do not reduce current local impacts*."[101]

It is also important in developing new standards that BAAQMD not adopt revised standards that include *any* fossil fuels or combustion resources. Natural gas or biofuel alternative power supplies, for instance, would still hinder the State's abilities to meet its climate,[102] clean energy,[103] and equity goals.[104]

Instead, BAAQMD should set the data center back-up generator clean energy standard for California and the nation. Clean, zero emission technologies have proven viable in examples across the United States. "Battery energy storage systems (BESS) can serve as the backup power source and greatly reduce—or in some cases, completely eliminate—the use of diesel generators."[105] Examples include:

- A BESS with 1,200 MWh capacity came online in 2024 to power a 300 MW Meta data center for up to four hours.[106]
- xAI deployed 168 Tesla Megapack battery systems (650 MWh) at its Memphis data center.[107]

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[100] BAAQMD Letter to California Energy Commission Re: CA3 Backup Generating Facility – Vantage Draft Environmental Impact Report (March 8, 2022).

[101] *Id.* (emphasis added).

[102] Cal. Health & Safety Code § 38566 ("the state board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030.")

[103] *See* SB 100, The 100 Percent Clean Energy Act of 2018.

[104] *See e.g.* Cal. Health & Safety Code § 38562.5 "when adopting rules and regulations pursuant to this division to achieve emissions reductions beyond the statewide greenhouse gas emissions limit and to protect the state's most impacted and disadvantaged communities, the state board shall . . . prioritize . . . direct emission reductions."

[105] Better Data Center Project, Diesel Generators at Data Centers (March 2026) *available at* https://betterdatacenterproject.com/wp-content/uploads/2026/03/Diesel-Generators-at-Data-Centers-Status-Impacts-and-Protective-Practices.pdf.

[106] *Id.*, citing https://www.energy-storage.news/arizonas-biggest-battery-storage-system-goes-online-to-feed-meta-data-centre-demand/

[107] *Id.*, citing https://www.datacenterdynamics.com/en/news/xai-deploys-168-tesla-megapacks-to-power-its-colossus-supercomputer-in-memphis/

- In a November 2025 announcement, Google unveiled plans for a co-located solar and battery energy storage plant at a data center in Haskell County, Texas.[108]
- Xcel Energy and Google announced plans to install 30 GWh of Form Energy iron-air batteries, which will supply up to 100 hours of power to a 300 MW data center in Pine Island, MN. Installation is expected to begin in 2028.[109]

Data centers should not block achievement of the State's climate, clean energy and equity targets. BAAQMD should therefore require clean, zero emission alternatives to diesel BUGs at data centers.[110]

[108] *Id.*, citing https://datacenters.google/google-commits-to-increasing-energy-abundance-and-reliability-for-texans/

[109] *Id.*, citing https://newsroom.xcelenergy.com/news/xcel-energy-to-power-new-google-data-center-in-minnesota

[110] While this petition only concerns diesel BUGs at data centers, BAAQMD should also consider replacing all diesel BUGs in the District with clean zero emission alternatives.

III. Conclusion

For the foregoing reasons, petitioners respectfully request that BAAQMD grant this petition.

Respectfully submitted,

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Dated: April 22, 2026