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SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF FRESNO, CENTRAL DIVISION

DEFENSORES DEL VALLE CENTRAL
PARA EL AIRE Y AGUA LIMPIO; FOOD &
WATER WATCH;
ANIMAL LEGAL DEFENSE FUND; and
CENTER FOR FOOD SAFETY,

Petitioners,

v.

CALIFORNIA AIR RESOURCES BOARD,
an agency of the State of California; STEVEN
S. CLIFF, in his official capacity as Executive
Officer of the California Air Resources Board;
and DOES 1-10, inclusive,

Respondents.

Case No. 24CECG05430 (Lead Case)
Consolidated with
Case No. 24CECG05508
Case No. 24CECG05514
Case No. 25CECG03544

ASSIGNED FOR ALL PURPOSES TO:
HON. GEOFFREY D. WILSON, DEPT. 32

**OPENING BRIEF OF DEFENSORES DEL
VALLE CENTRAL PARA EL AIRE Y AGUA
LIMPIO, FOOD & WATER WATCH, ANIMAL
LEGAL DEFENSE FUND, AND CENTER FOR
FOOD SAFETY IN SUPPORT OF VERIFIED
PETITION FOR WRIT OF MANDATE AND
COMPLAINT**

Date: February 26, 2027
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INTRODUCTION

This case is about a California transportation program that has gone off the rails. The California Air Resources Board (CARB) developed the Low Carbon Fuel Standard (LCFS) to lower the total average greenhouse gas (GHG) emissions from transportation fuels in California, but CARB allowed fuel producers and importers to buy credits to comply with the regulations instead of actually producing cleaner fuels. CARB recently adopted amendments to the LCFS (LCFS Amendments) that double down on a harmful policy known as “avoided methane crediting,” which has turned the LCFS into a cash cow for the largest, most polluting factory farms in California and across the country. CARB’s decision to lavishly reward factory farms with LCFS credits for capturing their methane emissions threatens the health of San Joaquin Valley (the Valley) residents and rural communities across the country. Adding insult to injury, low-income residents in California disproportionately pay a “pass-through cost” at the pump for oil companies’ costs of buying these credits.

Defensores del Valle Central Para el Aire y Agua Limpio (Defensores), Food & Water Watch, Animal Legal Defense Fund, and Center for Food Safety (collectively Petitioners) raised these issues to CARB and showed how the excessive incentives for methane-based fuels made from factory farm manure—known as “factory farm biogas”—lead to perverse outcomes that harm water, air, and quality of life in Valley communities. Ignoring these concerns, CARB adopted LCFS Amendments that include massive incentives for factory farm biogas. The LCFS Amendments reward and encourage methane-producing liquid manure management at factory farms paired with equipment intended to capture those emissions, known as anaerobic digesters. CARB approves massive numbers of credits for these “captured” emissions, which oil companies buy to offset their pollution. These credits make it especially lucrative to produce factory farm biogas, which incentivizes expansion and consolidation of factory farms. More animals produce more waste, which generates more methane and, in turn, more LCFS credits. Unfortunately for communities in the Valley, where nearly all of California’s largest dairy factory farms operate, this has serious public health and environmental impacts.

The LCFS Amendments also increase the demand for LCFS credits through more stringent fuel requirements in an effort to stabilize credit prices. CARB admits the policy will result in significantly increased pass-through costs in gasoline and diesel prices, paid for by people who cannot afford to drive

1 electric vehicles. As wealthy areas and communities transition more rapidly to electric vehicles and
2 reliable EV charging, low-income communities are left driving gasoline vehicles longer and bearing a
3 disproportionate share of the pass-through costs, which will increase over time.

4 Rather than grappling with these harms or ensuring that incentivizing factory farm biogas
5 through the LCFS complies with the Global Warming Solutions Act of 2006, as amended (GWSA),
6 CARB ignored the input of impacted communities, policy experts, and its own Environmental Justice
7 Advisory Committee (EJAC). Instead of achieving the purposes of the program or enhancing
8 California's climate efforts, the LCFS has become a massive wealth machine for factory farm biogas
9 credit generators, a mechanism for oil companies to avoid direct emissions reductions, and an
10 affordability burden on low-income Californians who must pay more when they fill up their gas tanks.

11 CARB's adoption of the LCFS Amendments must be set aside on two, independent grounds.
12 First, CARB violated CEQA by producing and relying on an inadequate Environmental Impact Analysis
13 (EIA). Second, CARB violated the GWSA and the Administrative Procedure Act (APA) by acting
14 outside its statutory authority and because the LCFS Amendments are arbitrary, capricious, and not
15 supported by substantial evidence.

16 17 **Factual and Procedural Background**

18 **I. The Low Carbon Fuel Standard.**

19 CARB adopted the LCFS to reduce California's GHG emissions in the transportation sector.
20 17 Cal. Code Regs. (CCR) § 95480. To accomplish this goal, the LCFS establishes a carbon intensity
21 "benchmark" that transportation fuels must meet. (*Id.* § 95484.) Producers and importers of fuels with a
22 carbon intensity above the established benchmark, such as gasoline and diesel, are called "deficit
23 generators." (*Id.* §§ 95484(a), 95486.) These entities accrue a carbon intensity deficit that they must
24 offset with lower carbon fuels of their own or, more commonly, by purchasing credits from "credit
25 generators." (*Id.* § 95486.) Credit generators, on the other hand, produce fuels to which CARB has
26 assigned a carbon intensity lower than the benchmark. To generate LCFS credits, a credit generator must
27 apply for, and CARB must certify, a fuel "pathway" that specifies the fuel's carbon intensity. A fuel's
28 carbon intensity in conjunction with the amount of fuel produced determine the number of credits the

1 pathway generates. One LCFS credit is equivalent to one million metric tons of carbon dioxide
2 equivalent (MMTCO₂e). Credits can be retained indefinitely, retired to meet a deficit generator’s
3 compliance requirements, or sold to other regulated entities. (*Id.* § 95486(a)(1).)

4 Factory farm biogas producers are credit generators.¹ They use anaerobic digesters—industrial
5 pieces of equipment that produce and capture gas emissions from manure on factory farms—to claim
6 massive credit generation under the “avoided methane crediting” policy. (AR2990, 66773, 6678–79,
7 82816.)

8 **II. The avoided methane crediting policy has spurred a “gold rush in cow manure.”**

9 CARB began approving LCFS pathways for factory farm biogas with avoided methane crediting
10 in 2017 and formally adopted the policy in the 2018 LCFS amendments. (AR82761; 17 CCR
11 95488.9(f)(3)(B) [2019 reflecting 2018 amendments].) Avoided methane crediting changed the way
12 CARB calculated the carbon intensity of factory farm biogas; under this policy, CARB accepts the most
13 methane-intensive manure management at factory farms as the baseline, regardless of whether the
14 factory farm intentionally chose such practices in the first place.

15 Overnight, avoided methane crediting transformed factory farm biogas into a fuel with a deeply
16 *negative* carbon intensity. (AR176–79, 3071, 66779.) The carbon intensity of petroleum gasoline is
17 about 100, and the carbon intensity of an electric vehicle powered by solar-generated electricity is 0.
18 (AR82816.) The carbon intensity of factory farm biogas using avoided methane crediting ranges
19 between approximately -100 and -790. (*Id.*) Biogas from landfills, which is functionally the same as
20 factory farm biogas but does not receive avoided methane crediting, has a positive carbon intensity.
21 (AR82817.) These extremely negative carbon intensity values are unique to factory farm biogas.

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25 ¹ As used here, “factory farm biogas” is inclusive of other terms used to describe these fuels such as
26 biomethane, renewable natural gas, manure gas, and other similar terminology. Factory farm biogas is
27 mostly composed of methane but also includes carbon dioxide, hydrogen sulfide, and trace amounts of
28 other gases and must be refined for use in most transportation applications. (AR3065.) Factory farms
are industrial operations that confine thousands—or even tens of thousands—of animals. (AR2991,
66773–84, 87449–66.) Unlike traditional farms, where animals graze on pasture, factory farms
concentrate animals and their waste in an unvegetated “production area.” (AR2995, 87457.)

1 To further illustrate the impact of avoided methane crediting, a fleet of seven trucks with five
2 traditional diesels and two trucks burning factory farm biogas has the same *or lower* net carbon intensity
3 on paper as a fleet of seven all-electric, zero-emission trucks. (AR77447.) The massive incentive owed
4 to avoided methane crediting dwarfs the amount of actual transportation fuel delivered for use in
5 California; factory farm biogas is responsible for generating approximately 20% of credits in the
6 program while providing only about 1% of the energy used in transportation. (AR82816.)

7 The Wall Street Journal declared avoided methane crediting in the LCFS a “gold rush in cow
8 manure” as factory farms began installing digesters to produce factory farm biogas for credit generation.
9 (AR74598, 77454.) The value of credits awarded for these supposedly carbon negative fuels could even
10 exceed profits from milk, leading to the potential for milk to become a byproduct of manure production.
11 (AR74598, 77456.) This result was a predictable response to avoided methane crediting. (AR62671–72,
12 66779–80, 82818–19.)

13 **III. Avoided methane crediting increases environmental and community harms.**

14 Avoided methane crediting incentivizes factory farms to increase herd size and consolidate to
15 maximize financial benefits from the LCFS. Agricultural economists, transportation policy experts, the
16 federal government, and even California legislators all understand this and explained as much to CARB
17 during development of the LCFS Amendments. The hard data shows this as well, as demonstrated
18 below. Expanded factory farms mean exacerbated environmental and community harms.

19 **A. Avoided methane crediting incentivizes factory farm expansion and consolidation.**

20 Digesters require large volumes of liquefied manure and thus favor large herd sizes and generally
21 do not work with smaller dairies. (AR3087, 62671, 66773, 68189, 70536, 70552–53, 70542–44, 70782,
22 74486–87, 74778.) High digester infrastructure and operating costs make digesters prohibitively
23 expensive for smaller livestock operations. (AR61686–87, 62676, 87457.) Additionally, “economies of
24 scale favor[] large operations.” (AR77231.) CARB acknowledges that dairies with methane digesters are
25 larger than those without them. (AR12379.)

26 Dr. Aaron Smith, an agricultural economist, explained that “[h]igh profits from operating
27 digesters create the incentive for farmers to expand dairy herds for the purpose of generating manure
28 rather than for producing milk.” (AR82818.) Dr. Sylvia Secchi, another agricultural economist, noted

1 that digester installation is positively correlated with factory farm expansion in states other than
2 California. (AR82810–12; see AR84386.) This is because, as the vice president of a biogas developer in
3 the Midwest told a reporter, “More cows and more manure means more energy.” (AR58246.)

4 This is why the federal Department of the Treasury has acknowledged the link between incentive
5 credits for factory farm biogas and factory farm expansion. (AR113267; 90 Fed. Reg. 2224, 2289–90
6 (Jan. 10, 2025); 90 Fed. Reg. 4006, 4080–81 (Jan. 15, 2025).) In promulgating rules for various federal
7 tax incentives for low carbon energy, the Department of the Treasury recognized the “risks of perverse
8 incentives” and sought to establish guardrails against this problem. (AR113267) “The magnitude of the
9 incentive provided by the” credits create “a significant risk of additional waste production in response to
10 the credit.” (*Id.*)

11 For the same reason, California legislators have implored CARB to remove avoided methane
12 crediting so that the LCFS stops rewarding pollution and harming California communities. The
13 legislators told CARB that the excessive incentive for factory farm biogas “is creating nonsensical
14 preferences for such fuels over cleaner fuels (including electric vehicles) and incentivizing the
15 production of methane and other contaminants.” (AR116734–36.) The legislators warned “that the
16 LCFS, if not corrected immediately, could perpetuate disastrous environmental justice harms on
17 Californians living near dairies.” (*Id.*)

18 Data supports these concerns. Avoided methane crediting causes factory farms to get bigger. The
19 average California dairy herd expanded by 12.66% (from 940 to 1,059 cows) in the five years prior to
20 the introduction of avoided methane crediting. (AR70536, 71515.) Then, in the five years after its
21 introduction, the average herd expanded by 42.68% (from 1,059 to 1,511 cows). (AR70536, 70782,
22 71136.) Expansion in the Valley has been especially pronounced, where the average herd size grew from
23 1,577 to 2,052 in the five years following the introduction of avoided methane crediting. (AR70536,

71136–57.) Not only is the Valley home to the vast majority of California’s cows and largest dairies,² it is also where nearly all of California’s factory farm digesters are located.³

Consistent with this, the percentage of cows on large-scale factory farms grew substantially, while the population of cows living on smaller farms plummeted. Between 2017 and 2022, the overall population of cows on smaller California dairies (those with fewer than 1000 cows) decreased by 52.4%, while the population of cows confined on large factory farm dairies (those with more than 2,500 cows) increased 26.8%. (AR70536, 70782.)

B. Expanded factory farms intensify environmental harms.

As factory farms grow to include more cows, more manure, and more overall operations, they emit more GHGs from both enteric emissions and manure. (AR74486–87.) Similarly, increased quantities of manure spread onto fields increase the threat of groundwater pollution and of nitrate contaminated drinking water. (See AR70539, 73983–87.)

Some factory farms utilize liquid manure management systems, using water to flush manure and other pollutants from animal confinement areas into storage impoundments euphemistically called “lagoons.” (AR66763, 70536, 74486–87.) Factory farms ultimately dispose of the liquified manure by spreading it on fields. (AR70539, 74486–87.) In liquid manure management, manure decomposes anaerobically (i.e., in an oxygen-deprived environment), producing large amounts of methane unlike pasture-based farming or dry manure management. (AR64546, 70553, 74483, 74486–87, 76307–08, 76779–81.) In fact, liquid manure management produces over 90% more methane emissions than dry manure management. (AR64546, 70553, 76308; Supp. AR41.) CARB itself has acknowledged that California “has higher per-milking cow methane emissions than most of the rest of the United States, due to the widespread use of flush water lagoon systems for collecting and storing manure.” (AR8945.) Livestock is responsible for more than half of California’s total methane emissions, with 25% of

² Ninety percent of dairy cows in California are located in the Valley (AR70536, 71136–57.) Average herd size in the Valley is 2,052. (AR70536, 71136–57.)

³ Over 99% of the digesters funded by the state’s dairy digester direct grant program are located in the Valley. (AR70537, 86867.)

1 California's methane coming from dairy manure, "primarily from lagoon storage of flushed manure,"
2 and 20% coming from enteric fermentation, which is methane from cattle's digestive processes. (*Id.*)

3 Liquid manure management at factory farms threatens groundwater, including drinking water
4 resources, with nitrates. (AR070539, 73983.) In 2019, the Central Valley Dairy Representative
5 Monitoring Program's Summary Representative Monitoring Report presented years of groundwater
6 monitoring data from forty-two dairies that were selected because they are purportedly representative of
7 dairies in the Valley. (AR070539, 73983.) It showed elevated nitrate concentrations under all monitored
8 dairies and found that dairies produce so much manure it cannot be safely spread on fields for disposal
9 without causing nitrate pollution. (AR070539, 73987–88.) The Report found that spreading manure on
10 fields accounted for 94% of groundwater nitrate pollution from dairies. (AR070539, 7398–87.)

11 Drinking nitrate-contaminated water is associated with increased risk of bladder, colorectal, and
12 ovarian cancer, birth defects, and premature births. (AR72224–25; 86866.) Infants in the Valley are at
13 increased risk of "blue baby syndrome," a potentially fatal blood condition caused by nitrates in drinking
14 water, which limit the ability of red blood cells to carry oxygen. (AR83081–82, 86866, 104402–03.)
15 Valley residents have raised concerns about nitrate pollution to CARB at several meetings, workshops,
16 in public comments related to the LCFS, and at CARB's EJAC. (AR 64529, 64586–87, 74433–35;
17 Supp. AR1163–64.) Residents of several Valley communities must purchase bottled water to protect
18 their families from the health impacts of nitrates despite their limited financial means. (AR83084–89.)

19 Expanding factory farms also increase air pollution. Factory farms are already the largest source
20 of ammonia in the Valley air basin. (AR070537, 72240.) Ammonia is an odorous and noxious gas which
21 irritates the eyes, throat, and nose and combines with oxides of nitrogen (NO_x) to produce ammonium
22 nitrate, the Valley's most common form of fine particulate matter (PM_{2.5}), and a dangerous air
23 pollutant. (AR070537–38, 72337–38, 86866, 104402, 104420–21.) Valley residents have testified before
24 CARB about respiratory distress and irritation to the throat, eyes, and lungs resulting from their
25 exposure to ammonia. (AR064585; Supp. AR1155.) PM_{2.5} air pollution causes increased emergency
26 room visits, heart attacks, irregular heartbeat, worsened asthma, reduced lung function, and long-term
27 lung disease. (AR2064, 72340, 104402–03.)

1 In addition to emitting ammonia, dairies emit volatile organic compounds (VOCs) that produce
2 odors and combine with NO_x to form ozone. (AR70591, 74552.) Ozone causes severe respiratory harm
3 and increased asthma risk, particularly for children in the Valley who face the highest asthma rates in
4 California. (AR70539, 72225, 104420.) Because of these pollutants, emergency room visits for
5 childhood asthma are above the state average in several Valley counties. (AR83240–41.)

6 In addition to odors caused by ammonia, hydrogen sulfide in manure creates a pervasive “rotten
7 egg” stench that impacts quality of life and causes headaches and nausea among nearby residents.
8 (AR64586–87, 74433, 86848–49, 104421.) Defensores members have testified that the smell of manure
9 attracts flies to their homes and lingers on their clothes, particularly during the summer heat. (AR74433–
10 34.) Odor and flies from factory farms contribute to mental and emotional distress, including higher
11 rates of depression, tension, and stress in those living near livestock operations. (AR86866; *McKiver v.*
12 *see Murphy-Brown, LLC* (4th Cir. 2020) 980 F.3d 937, 980 [con. opn. of Wilkinson, J.] [“Nearby
13 residents may also suffer from aggravated rates of high blood pressure, depression, and infant
14 mortality.”].) As factory farms expand with increased production of factory farm biogas, so too will the
15 water, air, odor, and nuisance impact of large-scale dairy operations and liquified manure management.

16 **IV. Avoided methane crediting harms rural communities by incentivizing digesters.**

17 CARB’s LCFS Amendments “incentivize the collection and use of biomethane gas from dairies”
18 and will lead to the “construction of infrastructure needed to collect biogas and produce and transport
19 biomethane.” (AR12485, 12446.) Digesters make a waste product called “digestate,” left over after the
20 biogas production process, that is chemically distinct from manure and presents unique risks to the
21 environment and public health. (AR3065, 70539.) Factory farms typically dispose of digestate by
22 applying it to fields. (AR3123–26.) As detailed below, digesters and other factory farm biogas
23 production infrastructure harm the environment by producing significant volumes of GHGs,
24 exacerbating groundwater pollution, and emitting local air pollutants.

25 **A. Digesters and factory farm biogas production exacerbate climate pollution.**

26 Digesters are designed to produce biogas and in particular methane. Digesters and related
27 infrastructure in biogas production supply chains leak vast quantities of methane to the atmosphere,
28 undermining claimed climate mitigation. (AR61406–07.) Digestate storage and handling likewise emits

1 significant GHGs. (AR70556, 72257–63, 77468–78, 84433). And digestate storage increases nitrous
2 oxide emissions compared to undigested manure. (AR70556, 72257–60, 77488–89, 74539–40.) Because
3 nitrous oxide is a more powerful GHG than methane—about 300 times more powerful than carbon
4 dioxide at trapping heat in the atmosphere over a 100-year period—nitrous oxide from digestate storage
5 can negate some, if not all, of the purported climate benefits of methane captured by a digester.
6 (AR33896, 72259, 77488–89, 84433, 101619, 104407.)

7 **B. Digesters and factory farm biogas production contaminate groundwater and**
8 **drinking water.**

9 Digesters exacerbate groundwater pollution. (AR70539, 72257–63, 74090–91, 116652.) Land
10 application of digestate “may have a higher risk for both ground and surface water quality problems”
11 because “nitrogen, phosphorus, and other elements become more soluble due to anaerobic digestion and
12 therefore have higher potential to move with water.” (AR74090–91; *see* AR70539, 72257–63
13 [“Anaerobic digestion breaks down waste, rendering it more susceptible to seepage into groundwater
14 than undigested manure.”].) Digestate also contains more ammoniacal nitrogen than manure, which
15 converts more quickly to nitrate and increases the risk of groundwater contamination, including drinking
16 water resources. (AR86866, 70539, 72257–63.)

17 **C. Digesters exacerbate air and odor pollution.**

18 Factory farm biogas production exacerbates air pollution by producing even more ammonia,
19 increasing noxious odors and impacting human health from NO_x and PM_{2.5}. (AR13397, 66025, 70537–
20 38, 70541, 70556, 72257–60, 74433–35, 77488–89, 85569, 104402.) Digesters also worsen air pollution
21 by “decompos[ing] waste into smaller molecules, enhancing their propensity to volatilize into the
22 atmosphere.” (AR72258.) Accordingly, digestion increases noxious odors, including by producing
23 additional ammonia. (AR9149, 13397, 66025, 70541, 72257–60, 74433–35, 74552, 85569, 104420–21.)
24 Defensores members and Valley residents commented that odor from nearby dairies has worsened as
25 they have increased their herd sizes and installed digesters. (AR064584–87, 74433–35, 86866.) Maria
26 Arévalo, a Defensores member who has many digesters near her town of Pixley, told CARB, “Your
27 nose burns when you breathe in the air. That smell of ammonia is unbearable. Even my granddaughter
28 couldn’t stand it.” (Supp. AR1155.) If the biogas is combusted in an internal combustion engine to

1 produce electricity, as several LCFS pathways allow, that process emits NOx, carbon monoxide, sulfur
2 dioxide, and various hazardous air pollutants like formaldehyde. (AR70538, 72257–60.)

3 **D. Avoided methane crediting exacerbates and entrenches harmful economic and**
4 **environmental conditions in the Valley.**

5 The EJAC alerted CARB that “the LCFS has exacerbated and entrenched harmful pollution in
6 communities near and regions containing large dairies and other confined animal feeding operations by
7 incentivizing the production, storage, and land application of wet manure.” (AR27174.) Environmental
8 impacts associated with expanding factory farms and biogas production fall disproportionately on
9 communities in the Valley where the vast majority of California’s cows and large factory farms,
10 digesters, and factory farm biogas pathways are located.

11 The Valley faces some of the worst air and groundwater pollution in the country. Visalia,
12 Fresno-Madera-Hanford, and Bakersfield consistently rank within the top five most polluted cities in the
13 United States with respect to short- and long-term PM2.5 and ozone exposure. (AR70538–39, 104402).
14 As explained above, factory farm biogas production exacerbates these issues. The Valley also has two of
15 the most contaminated groundwater aquifers in the nation and some of the highest nitrate levels in the
16 country. (AR74150.) Nearly 95% of the Valley’s population relies on groundwater for drinking. (*Id.*)

17 The Valley also has some of the highest rates of poverty and minority populations—particularly
18 Latinos—in the state. (AR74150.) Every county in the Valley has lower household and per capita
19 incomes and higher poverty rates than California as a whole. (AR104401.) These communities are
20 economically and socially disadvantaged, making it harder for them to afford mitigation or to address
21 related health consequences of nitrate contamination. (*Id.*; AR70540–41, 74228.) Within the Valley,
22 nitrate contamination disproportionately impacts small, rural, disadvantaged communities of color, and
23 one report found that communities impacted by nitrates pay on average three times the cost for water
24 considered affordable by the U.S. Environmental Protection Agency. (AR70540, 74149, 74228.)

25 Defensores member David Rodriguez commented that the LCFS impacts communities in the
26 Valley: “For years, we have endured putrid odors from a local dairy that’s not even a mile away from
27 our city limits. Hillcrest Dairy arrived in 2002 with over 3,000 cows. They now have over 8,000 cows.”
28 (Supp. AR646.) “[I]t’s the people like us, the small towns and people who get the wrong end of the

1 stick. And it’s just not fair.” (Supp. AR652.) “It seems that our legitimate concerns are being ignored.”
2 (Supp. AR647.) Numerous residents of the Valley similarly told CARB how this pollution has harmed
3 their health and quality of life. (See, e.g., AR 64397–98, 64585, 69653–55.)

4 **V. The LCFS Amendments.**

5 **A. The LCFS Rulemaking Process and Public Input.**

6 CARB has been aware of the problems with including fuels derived from factory farm biogas in
7 the LCFS for at least five years, beginning with a Petition for Rulemaking submitted to CARB in
8 October 2021. (AR104393.) That petition explained to CARB that excessive and ill-conceived
9 incentives for factory farm biogas in the LCFS are harming Californians and undermining the integrity
10 of CARB’s climate efforts and requested changes to the LCFS regulations accordingly. (*Id.*) CARB’s
11 partial grant of the petition on January 26, 2022, committed to bringing these issues into the “formal
12 rulemaking process” to amend the LCFS in 2023. (AR98948.)

13 In anticipation of rulemaking, CARB’s EJAC convened two meetings about the LCFS in July
14 and August of 2023. (Supp. AR1–6.) EJAC adopted a resolution at their meeting in August of 2023
15 providing eight recommendations to CARB, including a request to end avoided methane crediting.
16 (AR64393–95.)

17 CARB issued a Standardized Regulatory Impact Assessment (SRIA) for the LCFS Amendments
18 on September 8, 2023. (AR2002.) Shortly after, CARB and EJAC held a joint meeting and CARB held a
19 separate Board meeting to discuss the LCFS. (AR64345, 13565.) CARB formally initiated the
20 rulemaking process in December of 2023 when it released the Initial Statement of Reasons (ISOR) and
21 Draft Environmental Impact Analysis (DEIA) for a 45-day public comment period. (AR14657–74.)
22 Petitioners and many others submitted timely comments on the ISOR and DEIA. (AR66686, 69653,
23 70531.)

24 CARB issued the first of three “15-Day Changes” to the proposed amendments on August 12,
25 2024, modifying the ISOR’s proposed regulatory text. CARB also issued a Recirculated Draft
26 Environmental Impact Analysis (RDEIA) on August 16, 2024. (AR38034, 11729.) CARB invited public
27 comment on both the First 15-Day Changes and the RDEIA. Petitioners timely commented on both.
28 (AR86105, 87425.) Meanwhile, on August 22, 2024, CARB hosted the California Dairy Sector

1 Workshop, where it presented for the first time its California Dairy & Livestock Database (CADD)
2 (Supp. AR935, 12332–89.) Petitioners commented on the Dairy Sector Workshop and provided in-depth
3 analysis of these data and CARB’s use of the CADD. (AR116816; Supp. AR1149–53, 1170–82, 1200–
4 1202.) CARB issued a Second 15-Day Change notice on October 1, 2024, again modifying the proposed
5 regulatory text, and Petitioners again submitted timely comments. (AR41196, 89091.)

6 Throughout the process, many commenters urged CARB to end avoided methane crediting and
7 otherwise improve the LCFS, including a former CARB Branch Chief who managed the LCFS.
8 (AR63688, 64101–02.) That former CARB official explained that avoided methane crediting
9 excessively rewards factory farms for poor environmental performance and highlighted that “avoided
10 methane crediting for dairies acts as an LCFS offset program, allowing oil companies to generate or
11 purchase large amounts of credits while displacing very little or no fossil fuel.” (AR64102.)

12 Technical experts called on CARB to end avoided methane crediting. Dr. Michael Wara and his
13 colleagues at Stanford University analyzed avoided methane crediting, finding that it subsidizes factory
14 farms. (Supp. AR99.) They also modeled a scenario where CARB ended avoided methane crediting and
15 made five key findings: (1) doing so is reasonable and consistent with CARB’s priorities in the LCFS;
16 (2) it would reduce local impacts to communities; (3) it would avoid unintended impacts; (4) it would
17 reduce pass-through costs to consumers of gasoline; and (5) it would enable CARB to better measure
18 methane emissions from agriculture. (Supp. AR97, 101–07.) They concluded that ending avoided
19 methane crediting in the LCFS “could achieve [CARB’s] goals while lowering impacts to
20 [environmental justice] communities and potentially improving climate outcome[s].” (Supp. AR108.)

21 Communities nationwide told CARB that the LCFS is “doing harm” and called for an end to
22 avoided methane crediting. (AR50512–14; see, e.g., AR50322–23 (organization representing “5,000+
23 family farm members” telling CARB to remove factory farm biogas fuels from the LCFS altogether to
24 stop the program from “inflicting harm on our communities.”). Valley residents attended CARB
25 meetings, hearings, and workshops “over and over” to tell CARB that the air and water in their
26 communities, including drinking water, are polluted from factory farm dairies and digesters. (Supp.
27 AR1163, 1169.) Residents also described odors and flies getting into their homes and how digesters
28 made the odor even more unbearable, including for children. (Supp. AR1155, 1165.) They spoke of

1 living in a region with “normalized chronic health diseases,” and spoke of their neighbors suffering and
2 dying from chronic lung issues, lung failure, cancer, and other ailments. (Supp. AR1146, 1163, 78
3 (ammonia from factory farms kills more than 1,000 Valley residents each year).) They asked that CARB
4 “no longer provide incentives” to the dairy industry. (Supp. AR1155.)

5 CARB adopted Resolution 24-14 at a public meeting on November 8, 2024. (AR372–82.) In
6 Resolution 24-14, CARB approved and adopted the LCFS Amendments and also directed CARB staff to
7 initiate a process to adopt the regulations required by SB 1383, the Short-Lived Climate Pollutants Act
8 of 2016. (Stats. 2016, Ch. 395 (SB 1383); see Argument, *infra.*). The Resolution directed CARB staff
9 “to prepare a plan for initiating, developing, proposing, and implementing a livestock methane
10 regulation.” (AR378.) It further specified a timeline: rule development by 2025, board consideration by
11 2028, and potential regulatory implementation in 2030. (*Id.*)

12 CARB submitted the LCFS Amendments to the Office of Administrative Law (OAL) on January
13 3, 2025. (AR42329.) OAL issued a Notice of Disapproval on February 18, 2025, due to incorrect
14 procedure and lack of clarity in the amended regulatory text. (AR113097.) CARB issued a Third 15-Day
15 Changes to address the OAL’s disapproval, invited public comments, and Petitioners submitted timely
16 comments. (AR058869, 113258.) Upon resubmission, the OAL approved the final LCFS Amendments
17 on June 27, 2025, and they became effective on July 1, 2025. (AR751.)

18 **B. Final LCFS Amendments.**

19 Over opposition from the public and CARB’s own EJAC, the LCFS Amendments include
20 several changes that greatly increase the incentive to install digesters, increase manure-derived fuel
21 production, and expand herds. Specifically, LCFS Amendments include numerous changes that CARB
22 states will “provide strong support for investment in biomethane capture in the near term.” (AR12428.)
23 Prior to the amendments, all avoided methane crediting pathways were generally eligible for three
24 consecutive, ten-year crediting periods. (AR183.) The LCFS Amendments phase out avoided methane
25 crediting in the coming decades while also creating a strong incentive to break ground on projects in the
26 coming years to secure more credit generation. Pathways certified after the effective date of July 1,
27 2025, but before January 1, 2030, are eligible for two, ten-year crediting periods using avoided methane
28 crediting; and pathways certified after December 31, 2029, may only generate avoided methane credits

1 through either December 31, 2040 (for natural gas fuels) or December 31, 2045 (for hydrogen and
2 electricity fuels). (AR183–84; 17 CCR § 95488.9(f)(3)(A).)

3 Further, the LCFS previously prohibited CARB from continuing avoided methane crediting in
4 factory farm biogas pathways “in the event that any law, regulation, or legally binding mandate
5 requiring [GHG] emissions reductions from manure methane emissions from livestock and dairy
6 projects ... comes into effect in California.” (AR183–84; 17 CCR § 95488.9(f)(3)(B) [2019 version
7 reflecting 2018 amendments].) After the LCFS Amendments, this rule applies only to “pathways
8 associated with projects that break ground after December 31, 2029,” allowing all earlier projects to
9 continue with avoided methane crediting for decades despite direct regulation mandating the same
10 reductions. (17 CCR § 95488.9(f)(3)(B).) The LCFS Amendments also impose deliverability
11 requirements that will prohibit credit eligibility for out-of-state projects that break ground after
12 December 31, 2029, unless they can demonstrate “physical flow” of their fuel to California. (AR167–68;
13 17 CCR § 95488.8(i)(2)(B)(1).)

14 The LCFS Amendments also create a new mechanism for electricity generated from factory farm
15 biogas with a “fuel cell” to qualify for “book-and-claim” accounting, an indirect accounting system that
16 allows credit generation despite no delivery of any fuel into California. (AR10; 167–68; 17 CCR §
17 95488.8(i).) And beginning on January 1, 2035, hydrogen produced using fossil gas will not be eligible
18 for credit generation *unless* matched with factory farm biogas via book-and-claim accounting. (AR40;
19 17 CCR § 95482(h).) Each of these increase incentives to produce factory farm biogas.

20 Finally, the LCFS Amendments strengthen the carbon intensity benchmark against which fuel
21 pathways are measured, known as the program’s “stringency.” (AR74–76; 17 CCR § 95484(a).) This
22 has the effect of increasing credit prices and the number of credits that deficit generators will purchase
23 to offset their fuels, which in turn increases both profits for prolific credit generators like factory farm
24 gas pathways and the pass-through cost for gasoline at the pump. (AR2048, 2082, 61649, 63686.)

25 **ARGUMENT**

26 At the core of CARB’s unlawful and arbitrary rulemaking to adopt the LCFS Amendments is
27 CARB’s failure to identify, analyze, and mitigate the harmful impacts of providing massive incentives
28 for factory farm biogas. CARB takes the untenable position that the LCFS Amendments will increase

1 factory farm biogas incentives, project development, and production but will not increase associated
2 pollution.

3 CARB has a mandate in SB 1383 to achieve up to a 40% reduction in manure methane emissions
4 from 2013 levels by 2030. (Health & Saf. Code § 39730.7(b)(1).) Under SB 1383, CARB “shall adopt
5 regulations to reduce methane emissions from livestock manure management operations and dairy
6 manure management operations.” Health & Saf. Code § 39730.7(b)(1). But CARB has not done that,
7 instead opting for lavish financial rewards for factory farms via avoided methane crediting in the LCFS.
8 CARB is ignoring its mandate and authority to directly regulate manure methane while doubling down
9 on LCFS incentives that are causing disproportionate impacts in low-income communities.

10 As explained in detail below, CARB violated CEQA in dealing with these issues by cursorily
11 dismissing critical impacts from herd expansion, failing to properly analyze the impacts from producing
12 factory farm biogas, and refusing to fully consider a project alternative that would have eliminated
13 avoided methane crediting. CARB also violates statutory mandates in the Global Warming Solutions
14 Act (GWSA) cabining CARB’s authority to regulate GHG emissions by failing to ensure that activities
15 undertaken to comply with the regulation do not disproportionately impact low-income communities
16 with increased environmental impacts and the pass-through costs on gasoline and diesel fuel. CARB
17 further violates its statutory duty to ensure that the financial incentives from credits actually cause the
18 methane capture, especially when the LCFS Amendments allows credit generation even after manure
19 management regulations take effect. Finally, CARB’s policy choice to use agricultural sector methane
20 reductions to create credits to offset transportation sector GHG emissions is arbitrary and capricious
21 when those emissions are statutorily required to occur and be accounted for in the dairy and livestock
22 sector under SB 1383. This Court should grant the petitions and set aside the LCFS Amendments.

23 **I. CARB violated CEQA in adopting the LCFS Amendments.**

24 The Environmental Impact Analysis (EIA) ignores the enormous environmental and public
25 health impacts that the LCFS Amendments will cause. The EIA ignores the impacts caused by factory
26 farm herd expansion, claiming that the LCFS Amendments do not incentivize such expansion—a
27 position the EIA fails to support with any credible evidence. The EIA concedes that the avoided
28 methane crediting provisions in the LCFS Amendments will cause factory farms to install digesters but

1 fails to inform the public that digesters severely degrade public health, concludes without any support
2 that digesters reduce odors, and understates the pollutant emissions. The EIA’s alternatives analysis
3 intentionally weakens the effectiveness of the only alternative limiting avoided methane crediting,
4 presenting a false choice that the State can only avoid the environmental impacts of avoided methane
5 crediting if it sacrifices the State’s dairy methane reduction goals. These prejudicial errors require
6 invalidating the EIA.

7 **A. CEQA Standard of Review.**

8 CEQA requires this Court to determine whether CARB prejudicially abused its discretion when
9 certifying the EIA by either (1) failing to proceed in the manner required by law, or (2) failing to support
10 its determinations or decisions with substantial evidence. (Pub. Resources Code §§ 21168; 21168.5;
11 *Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376,
12 392.) When reviewing an agency’s compliance with CEQA, “a reviewing court must adjust its scrutiny
13 to the nature of the alleged defect, depending on whether the claim is predominantly one of improper
14 procedure or a dispute over the facts.” (*Vineyard Area Citizens for Responsible Growth v. City of*
15 *Rancho Cordova* (2007) 40 Cal.4th 412, 435.)

16 Claims challenging an environmental impact report’s (EIR) adequacy “as an informational
17 document” that assert the EIR “lacks analysis or omits the magnitude of the impact” presents “a mixed
18 question of law and fact” and are thus “generally subject to independent review.” (*Sierra Club v. County*
19 *of Fresno* (2018) 6 Cal.5th 502, 514–16.) Only when “factual questions predominate” do courts utilize
20 the substantial evidence standard of review. (*Id.* at 516.) Substantial evidence is “enough relevant
21 information and reasonable inferences from this information that a fair argument can be made to support
22 a conclusion[.]” (14 CCR § 15384(a).) Substantial evidence includes “facts, reasonable assumptions
23 predicated upon facts, and expert opinion supported by facts[.]” but does not include “[a]rgument,
24 speculation, unsubstantiated opinion[or] evidence which is clearly erroneous[.]” (*Id.* § 15384(a).) These
25 standards apply in full to an EIA, which is the functional equivalent of an EIR prepared in a typical
26 CEQA case. (*POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 710–13; *John R.*
27 *Lawson Rock & Oil, Inc. v. State Air Resources Bd.* (2018) 20 Cal.App.5th 77, 94–96.)

1 **B. The EIA fails to support its conclusion that herd expansion is not a reasonably**
2 **foreseeable response to the LCFS Amendments.**

3 The EIA violates CEQA by manipulating data to explain away the significant incentive that
4 avoided methane crediting provides for factory farms to expand their herds so they can generate more
5 credits. Ample evidence establishes a causal link between avoided methane crediting and herd
6 expansion. The U.S. Department of Agriculture’s Ag Census data show that the growth rate of dairy
7 herds in California increased substantially after avoided methane crediting began. In the five years
8 before avoided methane crediting began, the average dairy herd in California grew from approximately
9 940 to 1059 dairy cows, or **12.66%**. (AR70536, 71515.) In the five years after avoided methane
10 crediting began, the average herd size increased from 1059 to 1511, or **42.68%**. (AR70536, 70782.)
11 This link between avoided methane crediting and herd expansion was acknowledged by the federal
12 government when it enacted similar crediting programs (90 Fed. Reg. 2224, 2289–90 (Jan. 10, 2025); 90
13 Fed. Reg. 4006, 4080–81 (Jan. 15, 2025); AR113267–68), as well as California legislators (AR116734–
14 36) and agricultural economists (AR82811–12, 82818.)

15 The EIA, however, refuses to analyze the severe environmental impacts associated with herd
16 expansion. The linchpin for the EIA is a defined list of “reasonably foreseeable compliance responses,”
17 which are actions CARB claims are likely to be taken in response to the incentives in the LCFS
18 Amendments. (AR12414.) The EIA only purports to consider the environmental impacts of those
19 actions. (*Id.*) CARB concedes that the LCFS Amendments would “incentivize the collection and use of
20 biomethane gas from dairies.” (AR12485.) CARB specifically concludes that the “construction of
21 infrastructure needed to collect biogas and produce and transport biomethane,” and the “additional
22 production of low-CI electricity or hydrogen from biomethane derived from dairy operations” are
23 reasonably foreseeable compliance responses. (AR12446.) CARB, however, contends that “changes to
24 herd size, dairy expansion, or new dairy cattle facilities are speculative and not reasonably foreseeable
25 compliance responses.” (AR12441.)

26 The EIA fails to support this conclusion with substantial evidence, as CEQA requires.
27 (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1197–98;
28 *County of Butte v. Dept. of Water Resources* (2023) 90 Cal.App.5th 147, 159–61.) Instead, the EIA cites

1 a CARB analysis that masks how avoided methane crediting has impacted herd growth and a discussion
2 of general market dynamics that actually affirms the LCFS's expansionary effect.

3 **1. CARB's analysis does not support its arbitrary position that avoided**
4 **methane crediting has no impact on herd expansion.**

5 CARB grounds its quantitative support for the conclusion that herd expansion is not a reasonably
6 foreseeable compliance response in the CADD, which it presented for the first time at the August 2024
7 Dairy Sector Workshop. (AR12332–89, 12444, 12796; Supp. AR935.) The CADD purports to provide
8 “facility-level cattle population and digester information for California dairies from 2012 to 2022” by
9 compiling data from various publicly available sources. (AR13309.) CARB posted a slideshow
10 containing its “data synthesis and analysis” that used CADD data to make the two key findings on which
11 the EIA relies. (AR12796.) First, CARB contends that “there is no statistical relationship between the
12 installation of digesters and dairy growth rates” because dairies with digesters have not grown at faster
13 rates than those without. (AR12444; see also AR12374–80, 12796, 11762–65.) Second, CARB claims
14 that avoided methane crediting has not accelerated herd growth because “the average dairy herd size has
15 grown steadily before and after [the] LCFS began to recognize avoided methane benefits in 2017.”
16 (AR12796; see also AR12374–80, 11762–65.) From these two findings, CARB concludes that “an
17 increase in livestock operations is not considered a compliance response” and that “the EIA
18 appropriately does not analyze potential adverse environmental impacts associated with an increase in
19 livestock operations.” (AR12795.) Neither contention is supported by substantial evidence.

20 **a. CARB's analysis of dairy factory farm growth rates intentionally**
21 **omits critical data.**

22 CARB purported to utilize the CADD to evaluate if dairies with digesters grew more than dairies
23 without digesters in response to avoided methane crediting. (AR12375–80.) CARB concluded that
24 digester dairies' average annual growth rate between 2018 and 2022 was 1.3%, compared to 0.6% for
25 non-digester dairies, a difference it determined was not statistically significant. (*Id.*) But CARB's
26 analysis excluded dairies whose behavior is critical to determining whether avoided methane crediting
27 drives herd expansion: those that ceased operating between 2017 and 2022. (AR12377, 87435, 13058.)
28 CARB concedes that it excluded this data but shrugs it: “[f]acilities that shut down are not germane to

1 concerns around expansion” and that “including dairies that shut down would mask the true growth rates
2 of facilities that remained operational.” (AR13058.) The opposite is true. Dairies that ceased operating
3 are critical to understanding the expansionary effect of avoided methane crediting.

4 The dairies most likely to have exited the industry between 2017 and 2022 are smaller operations
5 without digesters. As CARB acknowledges, “farms with larger herd size classes consistently earn[]
6 substantially higher net returns than smaller herds” and “larger operations are more likely to invest in
7 technology such as digesters.” (AR11763–64; see also AR12221 [USDA analysis that smaller farms are
8 more likely than larger farms to end production].) These smaller dairies experienced a 100% reduction
9 in herd size, but that reduction is entirely absent from the non-digester average. Including these dairies
10 would have dramatically reduced the non-digester growth rate, revealing a gap between digester and
11 non-digester growth rates far more pronounced than CARB’s analysis suggests. As explained to CARB
12 at the Dairy Sector Workshop, its analysis is a textbook case of “survivorship bias” and is akin to
13 “assessing the average growth rate and future projections of a group of mutual funds by excluding the
14 funds that closed as a result of poor performance.” (Supp. AR1151–52.) This analysis would overstate
15 the performance of the mutual funds by only reflecting those that survived, just as CARB’s analysis
16 overstates the growth rate of non-digester dairies by excluding dairies that exited the market, which were
17 disproportionately smaller dairies without digesters. The analysis artificially compresses the gap
18 between digester and non-digester dairy growth rates.

19 CARB’s analysis also omits dairies that had a digester under construction in 2022, further
20 skewing its results. (AR12377, 13053–58, 116820–21.) Failing to include these dairies, which CARB
21 concedes are likely larger (AR11763–64), in the digester dairy category artificially deflated the growth
22 rate of these dairies. By excluding dairies that chose to install digesters after avoided methane crediting
23 began, CARB removed the farms that were most actively responding to the LCFS’s incentives.

24 Petitioners conducted their own analysis of the same CADD data without these distortions, and
25 the results directly contradict CARB’s conclusions. (AR116816–36.) Petitioners’ corrected analysis
26 found that in the five years after avoided methane crediting began, dairies with digesters grew by 181
27 cows, while non-digester dairies shrank by 137 cows. (AR116822.) Petitioners also compared average
28 herd sizes across the five-year periods before and after avoided methane crediting began, determining

1 that digester dairies gained an average of 191 cows, while non-digester dairies lost an average of 124.
2 (*Id.*) When the full universe of dairies is measured, the data show that digester dairies have grown
3 significantly since avoided methane crediting began, while non-digester dairies have contracted—a
4 result entirely consistent with the powerful economic incentives provided by the LCFS.

5 Because CARB’s analysis omits dairies whose behavior is crucial to understanding how avoided
6 methane crediting impacts herd expansion, that analysis is “not credible” and thus cannot “constitute
7 substantial evidence” under CEQA. (14 CCR § 15064(f)(5).) In *Cleveland National Forest Foundation*
8 *v. San Diego Assn. of Governments* (2017) 17 Cal.App.5th 413, 444, an agency analyzed a
9 transportation plan’s agricultural impacts using datasets that excluded “farmland under 10 acres” and
10 “agricultural lands that went into production after the mid-1990s.” (*Id.*) The court held that the
11 “combined effect of these limitations is that there is not substantial evidence to show the EIR’s analysis
12 accounted for impacts to farmland of less than 10 acres put into production within the last 20 years.” (*Id.*
13 at 444–45.) Because this information was critical to determine the precise amount of farmland the plan
14 would convert, the court rejected the EIR’s analysis of the project’s impacts on farmland conversion—
15 even though the record contained no evidence demonstrating that inclusion of smaller farms would have
16 rendered the project’s impacts significant. (*Id.* at 445.) Other cases have similarly found a lack of
17 substantial evidence where the agency relies on data sets that omit key information. (*Kings County Farm*
18 *Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 718 [underlying analysis of air quality impacts
19 “is misleading because the calculations do not include secondary emissions related to the project”];
20 *Citizens to Preserve the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 426–32 [EIR’s
21 conclusion lacks substantial evidence when underlying analysis excluded a key air emission source].)

22 CARB’s analysis suffers the same fatal flaw. CARB admits its analysis omitted now-defunct
23 dairies, which are necessary to understand the expansionary impact of avoided methane crediting.
24 (AR13058.) And unlike *Cleveland*, where the court concluded that the omitted data was critical without
25 knowing what it would have shown, Petitioners’ corrected analysis of the same CADD data, without
26 CARB’s exclusions, demonstrates that digester dairies expanded significantly since avoided methane
27 crediting began, while non-digester dairies contracted. Because CARB employed “a methodology with
28

known data gaps,” its analysis cannot provide substantial evidence that avoided methane crediting has no expansionary effect. (*Cleveland*, 17 Cal.App.5th at 445.)

b. CARB provides no support for its contention that avoided methane crediting has not impacted average herd size growth.

For the first time in its response to comments, CARB contended that herd expansion is not a reasonably foreseeable compliance response because its analysis of CADD data purportedly showed that herd sizes increased steadily before and after avoided methane crediting began. (AR12796; see AR12441–46 [EIA’s omitting any reference to CARB analysis of average herd size growth].) In support, they cite to the Slideshow presented at the Dairy Sector Workshop. (AR12796.) The only relevant information in that Slideshow on average herd size growth is a single line graph (AR12374.)

That vague, analytically incomplete line graph cannot constitute substantial evidence under CEQA. (14 CCR § 15064(f)(5) [“evidence that is not credible [] shall not constitute substantial evidence”].) The graph provides no citation to the underlying dataset, no disclosure of the methodology used to generate the trend line CARB has drawn, and no basis for independent verification of the conclusion it attempts to depict. Moreover, the graph provides labeled data points only for 2013 and 2022, as well as a projection for 2030. Nowhere in the slideshow, or anywhere else in the record, did CARB provide the actual annual herd size numbers, including for 2017—the year avoided methane crediting began. A reviewing court, a public commenter, or a decisionmaker attempting to evaluate CARB’s steady trend claim is left to estimate the 2017 value by eye from an unlabeled graph. That 2017 value appears to be approximately 1,300, which, contrary to CARB’s conclusion, would correspond to herd sizes growing at almost double the rate after avoided methane crediting began.⁴ An unlabeled and unsupported graph that, on its own terms, documents an acceleration in herd growth following avoided methane crediting is not substantial evidence that no such acceleration occurred.

⁴ Assuming the 2017 value is 1,300, the graph indicates that average herd sizes grew by 76, or 19 cows/year, between 2013 and 2017, whereas herd sizes grew by 172 between 2017 and 2022, or 34 cows/year—almost double the prior rate. Even assuming the graph shows 1,320 cows in 2017, it would still provide that herd sizes grew by approximately 24 cows/year between 2013 and 2017, compared to 30 cows/year for 2017 to 2022—a 25% acceleration.

1 **c. CARB’s analysis of CADD data ignores the LCFS Amendments’**
2 **expansionary impact outside California.**

3 The limitations of CARB’s flawed analysis of CADD data are compounded by its California-
4 only scope. “CEQA defines the relevant geographical environment” for purposes of environment review
5 “as the area where physical conditions will be affected by the proposed project.” (*County Sanitation*
6 *Dist. No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1582 [citing Pub. Resources Code §
7 21060.5].) CARB acknowledges that “out-of-state dairy facilities already participate in the LCFS
8 program” and thus the “impacts discussed in the EIA related to dairy facilities would generally apply to
9 out-of-state as well as in-state facilities.” (AR12804.) Agricultural economists and industry operators
10 agree that the lucrative financial incentives created by avoided methane crediting have led to herd
11 expansion outside California. (AR82810–12, 92316–26.) But the CADD provides no information on
12 out-of-state operations. Even if CARB had appropriately analyzed CADD data, it would not provide
13 substantial evidence that there is no link between avoided methane crediting and out-of-state expansion.

14 **2. CARB’s discussion of the general economics of factory farm expansion**
15 **affirms the link between herd expansion and avoided methane crediting.**

16 The EIA pairs its fatally flawed quantitative analysis of CADD data with a cursory narrative
17 discussion. CARB claims there is no link between avoided methane crediting and herd expansion
18 because of the pre-existing trend toward herd consolidation and the economies of scale large herd sizes
19 unlock, and further claims that predicting individual dairy decisions would require speculation. None of
20 these statements establish the absence of a link between avoided methane crediting and herd expansion
21 or support CARB’s arbitrary position.

22 First, the EIA refers to the national trend in the dairy industry towards herd consolidation, which
23 the EIA states is “expected to continue in the near term, independent of the [LCFS] Amendments.”
24 (AR12441–42, 12795–96.) This national trend says nothing of the link between the LCFS and herd
25 expansion. That expansion would continue to increase without the LCFS in no way demonstrates that
26 the LCFS has not increased the rate of expansion. Indeed, that there is a national trend towards herd
27 expansion, with a corresponding increase in environmental impacts, only further underscores the
28 severity of the LCFS Amendments’ incremental contribution to that trend and those impacts. (See

1 *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 120
2 [“the greater the existing environmental problems are, the lower the threshold should be for treating a
3 project’s contribution to cumulative impacts as significant”].)

4 Second, the EIA recites general market dynamics that benefit large herd sizes. The EIA states
5 that “farms with larger herd size classes consistently earned substantially higher net returns than smaller
6 herds,” as larger herds “allow facilities to generate increased commodity revenues while reducing the
7 economic impact of production costs driven by a variety of factors.” (AR12443, 12795–96.) According
8 to the EIA, it is this “basic economic fact, and not actions taken in response to the LCFS,” that “drive
9 decisions to expand.” (AR12444.) That larger herds unlock economies of scale undercuts the EIA’s
10 position that there is no link between the LCFS Amendments and herd expansion. The financial benefits
11 from avoided methane crediting are an integral part of the “basic economic fact” driving consolidation.
12 Singling out this incentive as an unimportant contributor to consolidation is arbitrary.

13 Lastly, the EIA asserts that predicting the decisions of individual dairies to expand requires
14 speculation that is inappropriate for a CEQA analysis. The EIA claims that whether a dairy will expand
15 is “speculative because it is subject to a fact-intensive, complex economic determination relying upon
16 local, unforeseeable circumstances.” (AR12444, 12797.) Analyzing herd expansion, according to
17 CARB, would “require making multiple inferences about what changes in the economic, regulatory, and
18 operating landscape led to a change in a dairy’s operation, which would require data about business
19 owner future decision-making to differentiate and isolate.” (AR12445, 12797.)

20 CARB misstates the level of analysis its own programmatic EIA calls for. The EIA’s
21 environmental impact analysis is “necessarily and appropriately general because the [LCFS]
22 Amendments are programmatic.” (AR12414.) Even though “the general locations of existing facilities
23 and infrastructure are known,” the EIA does not engage in site-specific analysis because “decisions by
24 the regulated entities regarding compliance options and the precise location of many components
25 covered in the [LCFS] Amendments are unknown.” (AR12414.) Instead, the EIA’s analysis “cover[s]
26 broad types of impacts.” (AR12414.) Disclosing that avoided methane crediting would incentivize herd
27 expansion and analyzing the associated impacts would not require CARB to predict the actions of
28 individual dairy operators. For example, the EIA analyzes digester impacts by estimating state- and

1 region-wide air quality emissions and providing a qualitative discussion of other impacts (e.g., odor,
2 water pollution). No site-specific analysis or prediction of individual dairy decision-making was
3 conducted. CARB could have done the same for herd expansion. Its reasoning for foregoing this
4 analysis lacks substantial evidentiary support, violating CEQA.

5 **C. The EIA fails to adequately analyze the environmental impacts associated with**
6 **digesters and increases in the production of factory farm biogas.**

7 CARB compounds its refusal to analyze herd expansion impacts with a cursory and unsupported
8 discussion of the water, air quality, and odor impacts of anaerobic digesters. The EIA determined that
9 the LCFS Amendments will have numerous significant environmental impacts that are driven, in part,
10 by the installation of digesters and increased production of factory farm biogas. These include short-
11 term constructed-related air quality impacts (AR12470–71), long-term local air quality impacts
12 (AR12473–83), long-term operational-related water quality impacts (AR12524–28), and long-term
13 operational noise impacts (AR12542–44). However, the EIA fails to inform how those significant
14 impacts will degrade public health, understates the emissions from digesters, and concludes without any
15 evidence that odor impacts will be insignificant. In doing so, CARB violated its dual obligations under
16 CEQA to support its significance determinations with substantial evidence and to provide a discussion
17 that informs the public of the harm caused by digestion.

18 **1. The EIA fails to inform the public of how digesters degrade public health.**

19 CEQA requires lead agencies to do more than determine if a project will have significant
20 impacts. For those impacts that an EIA determines are significant, the EIA must “correlate the identified
21 adverse [] impacts to resultant adverse health effects.” (*Bakersfield Citizens*, 124 Cal.App.4th at 1219.)
22 This rule derives from the CEQA requirement that an EIR discuss the “health and safety problems”
23 caused by a project. (14 CCR § 15126.2(a).) The California Supreme Court held that an EIA may only
24 satisfy this requirement if it both provides a “general discussion of adverse health effects” caused by
25 specific pollutants and “indicate[s] the concentrations at which such pollutants would trigger the
26 identified symptoms.” (*Sierra Club*, 6 Cal.5th at 519.) The EIA violates these requirements, determining
27 anaerobic digesters will drive numerous significant water and air quality impacts while ignoring the
28 corresponding health consequences.

1 The deleterious effects of groundwater contamination from anaerobic digesters are well
2 documented. Anaerobic digesters makes digestate more harmful to groundwater quality than manure
3 because the digestion process breaks down organic material into smaller molecules that are significantly
4 more susceptible to leaching into groundwater, while simultaneously increasing the concentration of
5 ammonia in the resulting digestate, which readily converts to nitrate in soil. (AR66744–46.) Nitrate
6 contamination of groundwater presents serious public health consequences, including blue baby
7 syndrome and increased risk of bladder, colorectal, and ovarian cancer, birth defects, and premature
8 births (AR66744, 72224–25, 86866.)

9 Similarly, “[i]t is well known that air pollution adversely affects human respiratory health.”
10 (*Bakersfield Citizens*, 124 Cal.App.4th at 1219.) Anaerobic digesters present a serious pollution threat
11 because digestion decomposes manure into smaller molecules, resulting in higher releases of ammonia
12 and NOx than manure. (AR66741–44.) Ammonia and NOx contribute to the formation of PM2.5, which
13 is linked to lung disease, heart attacks, irregular heartbeat, asthma, and cancer. (AR2064, 72340,
14 104402–03.) The communities who live near dairies already face a severe pollution burden and are
15 uniquely susceptible to the adverse health impacts of such emissions. (AR104402–03.)

16 This critical information appears nowhere in the EIA. The EIA concluded the LCFS
17 Amendments would significantly impact water quality, in part, because “increased use of anaerobic
18 digesters ... could result in the contamination of local waterways and groundwater resources,” and
19 “improperly treated digestate ... may lead to increased nitrogen oxide emissions, soil contamination,
20 and/or nutrient leaching,” but the EIA made no effort to explain how these increased pollutants would
21 degrade public health. (AR12526.) The EIA further determined that the LCFS Amendments would
22 significantly impact air quality due to “local emissions associated with ... biomethane production,” but
23 omitted any discussion of how increased emissions would damage the health of the communities
24 adjacent to dairies. (AR12482–83.) “After reading the [EIA], the public would have no idea of the health
25 consequences that result” from anaerobic digestion. (*Bakersfield Citizens*, 124 Cal.App.4th at 1220.)

26 In fact, because it omits *any* discussion of these severe health impacts, the EIA is more deficient
27 than those in *Bakersfield Citizens* and *Sierra Club*. In *Bakersfield Citizens*, the court held that “brief
28 references to respiratory illnesses” in the EIRs’ air quality discussions were insufficient because the

EIRs failed to also “acknowledge[] or analy[ze] [] the well-known connection between reduction in air quality and increases in specific respiratory conditions and illnesses.” (124 Cal.App.4th at 1219–20.) The EIR in *Sierra Club* provided “a general discussion of adverse health effects associated” with the specific pollutants the project would generate, “recognized that the County suffers from the ‘most severe’ ozone problems in the state[,]” and “acknowledged the relationship between adverse ambient air quality and certain health risks to the respiratory system that could affect asthmatics, children, and healthy adults.” (6 Cal.5th at 519.) Still, the EIR violated CEQA because it failed to “indicate the concentrations at which [the identified] pollutants would trigger the identified symptoms.” (*Id.*)

Here, the EIA does not even generally acknowledge the health impacts of groundwater contamination or localized air pollution,⁵ much less attempt to disclose the specific impacts that would result from the LCFS Amendments. Without this discussion, the EIA is “inadequate as an informational document.” (*Sierra Club*, 6 Cal.5th at 519.) “These defects are prejudicial.” (*Bakersfield Citizens*, 124 Cal.App.4th at 1193.)

2. The EIA fails to support its conclusion that the LCFS Amendments will have a less than significant odor impact.

The EIA improperly concludes that the LCFS Amendments will not have a significant impact on odors by assuming that anaerobic digesters reduce dairy odors. CARB, however, failed to provide any data, facts, or evidence to support this assumption. This lack of evidence is unsurprising; peer-reviewed science indicates digesters can worsen odors by increasing ammonia emissions. The EIA thus violates its obligation to “present facts and analysis, not simply the bare conclusions or opinions of the agency.” (*Californians for Alternatives to Toxics v. Dept. of Food & Agriculture* (2005) 136 Cal.App.4th 1, 13.)

Odor is a serious problem for communities adjacent to dairies, degrading their quality of life and exacerbating existing economic and health inequities. (AR54584–87, 86866.) Dr. Paul Rosenfeld, whose

⁵ The emission benefit analysis CARB conducted as part of its SRIA does not absolve the EIA’s prejudicial omissions because that analysis is not localized, only relates to air quality impacts and neither its conclusions nor analysis are contained in the EIA. (*People ex rel. Bonta v. County of Lake* (2024) 105 Cal.App.5th 1222, 1232 [“Material not contained in the EIR cannot be expected to be considered, and therefore, cannot be relied upon to support an adequate EIR.”]; *Vineyard Area Citizens for Responsible Growth, Inc.*, 40 Cal.4th at 442 “[I]nformation scattered here and there in EIR appendices or a report buried in an appendix, is not a substitute for a good faith reasoned analysis.”].)

1 peer-reviewed research on odor emissions is extensive, informed CARB that anaerobic digestion can
2 worsen odor impacts by increasing emissions of ammonia, an “odorous compound” that is “easily
3 detectable at low concentrations and contributes to irritation such as immediate burning of the nose and
4 respiratory tract.” (AR66740–61; see also AR12485 [EIA acknowledging ammonia is an “odorous
5 compound[.]”].) As noted above, this is because anaerobic digestion decomposes waste into smaller
6 molecules that more easily volatilize into the atmosphere, releasing higher concentrations of ammonia
7 than manure. (AR66741–42.)

8 The EIA ignores the science. It devotes just two pages to odor impacts, which it analyzes
9 separately from general air quality impacts. (AR12484–86.) The EIA contends that “[m]anure
10 management at dairies typically involves flushing and/or scraping manure into on-site storage ponds or
11 stockpiles,” and that anaerobic digestion “would result in the manure being placed into the digester
12 rather than into on-site storage ponds or stockpiles, potentially reducing odors that would otherwise
13 occur without new digester facilities.” (AR12485–86.) The EIA fails to provide a single citation to
14 support the underlying assumption that digesters could potentially reduce odors. (*Id.*)

15 CEQA does not permit agencies to conclude a project’s impacts will be less than significant
16 based on an unsupported assumption. For example, in *City of Maywood v. Los Angeles Unified School*
17 *Dist.* (2012) 208 Cal.App.4th 362, 370–78, an EIR concluded no pedestrian safety hazards would result
18 from a high school being bisected by a public street. Despite expert comments to the contrary, the EIR
19 assumed that no impacts would result because the campus would be connected by a pedestrian bridge
20 and “[s]tudents would be required to use the bridge to cross [the street] and would be prohibited from
21 crossing [the street] at street level.” (*Id.* at 390.) The court found this discussion violated CEQA,
22 because it consisted solely of “conclusory statements” that were “unaccompanied by any information or
23 facts explaining how” the agency intended to ensure students only used the pedestrian bridge. (*Id.* at
24 393.) The EIA commits the same fatal error, concluding without any supporting data, facts, or evidence
25 that the addition of a digester will reduce odor impacts—despite contrary expert analysis in the record.

26 CARB’s responses to comments confirm the EIA’s deficiency. When Petitioners raised Dr.
27 Rosenfield’s analysis, CARB directed them to “Master Responses 4 and 5, response to comment 313-4,”
28 and the text of the EIA itself. (AR12945–96.) Neither Master Response addresses odor emissions. (see

AR12805–10.) And response 313–4 merely repeats the EIA’s unsupported conclusion that odors are “likely to be reduced using a closed system (*e.g.*, digester facilities).” (AR12969–70.) CARB’s discussion of anaerobic digesters’ odor impacts begins and ends with an assertion it repeatedly failed to support with any evidence. A “conclusory discussion of a potentially substantial adverse change in the environment deprives the public of information necessary for informed self-government and constitutes a prejudicial abuse of discretion.” (*People ex rel. Bonta v. County of Lake* (2024) 105 Cal.App.5th 1222, 1231.)

3. The EIA undercounts NOx emissions from factory farm biogas combustion.

The EIA significantly understates the LCFS Amendments’ NOx emissions by assuming that factory farms converting factory farm biogas to electricity—fuel for electric vehicles—will use a near-zero emission technology that has only ever been adopted once. CEQA does not permit agencies to undercount a project’s emissions by relying on unsupported assumptions and methodologies. (*Kings County Farm Bureau*, 221 Cal.App.3d at 718; *Citizens to Preserve the Ojai*, 176 Cal.App.3d at 426–30, 426–32.) CARB’s modeling assumptions must be supported by substantial evidence. (*Bakersfield Citizens*, 124 Cal.App.4th at 1198.) They are not.

Factory farms that convert methane to electricity for electric vehicles qualify for LCFS credits. (AR176–79.) At the time CARB approved the LCFS Amendments, it had certified twenty fuel pathways for factory farms that use the biogas to create electricity. (AR66905–67032.) Of those twenty, *nineteen* burn the biogas in internal combustion engines—which emit NOx at substantial volumes that can exceed natural gas-fired power plants in terms of per unit of electricity generated. (*Id.*; AR67500.) *Just one* pathway relied on fuel cell technology, which has purportedly near-zero NOx emissions. (AR66905–67032; AR2140 [fuel cells have NOx emissions factor of 0.00085 tons/Gwh].) The modeling CARB conducted for the EIA, however, “assumes use of fuel cells to generate this electricity, which do not rely on combustion.” (AR12446; see also AR2140.)

No justification exists for CARB’s assumption that all factory farms who seek LCFS eligibility for electric vehicle fuel pathways will rely on fuel cells. To the contrary, fuel cells are significantly more expensive than internal combustion engines. (AR67099, 67188.) The San Joaquin Valley Air Pollution Control District (Air District) reviews permit applications for internal combustion engines at factory

1 farms, requiring the agency to conduct a “Best Available Control Technology” analysis to identify the
2 cost-effective technology that minimize emissions. (AR67099–105, 67188–95.) The Air District has
3 repeatedly determined that fuel cells are cost prohibitive. (E.g., AR67105 [fuel cell for Lone Oak Energy
4 project would cost more than \$3 million more annually than internal combustion engine]; AR67194
5 [fuel cell for Lakeview Dairy project would cost \$2.7 million more annually than internal combustion
6 engine].) It is not reasonable to assume that factory farms will forego internal combustion engines and
7 instead adopt a technology that costs millions of dollars more per year.

8 CARB defends its assumption of 100% fuel cell usage on the ground that the LCFS
9 Amendments create a “new opportunity for book and claim of biomethane to produce electricity” that is
10 available only for fuel cell-generated electricity. (AR12878.) But that is not the only factory farm biogas
11 electricity pathway incentivized by the LCFS Amendments. Factory farms that use internal combustion
12 engines remain eligible for LCFS credits. (AR167–68, 183–88; 17 CCR § 95488.9(f).) The EIA itself
13 acknowledges that the LCFS Amendments provide a significant near-term incentive for the “production
14 of low-CI electricity ... from biomethane derived from dairy operations.” (AR12446.) That production
15 is overwhelmingly likely to occur through much cheaper and higher emitting internal combustion
16 engines. By assuming exclusive fuel cell use, CARB substantially undercounted the LCFS
17 Amendments’ NO_x emissions.

18 CEQA does not permit such undercounting. “An analysis which understates the severity of a
19 project’s impacts ‘impedes meaningful public discussion and skews the decisionmaker’s perspective
20 concerning the environmental consequences of the project, the necessity for mitigation measures, and
21 the appropriateness of project approval.’” (*Cleveland Nat’l Forest Foundation*, 17 Cal.App.5th at 444.)
22 CARB’s unsupported modeling assumption violates CEQA.

23 **D. The EIA fails to support its refusal to analyze an alternative scenario where CARB**
24 **eliminates avoided methane crediting without sacrificing the State’s methane**
reduction goals.

25 The discussion of alternatives lies at the “core” of CEQA analysis. (*Citizens of Goleta Valley*, 52
26 Cal.3d at 564.) CEQA requires EIAs to “consider a reasonable range of potentially feasible alternatives”
27 that would “feasibly attain most of the basic objectives of the project but would avoid or substantially
28 lessen any of the significant effects of the project[.]” (14 CCR § 15126.6(a).) The “range of feasible

alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.” (*Id.* § 15126.6(f).) Where a lead agency rejects a proposed alternative as infeasible, that rejection must be supported both by an “explanation ... sufficient to enable meaningful public participation and criticism” and by substantial evidence in the record. (*Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1458–59.)

The EIA considered three alternative scenarios to the LCFS Amendments. Alternative 1 analyzed a scenario where the LCFS continued without change, whereas Alternative 3 considered a scenario with less stringent carbon intensity reduction targets. (AR12594–95, 12598–99.) Alternative 2, the “Focused Crediting” scenario, is a modified version of the “Comprehensive Environmental Justice Scenario” recommended by CARB’s EJAC. (AR12596.) That alternative considered a scenario where avoided methane crediting is eliminated, deliverability requirements are applied to all other biomethane crediting, and credit generation for Direct Air Capture projects is eliminated. (AR12596.)

CARB’s alternatives analysis presents a false choice: that the State must choose between eliminating the environmental harms of avoided methane crediting and achieving its methane reduction goals. But SB 1383 gives CARB the authority to require *direct* methane reduction from dairies through regulation without relying on the indirect, incentivized market-based mechanism of avoided methane crediting. Petitioners requested CARB consider such a scenario—the “SB 1383 Alternative”—but it refused. (AR13062, 14655–66, 66707.) The only alternative CARB considered that limited avoided methane crediting, the Focused Crediting scenario, did not incorporate CARB’s direct regulatory authority. (AR12596–98.) The EIA then faulted that alternative for being less effective than the LCFS Amendments at “achieving the State’s 2045 [GHG] reduction targets and SB 1383 methane reduction target.” (AR12597.) But that weakness is entirely of CARB’s own making. Lead agencies may not intentionally undermine an alternative to avoid concluding that it would be superior to the project. CARB did just that by rejecting the SB 1383 Alternative.

1. The SB 1383 Alternative would remedy one of the major flaws in the Focused Crediting scenario.

CEQA is clear: “Meaningful analysis of alternatives ... requires an analysis of meaningful alternatives.” (*Save Our Capitol! v. Dept. of General Services* (2023) 87 Cal.App.5th 655, 704.) By

analyzing only a single alternative that included limits on avoided methane crediting, without also incorporating the methane reductions that direct regulation could achieve, the EIA did not consider a reasonable range of alternatives.

CARB has a statutory duty to directly regulate dairy methane emissions and to prioritize direct emission reduction regulations. SB 1383 provides that CARB “shall adopt regulations to reduce methane emissions from livestock manure management operations and dairy manure management operations[.]” (Health & Saf. Code § 39730.7(b)(1).) SB 1383 authorizes CARB to implement such direct regulations, which would obviate the need for the indirect, incentive-based mechanism of avoided methane crediting, since January 1, 2024. (*Id.* § 39730.7(b)(4).) SB 1383 includes a list of actions CARB must take “[p]rior to adopting regulations” (*id.* § 39730.7(b)(2).) CARB concedes it has completed all of these. (AR12339.) The Legislature also directed CARB to prioritize direct emission reduction regulations. (Health & Saf. Code § 38562.5.)

CARB itself has highlighted both the importance, and the inevitability, of direct regulation. In CARB’s 2022 Scoping Plan—which outlines its preferred path to achieving Statewide carbon neutrality by 2045—CARB describes its approach to methane reductions as a “carrot-then-stick strategy” where incentives like LCFS credits are relied on “in the early years of implementation to overcome technical and market barriers,” and are ultimately “replaced with requirements as the solutions become increasingly feasible and cost-effective.” (AR3734.) Notably, when CARB adopted the LCFS Amendments, CARB directed its Executive Officer “to prepare a plan for initiating, developing, proposing, and implementing a livestock methane regulation under Health and Safety Code section 39730.7 from SB 1383.” (AR378.)

By refusing to incorporate CARB’s express authority under SB 1383 in the alternatives analysis, the EIA artificially constrained the Focused Crediting scenario’s effectiveness. The EIA acknowledges that the Focused Crediting scenario would alleviate the significant air and water quality impacts driven by avoided methane crediting, but faults that alternative for failing to incentivize dairy methane capture, thereby threatening the State’s methane reduction goals. (AR12594–97.) That flaw was entirely avoidable. Had CARB analyzed the SB 1383 Alternative, it could have considered a scenario where avoided methane crediting ends without jeopardizing dairy methane reduction. By refusing to do so,

CARB deprived the public of a meaningful alternative and violated CEQA’s requirement to discuss alternatives “in a manner to foster meaningful public participation and informed decision making.” (14 CCR § 15126.6(f).)

The court in *Save Our Capitol!* faced a similar attempt by an agency to inhibit its own alternatives analysis. There, an EIR considered eleven “potentially feasible alternatives” to a project that replaced a State Capitol building and constructed a new visitor center on the Capitol’s historic west side. (87 Cal.App.5th at 665–701, 703.) The petitioner proposed an alternative that would move the visitor center to avoid the historic west side while still keeping the project intact and not increasing impacts. (*Id.* at 700.) The agency claimed it need not consider this alternative because it considered three alternatives scenarios that either eliminated the visitor center or relocated it from the west side. (*Id.* at 703–04.) However, each of those three alternatives included changes to the project that either increased its impacts or made it less effective at achieving the objectives. (*Id.*) The court rejected this approach, holding the agency improperly “identif[ied] alleged alternatives that meet few if any of the project’s objectives so that these alleged alternatives may be readily eliminated.” (*Id.* at 704.)

CARB committed the same error. It considered just one alternative that eliminated avoided methane crediting, refused to assume reductions in methane emissions from direct regulation, and then rejected its cherry-picked alternative for not achieving the State’s methane reduction goals. As a result, the Focused Crediting alternative “did not contribute to a reasonable range of alternatives that fostered informed public participation and decision-making.” (*Save our Capitol!*, 87 Cal.App.5th at 703.)

2. CARB’s contention that the SB 1383 Alternative is infeasible lacks support.

CARB’s contention that it need not consider the SB 1383 Alternative because it would inhibit some of the LCFS’ objectives is both unsupported and cannot excuse CARB’s refusal to consider it in lieu of the Focused Crediting alternative. CARB identified seven objectives for the LCFS Amendments:

1. Improve California's long-term ability to support the production and use of increasingly lower-CI transportation fuels and to improve the program’s overall effectiveness;
2. Update the annual carbon intensity benchmarks through 2030 and establish more stringent post-2030 benchmarks in alignment with the 2022 Scoping Plan;
3. Increase the flexibility of the program to adjust for potential future market over-performance by including a mechanism that would automatically accelerate the compliance targets under certain conditions;

4. Include a step-down in the near-term CI target to further support ambition;
5. Incentivize fuel production and refueling infrastructure buildout needed to meet California's long-term climate goals and reduce dependence on petroleum fuels, including opportunities to leverage federal funding for low-carbon hydrogen production and ZEV fueling, and support the transition of biomethane fuel pathways for combustion out of transportation;
6. Update standard values in the regulation, including emission factors, as well as life cycle assessment (LCA) modeling tools to use more detailed or recent data; and
7. Streamline implementation of the program.

(AR12593–94.)

CARB claims that the SB 1383 Alternative “would be inconsistent” with the objectives to promote the decarbonization of the State’s transportation fuel. (AR13062.) But that objection rests on the false premise that avoided methane crediting contributes to the decarbonization of the State’s transportation sector. CARB repeatedly acknowledges that it uses avoided methane crediting as a tool to reduce emissions *in the dairy sector*. (AR12954 [“capturing methane from dairies is one of the primary measures for achieving the State’s 2045 [GHG] reduction targets and SB 1383 methane reduction target” and “restricting LCFS credit generation from existing or future digester projects [] would conflict with State GHG emissions reduction goals.”]; see also AR12797, 12979, 13062.)

Indeed, factory farm biogas pathways have extremely low carbon intensity scores, and thus generate substantial credits, because of the assumed reduction in factory farm methane emissions. Experts from the Union of Concerned Scientists quantified this, determining that “85 percent of the credit claimed by dairy biomethane is associated with avoided methane,” while just “15 percent of the climate benefit assigned to dairy biomethane is associated with replacing fossil fuels with bio-derived fuel used for transportation.” (AR66618.) Moreover, fuel derived from factory farm biogas has historically provided less than 1% of the LCFS-eligible energy used for transportation. (AR82816.) Eliminating a mechanism CARB uses to target factory farm emissions, which has a miniscule impact on providing substitute transportation fuels, would not interfere with CARB’s transportation fuel decarbonization objectives.

CARB further contends that the SB 1383 Alternative would be inconsistent with the LCFS Amendments’ objective to “updat[e] and strengthen[] carbon intensity benchmarks.” (AR13062.) However, that objective—as well as objectives 3, 4, and 6—merely restate components of the LCFS

1 Amendments. CEQA does not permit lead agencies to define project objectives synonymously with the
2 project and then assert that any alternative is therefore less effective at meeting those objectives. In
3 *North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 667–69, the court rejected the
4 Department of Food and Agriculture’s attempt to define the objective of a pest eradication program as
5 “eradication” itself, rather than the outcome the program was intended to achieve: “to protect
6 California’s native plants and agricultural crops from damage.” The court held that the agency must
7 consider an alternative “control” program that stopped short of eradication because it could achieve the
8 project’s actual objective. (*Id.*)

9 Similarly, here, the specific changes CARB made to the LCFS Amendments are the project—not
10 its objective. The goals CARB intends to achieve with the LCFS Amendments are to generally promote
11 the decarbonization of the State’s transportation fuel, while specifically relying on avoided methane
12 crediting to reduce manure methane emissions. The SB 1383 Alternative would not interfere with either
13 of these goals, while alleviating the significant environmental harms generated by avoided methane
14 crediting. Analysis of that Alternative thus “would have provided the decisionmakers with information
15 about how most of the project’s objectives could be satisfied without the level of environmental impacts
16 that would flow from the project.” (*Watsonville Pilots Assn.*, 183 Cal.App.4th at 1086–90 [lead agency
17 improperly rejected alternative that would reduce project’s environmental impacts while only failing to
18 achieve two out of twelve project objectives].)

19 Even if the SB 1383 Alternative would have created some tension with the LCFS Amendments’
20 objectives, which it would not, this tension alone would not render the Alternative infeasible. An
21 alternative need not accomplish all of a project’s stated objectives; agencies must consider “potentially
22 feasible alternatives” even if they may “impede to some degree the attainment of the project
23 objectives[.]” (14 CCR § 15126.6(b); see also *Habitat & Watershed Caretakers v. City of Santa Cruz*
24 (2013) 213 Cal.App.4th 1277, 1304 [petitioner’s proposed “alternative could not be eliminated from
25 consideration solely because it would impede to some extent the attainment of the project’s
26 objectives”].) The SB 1383 Alternative is simply a stronger version of the Focused Crediting alternative,
27 which CARB clearly determined was sufficiently feasible to include in its alternatives analysis. CARB’s
28 refusal to consider the SB 1383 Alternative thus violates CEQA.

1 **II. CARB unlawfully and arbitrarily violated the Global Warming Solutions Act in adopting**
2 **the LCFS Amendments.**

3 In addition to violating CEQA, the LCFS Amendments violate the Global Warming Solutions
4 Act (GWSA) and are arbitrary, capricious, and without a reasonable or rational basis. First, the
5 Amendments will cause disproportionate impacts as factory farms and the factory farm biogas industry
6 respond to the Amendments with herd expansions, digester projects, and factory farm biogas production.
7 The Amendments also have the effect of increasing the pass-through cost for gasoline, which is
8 disproportionately borne by low-income communities in California, including in the Valley. Second,
9 CARB has acted outside its authority by entirely ignoring the statutory requirement of “additionality” to
10 protect the integrity of market-based compliance mechanisms like the LCFS. Finally, the authorization
11 in the LCFS Amendments to count the same emissions reductions in both the transportation and dairy
12 sectors is arbitrary and capricious and not reasonably necessary because it results in claimed progress
13 toward the GWSA goals with reductions that are not real.

14 **A. The Global Warming Solutions Act.**

15 The GWSA is California’s landmark climate change legislation. It requires CARB to adopt and
16 implement regulations to achieve specific emissions reductions targets. When first enacted, the GWSA
17 directed CARB to reduce the state’s GHG emissions down to a baseline known as the “statewide [GHG]
18 emissions limit” by 2020. (Health & Saf. Code §§ 38505(m), 38550.) The Legislature amended the
19 GWSA in 2016 and in 2022 to achieve more ambitious reduction goals, and CARB now must achieve a
20 40% reduction below the statewide GHG emissions limit by 2030, with an ultimate goal of an 85%
21 reduction below the statewide GHG emissions limit and zero net emissions by 2045. (*Id.* §§ 38550,
22 38562.2, 38566.) The GWSA authorizes CARB to adopt regulations “to achieve the maximum
23 technologically feasible and cost-effective [GHG] emission reductions from sources or categories of
24 sources, subject to the criteria and schedules set forth in [the statute].” (*Id.* § 38560.) The GWSA also
25 requires that emissions reductions be “real, permanent, quantifiable, verifiable, and enforceable[.]” (*Id.*
26 § 38562(d)(1).)

27 The GWSA requires that CARB prioritize “direct emissions reductions,” consider the social cost
28 of GHG emissions, and ensure “that activities undertaken to comply with the regulations do not

disproportionately impact low-income communities.” (*Id.* §§ 38562(b)(2), 38562.5.) CARB must lay out its plan for achieving these GHG reduction goals in a Scoping Plan for Achieving Carbon Neutrality, most recently updated in 2022. (AR3495.) The Scoping Plan outlines how CARB intends to achieve the GWSA reductions and provides an accounting of progress it claims to have already made.

The GWSA established a phased approach for CARB’s adoption of regulations with particular “criteria and schedules.” (*See* Health & Saf. Code § 38560.) First, CARB was authorized to adopt “discrete early action [GHG] emission reduction measures” (“Early Action Measures”) to help achieve the statewide GHG emissions limit by 2020. (*Id.* § 38560.5(a).) These regulations had to be ready for implementation no later than January 1, 2010, “prior to the measures and limits adopted pursuant to [the GWSA’s other grant of rulemaking authority,] Section 38562.” (*Id.*) CARB’s authority to adopt regulations after 2010 and to achieve GHG emissions reductions beyond the 2020 target comes from Health & Safety Code section 38562. Section 38562 gives CARB the authority to “revise regulations adopted pursuant to this section and adopt additional regulations to further the provisions of [Division 25.5].” (*Id.* § 38562(g).) As the Legislature has amended the GWSA in the years since its passage, it has updated section 38562 to be responsive to changed circumstances, changes in reduction targets, and California’s evolving priorities.

CARB adopts LCFS regulations pursuant and limited to the authority granted it by the GWSA. (17 CCR § 95480; *City of Lodi v. Randtron* (2004) 118 Cal. App. 4th 337, 359 [citing cases].)

B. APA Standard of Review.

Under the California Administrative Procedure Act (APA), the court exercises its own, independent judgment in questions of statutory interpretation. (*Western States Petroleum Assn. v. Board of Equalization* (2013) 57 Cal.4th 401, 415.) This includes when a court must determine if an agency has acted beyond the scope of the authority granted it by the legislature. (*Id.*) The court, not the agency, has ““final responsibility for the interpretation of the law”” under which the regulation was issued. (*Yamaha Corp. of America v. State Bd. of Equalization* (1998) 19 Cal. 4th 1, 121.)

Within an agency’s proper scope of authority, the APA requires that all regulations promulgated be reasonably necessary to effectuate the governing statute’s purpose. (Gov. Code § 11342.2.) This determination of necessity requires substantial evidence in the rulemaking record and the agency’s

1 action may not be “arbitrary, capricious, or without reasonable or rational basis.” (*California Chamber*
2 *of Commerce v. State Air Resources Board* (2017) 10 Cal.App.5th 604, 619 [quoting *Morning Star Co.*
3 *v. Board of Equalization* (2011) 201 Cal.App.4th 737, 744–45]; *Cmtys. for a Better Env't v. Cal. Res.*
4 *Agency* (2002) 103 Cal. App. 4th 98, 109.) “[R]egulations that alter or amend the statute or enlarge or
5 impair its scope are void and courts not only may, but it is their obligation to strike down such
6 regulations.” (*Gregory v. State Bd. of Control* (1999) 73 Cal. App. 4th 584, 594.)

7 Additionally, the GWSA is a civil statute with a protective purpose, so it should be construed
8 liberally “so as to promote the general object sought to be accomplished.” (*Coastside Fishing Club v.*
9 *California Resources Agency* (2008) 158 Cal.App.4th 1183, 1202 [applied in the case of a natural
10 resource conservation regulation]; see also *So. Cal. Gas Co. v. So. Coast Air Quality Mgmt. Dist.* (2011)
11 200 Cal. App. 4th 251, 268 [construing liberally an air quality statute].).

12 **C. CARB violated the GWSA because the LCFS disproportionately impacts low-**
13 **income communities.**

14 CARB must “ensure that activities undertaken to comply with the regulations do not
15 disproportionately impact low-income communities.” (Health & Saf. Code §§ 38562(b)(2), 38562.5.) At
16 no point in this rulemaking did CARB even acknowledge this duty exists.

17 Even though CARB heard compelling evidence from Valley residents and EJAC, CARB still
18 refused to ensure that activities undertaken in response to the LCFS Amendments will not
19 disproportionately impact low-income communities. Defensores members and other Valley residents
20 testified about their first-hand experience with disproportionate impacts from herd expansion and
21 digesters across several meetings, workshops, and public comments. (See Factual and Procedural
22 Background Sections II, IV, and V, *infra*; see also AR 69653–55.) CARB heard hours of oral testimony
23 and received reams of written comments explaining how avoided methane crediting inflicts
24 disproportionate impacts on low-income communities by increasing air, water, and odor pollution in the
25 Valley. (*Id.*) EJAC exhaustively considered and weighed these disproportionate impacts (See, e.g.,
26 Supp. AR67–85, 196–199, 259–261, 645–648.) As one commenter observed at an EJAC meeting,
27 CARB’s own environmental justice analysis in the ISOR made no effort to consider them. (Supp.
28 AR649–651; AR14741–14745.) EJAC advised CARB that the agency could achieve its goals *and*

1 reduce disproportionate impacts on low-income communities by eliminating avoided methane crediting.
2 (AR64393–95). CARB opted to not only maintain avoided methane crediting and its harmful impacts,
3 but it supercharged its favorable treatment of factory farm biogas despite those impacts. (*See* Factual and
4 Procedural Background Section VI.B, *supra*; *see also* Argument Sections I.B, I.C, and II.D, *infra*.)

5 CARB violates its duty to ensure that activities undertaken to comply with the LCFS—especially
6 avoided methane crediting—do not disproportionately impact low-income communities. Despite a
7 record rife with data and public comments, CARB took no steps and included no provisions in the LCFS
8 Amendments to ensure avoided methane crediting would not cause harm from incentivizing herd
9 expansions, concentrating cows, concentrating manure, threatening water quality, exacerbating air
10 pollution, and ripening odors in disproportionately low-income communities. As explained in the CEQA
11 arguments above, CARB could have adopted the SB 1383 Alternative to comply with its duty in section
12 38562(b)(2) but refused to even include that alternative in the EIA. (*See* Argument Section II.D., *infra*)
13 Thus, CARB violated its duty to ensure that the LCFS amendments do not disproportionately impact
14 low-income communities.

15 CARB also violates this duty with respect to the economic impacts inflicted on low-income
16 communities. The SRIA documents significant pass-through costs in the price of gasoline and diesel
17 which will increase over time. (AR2083–87.) The SRIA also concludes that this significant pass-through
18 cost “may” cause disproportionate impacts to “low-income, disadvantaged, and rural communities,” but
19 proposed subsidies for electric vehicle purchases and charging infrastructure “should help mitigate
20 potential impacts that would be associated with cost pass-through to ICE vehicle owners[.]” (AR2087–
21 89.) Nothing in the record would support a finding that the proposed subsidies would eliminate the
22 disproportionate impact. Nor does the record show that low-income Californians could even afford
23 electric cars and chargers with these subsidies. But record evidence does show that low-income
24 communities, including those in the Valley, spend a larger share of their income on non-discretionary
25 transportation and are less likely to own an electric vehicle or have access to chargers than wealthier
26 people. (AR1284, 2087, 52897–902, 61649–50, 70541–42, 74438, 74440–56, 116315–20, 116655–56,
27
28

1 116851–56.)⁶ The Californians driving gasoline cars and paying the pass-through costs are more likely
2 to be increasingly lower income. (AR54460).

3 When confronted by the admissions in the SRIA, CARB doubled down on its failure to protect
4 low-income communities from pass through costs by intentionally obfuscating and explaining away the
5 admissions in the SRIA. Instead of complying with its duty in section 38562(d)(2), CARB shifted to
6 diluting the impact by averaging costs across all Californians. The discussion of gasoline pass through
7 costs in the ISOR claims that the LCFS will make transportation fuels cheaper *on average*. (AR14759–
8 61). CARB achieves this statistical feat by averaging the lower costs of electric vehicle fuel with the
9 higher costs of gasoline (including the additional pass-through costs). (*Id.*) In other words, CARB papers
10 over the fact that the LCFS accrues financial benefits to wealthier Californians who drive electric
11 vehicles while low-income Californians suffer the costs which the oil companies pass through to them.

12 As summarized through a metaphor by the former CARB Branch Chief who managed the LCFS:

13 [T]he LCFS program acts as both a carrot (through credit value generated by low carbon
14 fuels) and a stick (through pass-through cost to high carbon fuels). Over time as the CI
15 benchmarks get lower, credit value generated by low carbon fuels decrease while pass-
16 through costs to consumers of high-carbon fuels increase . . . [T]his LCFS stick will
17 increasingly punish low-income Californians while corporations and high-income
18 Californians dine on the carrot. (AR63686.)

19 Remarkably, CARB’s attempt to mask gas price impacts only reinforces CARB’s violation of
20 section 38562(b)(2) for failing to ensure that activities undertaken pursuant to the LCFS Amendments
21 do not disproportionately impact low-income communities.

22 **D. CARB violated the GWSA by failing to ensure LCFS crediting is additional to**
23 **reductions that would have otherwise occurred.**

24 CARB exceeded its statutory authority when it disregarded a long-standing guardrail that ensures
25 incentives from market-based climate programs actually cause the credited emissions reductions. When
26 enacting the GWSA, the Legislature codified this causation-based and common-sense principle of
27 “additionality” when it authorized market-based compliance mechanisms in lieu of traditional direct
28

29 ⁶ One expert determine that the LCFS amendments could increase the share of annual income that low-
30 income Kern County households pay for LCFS pass-through costs from .42% of annual income in 2024
31 to 3.3% of annual income in 2040. (AR42602, 86701).

1 regulations. (Health & Saf. Code § 38562(d)(2).) With this additionality mandate, the Legislature sought
2 to guarantee the integrity of the marketplace, prevent unjust enrichment for doing what the law already
3 requires, and prevent windfall rewards for reductions that would have happened regardless.

4 CARB ignores this fundamental additionality mandate and exceeds its statutory authority in
5 doing so. The Amendments contain no additionality guardrails for any credit generating fuel in the
6 LCFS, including avoided methane crediting for factory farm biogas projects. No provision of the LCFS
7 Amendments ensures additionality for reductions required by law, for reductions required by contract
8 (e.g., a grant agreement), or for projects which would have happened or were long in existence
9 regardless of the LCFS. Furthermore, the LCFS amendments explicitly and unlawfully authorize
10 avoided methane crediting even after the adoption of manure methane regulations required by SB 1383.
11 By failing to adopt any additionality provisions in the LCFS Amendments and by explicitly authorizing
12 credits for manure methane reductions required by law, CARB has exceeded its statutory authority.

13 CARB has authority to adopt and implement the LCFS amendments as a market-based
14 compliance mechanism. (Health & Saf. Code § 38570(a).)⁷ But the Legislature has cabined that
15 authority by directing CARB to ensure additionality for such regulations. For any regulation CARB
16 adopts under the part of the GWSA that authorizes the use of market-based compliance mechanisms,
17 “the reduction [must be] in addition to any [GHG] emission reduction otherwise required by law or
18 regulation, and any other [GHG] emission reduction that otherwise would occur.” (*Id.* § 38562(d)(2).)
19 The GWSA defines market-based compliance mechanisms as “[GHG] emissions exchanges, banking,
20 credits, and other transactions, governed by rules and protocols established by the state board, that result
21 in the same [GHG] emission reduction, over the same time period, as direct compliance with a [GHG]
22 emission limit or emission reduction measure adopted by the state board pursuant to this division.” (*Id.* §

23
24
25 ⁷ CARB has denied that it must ensure additionality because it initially adopted the LCFS pursuant to its
26 authority to adopt “early action measures” in Health & Safety Code section 38560.5. But CARB’s
27 authority for early action measures only extends to those measures “in furtherance of achieving the
28 statewide [GHG] emissions limit,” which the Legislature defined as the 2020 emissions target. (Health
& Saf. Code §§ 38505(n), 38560.5(c).) Furthermore, the Legislature directed early action measures to be
in place by 2010 as an initial regulatory strategy. (*Id.* § 38560.5(d).) The Legislature has since directed
CARB to achieve the 2030 and 2045 emission reductions targets with its ongoing regulatory authority in
sections 38562 and 38570. (See *id.* § 38562(a), 38566.)

38505(k).) CARB cannot reasonably dispute that the LCFS is a market-based compliance mechanism subject to additionality.

The LCFS bears all the markings of a market-based compliance mechanism. The LCFS mandates declining annual carbon intensity benchmarks for transportation fuels. (17 CCR § 95484.) The LCFS authorizes credits for reductions by credit generators and authorizes regulated entities with fuels above the benchmarks to lower their fuels' carbon intensity by purchasing such credits. (*Id.* §§ 95483.1(a), 95485, 95486.) The LCFS creates and maintains the market for credit transactions under the rules and protocols adopted by CARB, including the LCFS Reporting Tool and Credit Bank & Transfer System. (*Id.* §§ 95483.2, 95487.) CARB also has established the price parameters of the market. The LCFS prevents excessively high credit prices through a Price Ceiling Mechanism. (*Id.* § 95487(a)(2)(D).) The LCFS amendments further strengthened CARB's control of the credit market by adopting a mechanism to prevent credit prices from falling unacceptably low from a credit oversupply condition. (*Id.* § 95484(b).) As a market-based compliance mechanism, CARB must ensure additionality as required by the GWSA. CARB exceeded its statutory authority when it adopted amendments that lack any provisions to affirmatively implement the additionality mandate. The LCFS Amendments fail to ensure that the emission reductions from the LCFS are "in addition to any [GHG] emission reduction otherwise required by law or regulation, and any other [GHG] emission reduction that otherwise would occur." (Health & Saf. Code § 38562(d)(2).)

The LCFS amendments go even further by expressly allowing non-additional credit generation from emission reductions required by law. Prior to the LCFS Amendments, section 95488.9(f)(3)(B) cut off avoided methane credit generation for factory farm biogas projects after methane reductions became required by law. (17 CCR 95488.9(f)(3)(B) [2019].) This version of section 95488.9(f)(3)(B) only allowed credits through the end of an existing, certified 10-year crediting period once reductions became required by law. (*Id.*) CARB expressly acknowledged its duty to ensure "regulatory additionality" when it adopted avoided methane crediting in 2018. (AR107962–107963.) The 2018 iteration of the LCFS thus demonstrates CARB at least understood the absurdity of continuing to approve avoided methane crediting after SB 1383 regulations take effect. (*Id.*)

1 But with the statutory deadline to implement SB 1383 manure methane regulations looming,
2 (Health & Saf. Code § 39730.7(b)(4)), CARB abandoned its prior interpretation and duty to ensure
3 additionality. The LCFS Amendments now allow factory farm biogas projects that break ground prior to
4 December 31, 2029, to evade additionality entirely. Such projects can now obtain additional ten-year
5 crediting periods and generate avoided methane credits even after CARB adopts and implements
6 regulations under SB 1383. (17 CCR § 95488.9(f)(3)(B).) This amendment to 95488.9(f)(3)(A)
7 egregiously violates the GWSA’s additionality mandate and CARB has exceeded its statutory authority
8 by ignoring it.

9 **E. CARB’s use of avoided methane crediting for factory farm biogas is arbitrary and**
10 **capricious because it double counts emission reductions.**

11 Finally, CARB’s decision to allow avoided methane crediting for factory farm biogas despite SB
12 1383’s mandate to achieve those reductions in the dairy and livestock sector is unnecessary to achieve
13 the purpose of the GWSA, is arbitrary and capricious, and not supported by substantial evidence.

14 A regulation is only valid and effective if it is “reasonably necessary to effectuate the purpose of
15 the [authorizing] statute.” (Gov. Code § 11342.2.) Whether a regulation is reasonably necessary requires
16 a Court to determine if CARB exercised its discretion “arbitrarily and capriciously, without substantial
17 evidentiary support.” (*Assc. of Irrigated Residents v. CARB* (2012) 206 Cal.App.4th 1487, 1494.) An
18 agency must demonstrate a rational connection between the “choice made[] and the purposes of the
19 enabling statute.” (*Cal. Hotel & Motel Ass’n v. Indus. Welfare Comm’n* (1979) 25 Cal.3d 200, 212.)

20 CARB’s decision to allow continued generation of LCFS credits via avoided methane crediting
21 at factory farms for decades into the future is patently counterproductive to the purpose of the GWSA.
22 CARB’s use of the powerful offset mechanism of avoided methane crediting in the LCFS purports to
23 transfer methane capture at factory farms to the transportation sector. Regulated entities in the
24 transportation sector then use those credits to claim a lower carbon intensity for their fuels and meet the
25 LCFS carbon intensity benchmark without directly lowering their own emissions. (Health & Saf. Code §
26 95488.9(f).) But the captured emissions can only be recognized on one side of a credit transaction like
27 this, and SB 1383’s mandate does not permit the transfer of dairy sector emissions reductions to the
28 transportation sector through avoided methane crediting.

1 The record is rife with interested parties explainin why CARB’s claim of achieving reductions in
2 both the dairy and transportation sector from the same exact methane capture is impermissible double
3 counting.⁸ As a former CARB staffer who led LCFS program explained:

4 “Technically, since all the emission reduction (*i.e.*, avoided methane) associated with the
5 dairy digester project is assigned to the renewable natural gas (RNG) and the RNG
6 renewable attributes (*i.e.*, LCFS credits) are sold to oil companies to offset transportation
7 sector emissions in California, the dairy industry emissions are not decreasing at all. ...
8 To claim that both dairy industry and transportation sector emissions are reduced by the
9 digester project is double counting emission reductions. Either transportation sector
emissions are being reduced (*i.e.*, avoided methane is assigned to the RNG “sold” in
California) or dairy sector emissions are being reduced (*i.e.*, avoided methane is assigned
to the milk) but not both. (AR64101.)

10 CARB defends this double counting as needed to “provid[e] credit certainty for project
11 developers for methane capture projects.” (AR43312.) But the GWSA mandates *real* and statewide
12 GHG emissions reductions. (Health & Saf. Code section 38562(d)(1).) The GWSA was not enacted to
13 ensure financial certainty for factory farm biogas project developers. CARB cannot point to any
14 substantial evidence that double counting is necessary to achieve real GHG emissions reductions.

15 Instead, CARB’s practice of claiming the same emission reduction in two entirely separate
16 sectors—the transportation and dairy sectors—is double counting that inhibits CARB’s ability to
17 achieve the GWSA’s goals and openly violates its mandate that emissions reductions be “real.” Under
18 this scheme, CARB either is failing to comply with SB 1383 or it is infusing empty credits into the
19 LCFS market, neither of which is reasonable. In response to public comments, CARB simply reiterates
20 that it believes transferring emission reductions *out of* the dairy sector via the LCFS and avoided
21 methane crediting is necessary to achieve reductions *in* the dairy sector, without further attempt to
22 explain itself. (AR43297–98 [claiming the amendment to allow avoided methane crediting despite SB
23 1383 regulations “supports California’s SB 1383 methane reduction goals”].) CARB has already been
24 doing this double counting, for example in its SB 1383 progress report where it claims to be achieving
25 reductions in the dairy sector via LCFS crediting. (AR36849.)

26
27 ⁸ See AR43206 [“Throughout this entire rulemaking and the SB 1383 proceedings, CARB staff have not
28 provided any explanation that allows such double counting. Cooking the books in the CARB inventory
is not an explanation but a cover-up.”]; AR43188 [“Stop double counting by allowing factory farm gas
projects paid for and claimed by other programs to sell LCFS credits as well.”].

1 Double counting, and the illusory climate progress that follows, is arbitrary and capricious
2 because it actively undermines the purpose of the GWSA. (*Cal. Hotel & Motel Ass’n*, 25 Cal.3d at 212;
3 *see also Citizens to Save Cal. v. Cal. Fair Political Practices Comm.* (2006) 145 Cal.App.4th 736, 754
4 [holding regulation unlawful because it hampered the electorate’s ability to influence public policies
5 under a law meant to ensure fair and equitable elections].) CARB’s decision to continue avoided
6 methane crediting has served only one function: more certainty that factory farm biogas developers will
7 continue to enjoy windfall profits from the LCFS. But the GWSA demands real climate reductions, not
8 endless profits for factory farm biogas production, especially when those profits come at the cost of
9 program integrity and disproportionate environmental and economic harm to communities in the Valley.

1 **CONCLUSION**

2 For the foregoing reasons, this Court should grant the relief requested in the petitions and
3 complaint and any other relief the Court deems just and proper.

4 Dated: September 28, 2026

**LEADERSHIP COUNSEL FOR JUSTICE
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7
8 By: 

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Central Para El Air Y Agua Limpio

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I, Olivia Faz, declare as follows: I am employed with the law offices of LEADERSHIP COUNSEL FOR JUSTICE AND ACCOUNTABILITY. My business address is 2210 San Joaquin Street, Fresno, California 93721. I am over the age of 18 years of age, and not a party to this action. My business electronic address is ofaz@leadershipcounsel.org.

**OPENING BRIEF OF DEFENSORES DEL VALLE CENTRAL PARA EL
AIRE Y AGUA LIMPIO, FOOD & WATER WATCH, ANIMAL LEGAL DEFENSE
FUND, AND CENTER FOR FOOD SAFETY IN SUPPORT OF VERIFIED
PETITION FOR WRIT OF MANDATE AND COMPLAINT**

I declare under penalty of perjury under the laws of the State of California that the above is true and correct. Executed on September 28, 2026, in Fresno, California.

OLIVIA FAZ

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