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9
10 **BEFORE THE**
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

11
12 Coalition for a Safe Environment,
Association of Irrigated Residents,
13 California Communities Against Toxics,
Society for Positive Action, and West
14 County Toxics Coalition.

15 Complainants,

16 v.
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18 California Air Resources Board,

19 Respondent.
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**COMPLAINT UNDER TITLE VI OF
THE CIVIL RIGHTS ACT OF 1964, 42
U.S.C. § 2000d and 40 C.F.R. Part 7**

I. INTRODUCTION

This is a civil rights Complaint by Coalition for a Safe Environment, Association of Irrigated Residents, California Communities Against Toxics,, Society for Positive Action, and West County Toxics Coalition under Title VI of the Civil Rights Act of 1964 and 40 C.F.R. part 7, alleging discrimination in the approval of the California Cap on Green House Gas Emissions and Market-Based Compliance Mechanisms Regulation, Including Compliance Offset Protocols ("Cap and Trade"). This Complaint is against the California Air Resources Board ("CARB"), which is the California state agency responsible for the creation and implementation of measures to meet the requirements of The Global Warming Solutions Act, also known as AB 32, and who approved the Cap and Trade regulation.

This Complaint demonstrates all four elements required to establish a *prima facie* violation of Title VI under U.S. Environmental Protection Agency ("EPA") implementing regulations: (1) CARB's action has an adverse impact; (2) that is discriminatory on the basis of race, color or national origin; (3) caused by a recipient of federal financial assistance; (4) within the statute of limitations period. CARB's discriminatory action took place on December 13, 2011 when the Office of Administrative Law approved CARB's Cap and Trade regulation and filed it with the Secretary of State.¹ This action will result in a substantial adverse effect on African American, Latino, and Asian/Pacific Islander residents throughout California because the facilities regulated under Cap and Trade are primarily located in communities of color. Populations living within six miles of industrial facilities disproportionately bear the impacts of co-pollutant emissions, such as particulate matter and toxics.² Over two-thirds of California's low-income African Americans and about 60% of low-income Latinos and Asian/Pacific Islanders live within 6 miles of a Cap and Trade

¹Gov. Code §§ 11340.5(b) and 11343.

²Manuel Pastor, et. al, *Minding the Climate Gap: What's at Stake if California's Climate Law Isn't Done Right and Right Away*, U.S.C. Program for Environmental and Regional Equity (2010), 8 available at <http://dornsife.usc.edu/pere/documents/mindingthegap.pdf> (hereinafter, *Minding the Climate Gap*). Attached as Exhibit 1.

1 facility.³ Under Cap and Trade, the residents of these communities will not receive the benefit
2 of co-pollutant emission reductions, and could even see an increase in emissions, if facilities
3 purchase allowances and offsets as Cap and Trade allows. Cap and Trade disparately and
4 adversely affects communities of color, which violates Title VI.

5 **II. THE COMPLAINANTS**

6 Complainants are various environmental justice community organizations who have
7 engaged with CARB throughout the administrative process and provided testimony before
8 CARB on the adverse and disparate impacts of Cap and Trade.

9 Coalition for a Safe Environment (“CSE”) is a non-profit environmental justice
10 community organization headquartered in Wilmington, CA. CSE has members in
11 Wilmington, San Pedro, Long Beach and Carson who live near Cap and Trade facilities.

12 Association of Irrigated Residents (“AIR”) advocates for air quality and environmental
13 health in the San Joaquin Valley. Members reside near polluting industries in Kern, Tulare,
14 Kings, Fresno, and Stanislaus counties.

15 California Communities Against Toxics (“CCAT”), a project of the Agape
16 Foundation, is a California non-profit dedicated to protecting environmental health and justice
17 in California. CCAT advocates in the public interest for clean air, clean water, and protective
18 toxic site cleanups, as well as food quality and food security for local communities. CCAT
19 distributes educational material and holds regular community trainings where residents can
20 learn about the impact of pollution on their health and well-being. CCAT appears before
21 federal, state and locals agencies to advocate for protective and just environmental policies.
22 Jane Williams, the executive director of CCAT, serves as the co-chair of the Environmental
23 Justice Advisory Committee (“EJAC”).

24 Society for Positive Action (“SPA”) is a non-profit grassroots community-based
25 environmental justice organization founded in 1999 to achieve its mission of helping
26 communities in the Los Angeles basin fight disproportionate impacts from local polluters.

27
28 ³*Id.* at 9, Figure 2.

1 Society for Positive Action is led by and serves low-income communities in Los Angeles who
2 would be significantly impacted by Cap and Trade.

3 West County Toxics Coalition ("WCTC") is a California non-profit, multi-racial
4 membership organization founded in 1986 to empower low and moderate-income residents to
5 exercise greater control over environmental problems that impact their quality of life in
6 Contra Costa County, particularly West Contra Costa County, in Northern California.

7 **III. TIMELINESS OF COMPLAINT**

8 A complaint must be filed within 180 days of the discriminatory act.⁴ CARB approved
9 the final Cap and Trade regulation on October 20, 2011 and filed it with the Office of
10 Administrative Law (OAL) on October 27, 2011 for approval.⁵ Cap and Trade did not
11 become final until OAL approved the regulation and filed it with the Secretary of State on
12 December 13, 2011.⁶ This Complaint is thus timely filed.

13 **IV. FINANCIAL ASSISTANCE**

14 CARB must comply with EPA's Title VI implementing regulations because the Board
15 receives substantial federal financial assistance from the EPA through grants.⁷ EPA gave
16 CARB \$7,053,811 in grant awards in fiscal year 2011 and \$3,454,141 in grant awards to date
17 in fiscal year 2012.⁸

18 **V. STATEMENT OF FACTS**

19 **A. The Global Warming Solutions Act, AB 32.**

20 In 2006, the California Legislature enacted AB 32, the Global Warming Solutions Act.
21 This landmark legislation requires the state to reduce greenhouse gas emissions to the
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24 ⁴40 C.F.R. § 7.120(b)(2).

25 ⁵Resolution No. 11-32, CARB, Regular Board Meeting, October 20, 2011.

26 ⁶See CARB website: <http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm>;
27 *see also* Gov. Code § 11340.5(b).

28 ⁷40 C.F.R. § 7.15.

⁸See USAspending.gov (last accessed 5/24/12). Attached as Exhibit 2; *see also* 40 C.F.R. §
7.15.

1 statewide limit of 1990 levels by 2020 and designates CARB as the lead state agency.⁹ AB 32
2 specifically recognizes that certain “regions of the state . . . have the most significant exposure
3 to air pollutants, including but not limited to, communities with minority populations,
4 communities with low-income populations or both.”¹⁰ Recognizing this, AB 32 seeks to
5 protect California’s vulnerable and over-exposed communities from carbon emissions and
6 other pollutants that accompany carbon, known as co-pollutants.¹¹ To assist with the goal of
7 protecting over-burdened communities, the legislature created the Environmental Justice
8 Advisory Committee (“EJAC”).¹² EJAC members represent the communities in California
9 most impacted by air pollution and represent a broad cross-section of California’s
10 environmental justice movement. EJAC did not recommend Cap and Trade and urged CARB
11 to consider localized impacts of its plan.¹³

12 **B. CARB’s Single-Minded March Toward Cap and Trade.**

13 Although AB 32 does not require or recommend a market system, CARB created and
14 adopted Cap and Trade as the strategy to regulate greenhouse gas emissions from industrial
15 sources, which account for approximately 20% of California’s total greenhouse gas emissions.
16 Under Cap and Trade, an overall greenhouse gas emission limit is set (the cap) and facilities
17 subject to the cap are able to trade permits (allowances) to emit greenhouse gases.¹⁴ CARB
18

19 ⁹Health & Safety Code § 38510; *see also* §§ 38501(f) - (h), 38505(n), and 38550.

20 ¹⁰*Id.* at § 38501(h).

21 ¹¹*Id.* at §§ 38562(b)(4) (“ensure that activities undertaken pursuant to the regulations
22 complement, and do not interfere with, efforts to achieve and maintain federal and state
23 ambient air quality and to reduce toxic air contaminant emissions.”), 38562(b)(1)-(9) and
38570(b)(1)-(3) (requires CARB to evaluate the potential for localized effects before
implementing a market-based compliance mechanism).

24 ¹²*Id.* at § 38591(a).

25 ¹³*See Recommendations and Comments of the Environmental Justice Advisory Committee on
the Implementation of the Global Warming Solutions Act of 2006 (AB32) on the Proposed
Scoping Plan*, Letter to Chairman Nichols and Mr. Goldstone, Environmental Justice
26 Advisory Committee (Dec. 2008) available at
27 <http://www.arb.ca.gov/cc/ejac/proposedplan-ejaccommentsfinaldec10.pdf>.

28 ¹⁴*See* Cal. Code Regs. tit. 17 § 95801 *et seq.*; Refineries, cement production facilities, oil and
gas production facilities, glass manufacturing, and food processing plants that emit at least

1 plans to give away allowances for free to Cap and Trade facilities.¹⁵ Cap and Trade facilities
2 are also able to purchase additional allowances at an auction or from one another.¹⁶ The
3 system also allows Cap and Trade facilities to purchase offsets to meet their emission limits.
4 An offset is the reduction of greenhouse gas from an activity or facility that is not regulated
5 under Cap and Trade. For example, a refinery in Wilmington, California could buy offset
6 credits from trees planted in Idaho instead of making actual reductions at the facility. Buying
7 allowances and offsets deprives communities of co-pollutant emission reductions that come
8 with reducing greenhouse gases on-site.

9 CARB first proposed Cap and Trade in the Scoping Plan.¹⁷ During the process of
10 preparing the Scoping Plan, EJAC advised against a cap and trade system for various efficacy
11 and justice reasons.¹⁸ During the public comment period, the Complainants, along with EJAC
12 and others, commented on the Scoping Plan and asked CARB to reject Cap and Trade scheme
13 because of the effect on low-income communities and communities of color.¹⁹ Ignoring these
14 comments, on December 12, 2008, CARB adopted the Scoping Plan, which included Cap and
15 Trade as the State's main strategy.

16 The Complainants, along with others, brought an action against CARB alleging that
17 the Scoping Plan violated AB 32 and the California Environmental Quality Act ("CEQA").²⁰
18 The Superior Court held that CARB violated CEQA when it (1) failed to meaningfully

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20 25,000 metric tones of carbon dioxide per year, electricity generation facilities, natural gas,
21 propane and transportation fuel providers are covered under Cap and Trade regulation. *See Id.*
22 at § 95811(a)-(b) (covered entities), § 95812(c)(1) (defining the "applicability threshold").
The facilities that are covered under Cap and Trade will be hereafter referred to as "Cap and
Trade facilities."

23 ¹⁵*Id.* at Subarticle 8 §§95870 *et seq.*

24 ¹⁶*Id.* at Subarticle 11 §§ 95870 *et seq.*

25 ¹⁷AB32 required CARB to prepare a Scoping Plan to outline the actions it would take to
achieve reductions in greenhouse gas emissions. Health & Safety Code § 38561.

26 ¹⁸*See* Recommendations on DRAFT AB 32 Scoping Plan (October 1, 2008) available at
http://www.arb.ca.gov/cc/ejac/ejac_comments_final.pdf.

27 ¹⁹*See* EJAC Comment Letter, *supra* note 13; Public comments submitted to CARB can be
found at <http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>.

28 ²⁰*AIR, et al. v. CARB, et al.*, Case No. CPF-09-509562 (June 10, 2009).

1 consider alternatives to Cap and Trade when adopting the Scoping Plan; and (2) began
2 implementing the Scoping Plan before it had responded to comments or finalized its
3 approval.²¹ The court ordered CARB to perform a new Alternatives Analysis and enjoined
4 CARB from further work on Cap and Trade until the analysis had been completed.²² CARB
5 vehemently opposed the court's decision and convinced the Court of Appeal to stay the
6 injunction, claiming that harm to the environment would be irreparable unless CARB could
7 implement Cap and Trade starting on January 1, 2012.²³ Five days after receiving the stay,
8 CARB Chairman Mary Nichols announced that CARB would defer implementation to
9 January 1, 2013.²⁴ CARB then continued to develop Cap and Trade, while it simultaneously
10 reviewed alternatives. On August 24, 2011, CARB presented a "revised" alternatives analysis
11 to the public. Not surprisingly, the analysis of alternatives was insufficient and disingenuous
12 because CARB never stopped its march towards Cap and Trade. Again, Complainants and
13 others urged CARB not to adopt a plan that included Cap and Trade because of the
14 inequalities in the program.²⁵ CARB ignored the public comments and voted to re-approve
15 the same Scoping Plan, with Cap and Trade included.²⁶

16 The Superior Court denied the Petition for Writ of Mandate with respect to the AB 32
17 causes of action, which alleged that the Scoping Plan violated Health & Safety Code § 38561
18 because the Plan did not recommend measures to meet AB 32's maximum technologically
19 feasible and cost-effective standard, and failed to evaluate the total costs and benefits of the
20 Plan on public health, including the effects of Cap and Trade on communities near Cap and
21 Trade facilities. That appeal is pending in the California First District Court of Appeals.

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24 ²¹*Id.*, Judgement (May 20, 2011).

25 ²²*Id.*

26 ²³CARB v. AIR, *et al.*, California Court of Appeal, 1st District, Case No. A132165.

27 ²⁴Margot Roosevelt, *California delays its carbon trading program until 2013*, LA Times
(June 30, 2011), available at

28 <http://www.latimes.com/news/local/la-me-cap-trade-20110630,0,2108482.story>.

²⁵Public comments, *supra* note 19.

²⁶Resolution No. 11-27, CARB, Regular Board Meeting, August 24, 2011.

1 On December 16, 2010, CARB had a public hearing on its proposed Cap and Trade
2 regulation. At this hearing, Complainants informed the Board that Cap and Trade would
3 violate Title VI and urged the Board not to go forward with the regulation.²⁷ Despite the
4 numerous comments on the burdens of Cap and Trade on communities of color, the Board
5 voted to adopt the Cap and Trade program.²⁸ From the outset, CARB has promoted a Cap and
6 Trade system and has refused to genuinely review, in good faith, alternatives or take seriously
7 Complainants' Title VI claims of disparate and adverse impacts on communities of color in
8 California.

9 VI. ARGUMENT

10 Title VI of the Civil Rights Act of 1964 provides:

11 No person in the United States shall, on the ground of race, color, or national origin,
12 be excluded from participation in, be denied the benefits of, or be subjected to
discrimination under any program or activity receiving federal financial assistance.²⁹

13 CARB, a recipient of federal financial assistance from EPA, has violated Title VI by its
14 decision to approve Cap and Trade.³⁰ EPA's implementing regulations prohibit recipients
15 from making decisions which have the *effect* of subjecting individuals to discrimination
16 because of their race, color or national origin.³¹ CARB's duty to comply with Title VI is not
17 limited to only those programs that are funded by EPA. "Program or activity" is defined as
18 "all the operations of" a department, agency, special purpose district or other instrumentality
19

20 ²⁷See CARB December 16, 2010 Hearing Transcript, 319-320 (Comments of Brent Newell),
21 322-324 (Comments of Caroline Farrell), *available at*
22 <http://www.arb.ca.gov/board/mt/2010/mt121610.pdf>. Relevant part attached as Exhibit 3; *See*
23 *also* CRPE Letter Re: Comments on Greenhouse Gas Cap and Trade Regulation, December
14, 2010. Attached as Exhibit 4.

24 ²⁸Resolution No. 10-42, CARB Regular Board Meeting, December 16, 2010. The regulation
25 was modified in July 2011 and September 2011. CARB approved the final version on
26 October 26, 2011 (Resolution No. 11-32); *See* CRPE Letter Re: Comments on 15-Day
Modifications to Greenhouse Gas Cap and Trade Regulation, August 11, 2011. Attached as
Exhibit 5.

27 ²⁹Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d.

28 ³⁰EPA's regulations can be found at 40 C.F.R. Part 7.

³¹40 C.F.R. §§ 7.35(b) - (c).

1 of a State or of a local government.³² CARB is a program or activity under the Act and thus,
2 all its decisions must comply with the requirements of Title VI.

3 CARB's decision to approve Cap and Trade violates its statutory and regulatory duties
4 under Title VI. CARB's action has the potential to exacerbate existing adverse environmental
5 impacts in communities of color throughout California and creates a substantial adverse effect
6 on these communities. The offsets and allowance trading in Cap and Trade denies
7 communities sited around Cap and Trade facilities the benefit of co-pollutant emissions
8 reductions and, in some instances, could cause an increase in emissions. As discussed in
9 Section B, *infra*, the impact of Cap and Trade will fall disproportionately on communities of
10 color located around these facilities in violation of Title VI.

11 **A. The Cap and Trade Regulation Will Have Significant Adverse Health Impacts.**

12 In determining adverse impacts for the *Angelita C.* Title VI complaint,³³ OCR
13 considered exposure levels and stated that the nature and severity of the potential health
14 effects, the frequency of occurrence, and the estimated numbers of persons potentially affected
15 could also be factors in finding an adverse impact.³⁴ The *Investigative Report* looked to the
16 Clean Water Act enforcement guidance to support the criteria that an exceedance of a

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18 ³²42 U.S.C. § 2000d-4a

19 ³³This preliminary finding, with its supportive investigative documents, represents the sole
20 authority on the application of the Title VI methodologies provided in EPA's Draft Guidelines
21 at this time. Accordingly, we adhere to *Angelita C.* to support our findings of adverse and
22 disparate impact demonstrated in this Complaint. See *Preliminary Finding*, Title VI
23 Complaint 16R-99-R9, U.S. EPA Office of Civil Rights, Apr. 22, 2011; *Investigative Report*
24 *for Title VI Administrative Complaint File No. 16R-99-R9*, U.S. EPA Office of Civil Rights,
25 Aug. 25, 2011 (hereinafter, *Investigative Report*); see also *Draft Title VI Guidance for EPA*
26 *Assistance Recipients Administering Environmental Permitting Programs (Draft*
27 *Administration Guidance) and Draft Revised Guidance for Investigating Title VI*
28 *Administrative Complaints Challenging Permits (Draft Investigation Guidance)*, 65 Fed. Reg.
39649, 39679-39680 (June 27, 2000). This draft guidance was the last document published by
EPA through what EPA termed a "robust stakeholder involvement process." As it represents
the last official Title VI policy guidance provided by EPA, even though EPA never responded
to public comments, we follow its suggested methodology in this Complaint. See, *Policies*
and Guideline, EPA Office of Civil Rights, <http://www.epa.gov/ocr/polguid.htm>.

³⁴*Investigative Report* at 16-17 referring to *Draft Investigation Guidance*, *supra* note 33.

1 concentration threshold are generally recognized as adverse under Title VI.³⁵ EPA CWA

2 enforcement guidance states:

3 An imminent harm or endangerment must only pose a *reasonable cause for*
4 *concern for the public health* or welfare in order to constitute an “imminent
5 and substantial endangerment” [T]he word “substantial” does not require
6 quantification of the endangerment (e.g., proof that a certain number of persons
7 will be exposed, that “excess deaths” will occur, or that a water supply will be
8 contaminated to a specific degree). Instead, the decisional precedent
9 demonstrates that an endangerment is substantial if there is reasonable cause
10 for concern that someone or something may be exposed to a risk of harm by a
11 release or a *threatened release* of a hazardous substance if remedial action is
12 not taken, keeping in mind that protection of the public health, welfare and the
13 environment is of primary importance. A number of factors (e.g., the quantities
14 of hazardous substances involved, the nature and degree of their hazards, or the
15 potential for human or environmental exposure) may be considered in
16 determining whether there is reasonable cause for concern, but in any given
17 case, one or two factors may be so predominant as to be determinative of the
18 issue.³⁶

11 The offsets and allowance trading allowed by Cap and Trade pose a reasonable cause for
12 concern that 15,492,631 people, or 45.9% of the population of California residents, that live
13 within a 6 mile radius of Cap and Trade facilities, may be exposed to a continued or increased
14 level of harmful co-pollutant emissions.³⁷ As described below, co-pollutants emitted from
15 Cap and Trade facilities cause significant health effects for the surrounding population. The
16 exposure levels, nature and severity of the potential health effects, and the estimated number
17 of people affected by Cap and Trade facilities’ co-pollutants demonstrates a significant
18 adverse impact. In addition, EPA must consider the significant adverse impacts of Cap and
19 Trade in the context of existing environmental injustice and social inequality. This
20 cumulative adverse impact of Cap and Trade, in addition to other adverse effects born by
21 communities living near Cap and Trade facilities, further demonstrates the significant adverse
22 impact of Cap and Trade.

26 ³⁵*Id.* at 26.

27 ³⁶*Id.* at 26-27 citing EPA, *Guidance on Use of Section 504, the Emergency Powers Provision*
28 *of the Clean Water Act, 1993* (internal citations omitted) (emphasis added).

28 ³⁷*Minding the Climate Gap* at 10, Table 1.

1 **1. Co-pollutants cause severe health impacts to surrounding communities.**

2 Industrial sources account for roughly 20 percent of the total global warming pollution
3 emitted in California.³⁸ Facilities such as power plants, cement plants, petroleum refineries
4 and bio-fuel facilities also emit significant quantities of co-pollutants. The co-pollutants
5 include, but are not limited to, criteria air pollutants³⁹ such as particulate matter (PM10 and
6 PM2.5) and ground level ozone (smog) precursors, such as nitrogen oxides (NOx) and volatile
7 organic compounds (VOC)⁴⁰, and toxic air contaminants (or hazardous air pollutants).⁴¹ The
8 residents of the communities surrounding these facilities are the most severely impacted by
9 the health effects of the co-pollutant emissions.

10 The criteria co-pollutants cause severe public health effects, such as asthma, cardio
11 pulmonary illnesses, and premature death. Ozone pollution can lead to inflammation and
12 irritation of the tissues lining the airways, which can cause spasms and contractions, reducing
13 the amount of air that can be inhaled. Ozone in sufficient doses can also increase the
14 permeability of lung cells, making them more susceptible to damage from environmental
15 toxins and infection. Exposure to particulate matter (“PM”) aggravates a number of
16 respiratory illnesses, decreases lung function and contributes to cardio pulmonary illnesses,
17 such as heart attacks and strokes, and may even cause premature death in people with existing
18 heart and lung disease. Both long term and short term PM exposure can have adverse health
19 impacts. Particulate matter less than 2.5 microns in diameter (PM2.5) poses an increased risk
20 because it can deposit deep within lungs and contains substances that are particularly harmful

22 ³⁸Diane Bailey, *et al.*, *Improving Air Quality and Health by Reducing Global Warming*
23 *Pollution in California*, June 2008, available at
24 <http://www.nrdc.org/globalWarming/boosting/contents.asp>, 10.

25 ³⁹Criteria air pollutants are pollutants for which a health based National Ambient Air Quality
Standard (NAAQS) has been set by the U.S. EPA.

26 ⁴⁰Many VOCs, such as benzene and methanol, are both VOCs and toxic compounds.

27 ⁴¹Toxic air contaminants are pollutants identified by CARB which pose adverse health effects
at extremely low levels. *See* Health and Safety Code § 39650 *et seq.* Hazardous air pollutants
28 are listed in section 112(b) of the Federal Clean Air Act, 42 U.S.C. § 7412(b), and emission
standards are set by U.S. EPA or by permitting authorities on a case-by-case basis.

1 to human health. Ozone and PM exposure are associated with increases in hospital
2 admissions and emergency room visits, premature death, and increases school and work
3 absenteeism. The elderly, children, adolescents, and adults who exercise or work outdoors are
4 most susceptible to adverse impacts from exposure.⁴²

5 California cities and counties consistently rank highest in exposure to short and long
6 term PM2.5 exposure and ozone exposure.⁴³ The top five most polluted U.S. cities for long
7 term and short term PM2.5 pollution are in California, almost exclusively in the San Joaquin
8 Valley.⁴⁴ California also holds the top five spots for most polluted counties with regard to
9 short term PM2.5 pollution, and seven of the top 10 counties for long term pollution.⁴⁵ The
10 same holds true for ozone pollution: 9 of the top 10 cities are in California and the top 10
11 counties are all in California.⁴⁶

12 Exposure to these criteria co-pollutants exceed the NAAQS in many California air
13 basins where Cap and Trade facilities are located.⁴⁷ The San Joaquin Valley and South Coast
14 Air Basin failed to attain the 1-hour ozone standard and are extreme non-attainment areas for
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18 ⁴²See EJAC comment letter, *supra* note 13, at 9 (reiterating that “Particulate Matter [] is a
19 co-pollutant of every fossil-fuel combustion process. Particulate matter not only contributes
20 to climate change, it also causes staggeringly high rates of illness and death in communities of
21 color and low income communities around the state.”); *Facts about Particulate Matter
22 Mortality: New Data Revealing Greater Dangers from PM2.5*, CARB (2008) available at
23 http://www.arb.ca.gov/research/health/pm-mort/pm-mort_fs.pdf (stating that “ARB staff
24 examined numerous studies from around the world and confirmed that even at very low levels
25 of exposure, there exists a strong link between PM2.5 air pollution and many adverse health
26 effects,” including “premature deaths, primarily from heart attacks, strokes, and other
27 cardiovascular causes.”); American Lung Association, *State of the Air 2012* available at
28 <http://www.stateoftheair.org/2012/assets/state-of-the-air2012.pdf>.

⁴³See *State of the Air 2012* at 14-18.

⁴⁴*Id.* at 14-15.

⁴⁵*Id.* at 17-18.

⁴⁶*Id.* at 14, 17.

⁴⁷See *Currently Designated Nonattainment Areas for All Criteria Pollutants* available at
<http://www.epa.gov/oaqps001/greenbk/ancl.html> (last accessed 6/5/12).

1 the 1997 8-hour ozone standard.⁴⁸ The Bay Area Air Quality Management District is in
2 marginal nonattainment for the 1997 8-hour ozone standard.⁴⁹ The San Joaquin Valley, South
3 Coast, and Bay Area Air Quality Management District are in non attainment for the short and
4 long term 1997 and 2006 PM2.5 NAAQS, and the South Coast is in serious non-attainment
5 for PM10.⁵⁰

6 Toxic air contaminants and hazardous air pollutants are co-pollutants emitted by Cap
7 and Trade facilities that also cause serious health effects. According to CARB, health effects
8 from toxic air contaminants “may occur at extremely low levels and it is typically difficult to
9 identify levels of exposure which do not produce adverse health effects.”⁵¹ Hazardous air
10 pollutants (or air toxics) are known or suspected of causing cancer, developmental effects, or
11 birth defects. Examples of toxic co-pollutants emitted from Cap and Trade facilities include,
12 but are not limited to ammonia, arsenic, benzene, formaldehyde, hexavalent chromium, and
13 lead.

14 **2. Offsets and trading maintain or increase co-pollutant emissions in**
15 **surrounding communities.**

16 Reducing greenhouse gas emissions on-site has the added benefit of reducing co-
17 pollutant emissions. These direct reductions would have particularly important health impacts
18 to communities that surround Cap and Trade facilities. As an example, the ExxonMobil
19 refinery in Torrance, CA emits 352.2 tons of asthma and cancer causing particulate matter
20 each year and nearly 800,000 people live within six miles.⁵² Reducing the greenhouse gas
21 emissions at the Torrance facility would reduce the PM emission as well. However, Cap and
22

23 ⁴⁸76 Fed. Reg. 82133 (Dec. 30, 2011) (1-hour failure to attain); 76 Fed. Reg. 57846, 57847
24 (September 16, 2011) (San Joaquin 8-hour); 76 Fed. Reg. 57872, 57873 (September 16, 2011)
(South Coast 8-hour).

25 ⁴⁹*Supra* note 47.

26 ⁵⁰76 Fed. Reg. 69896 (Nov. 9, 2011) (San Joaquin Valley); 75 Fed. Reg. 71294, 71295
(November 22, 2010) (South Coast); *supra* note 47.

27 ⁵¹ARB Glossary of Air Pollution Terms, definition of Toxic Air Contaminant (TAC),
available at <http://www.arb.ca.gov/html/gloss.htm#caaqs>.

28 ⁵²*Minding the Climate Gap* at 1.

1 Trade allows polluting entities to either reduce their greenhouse gas emissions on-site or
2 continue to pollute and buy allowances from another Cap and Trade facility or offsets from an
3 unregulated entity.⁵³ While supposedly all of these options will decrease California's overall
4 greenhouse gas emissions, only one will decrease the co-pollutant emissions for the
5 surrounding communities: reducing emissions at the source. Under Cap and Trade, if a
6 facility chooses to buy allowances or offsets, they do not need to reduce their own emissions
7 on-site. Therefore, the surrounding communities will not see any decrease in co-pollutants.
8 Moreover, should a Cap and Trade facility expand its capacity or otherwise increase
9 emissions, that facility may also buy allowances or offsets to comply with the cap. In this
10 case, nearby communities would see an increase in co-pollutant emissions. Given the
11 exceedances of the health based standards for criteria co-pollutants and the health effects of
12 toxic co-pollutants described above, Cap and Trade inflicts a significant adverse impact.

13 **3. The Clean Air Act does not protect communities from co-pollutant**
14 **emissions.**

15 Comments regarding the harms posed by co-pollutants have been brought before
16 CARB throughout the creation and implementation of Cap and Trade. Often CARB has
17 responded that AB32 is about greenhouse gas reductions and that the Clean Air Act protects
18 communities from co-pollutants. This simply is not true. First, AB32 specifically directs
19 CARB to "consider the potential for direct, indirect, and cumulative emission impacts from
20 [market-based compliance mechanisms], including localized impacts in communities that are
21 already adversely impacted by air pollution" and to "design any market-based compliance
22 mechanism to prevent any increase in the emissions of toxic air contaminants or criteria air
23 pollutants."⁵⁴ Second, the Clean Air Act does not protect communities from co-pollutant
24 impacts. CARB cannot rely on the Clean Air Act as a backstop to prevent increased co-
25 pollutant impacts when new or modified major stationary sources (which are also Cap and
26

27 ⁵³Cal. Code Regs. tit. 17 §§ 95870 *et seq.*

28 ⁵⁴Health and Safety Code §§ 38570(b)(1)-(2).

1 Trade facilities) increase hazardous air pollutant or criteria pollutant emissions in a
2 community. EPA has access to numerous permits throughout the San Joaquin, South Coast
3 and Bay Area air basins that will demonstrate the Clean Air Act's inability to protect local
4 communities from co-pollutant emissions.⁵⁵ Hazardous air pollutant regulations (Section 112)
5 and New Source Review (as codified in Part D of Title I of the Clean Air Act) allow increases
6 in emissions. Those sections do not require zero emissions but, rather, impose technology
7 based emissions limits.⁵⁶ Section 112 allows any emissions beyond MACT. Moreover, under
8 New Source Review, a major stationary source purchases offsets to mitigate the pollution not
9 reduced by BACT (or LAER) under an almost identical scheme as Cap and Trade: the major
10 source buys offsets from another source in the air basin and the local community gets stuck
11 with the increase in criteria pollutant emissions.⁵⁷ The California Clean Air Act likewise does
12 not require zero emissions of toxic or criteria pollutant emissions for new or modified
13 stationary sources. Therefore, if a new source or expanding source increases pollution in a
14 community, Cap and Trade allows it, and the Clean Air Act only requires emissions controlled
15 to the extent technologically feasible. CARB had the opportunity to reduce greenhouse gases
16 and harmful co-pollutant emissions for communities living near Cap and Trade facilities, but
17 Cap and Trade does not capitalize on that opportunity to the detriment of those communities.

19 ⁵⁵Two examples are the Avenal Power Center in the San Joaquin Valley and the Ultramar
20 Wilmington Refinery in the South Coast. In Avenal, even after controls, the approved project
21 will emit 12 tons per year of toxics. *See* Notice of Final Determination of Compliance,
22 Project Number: C-1100751 - Avenal Power Center, LLC (08-AFC-01), 60 (December 17,
23 2010), relevant portions attached as Exhibit 6. In Wilmington, the refinery will have
24 significant air impacts and hazardous air pollution emissions but it will comply with existing
25 air quality regulations. *See* Notice of Preparation of Draft Environmental Impact Report,
Ultramar, Inc. Wilmington Refinery Proposed Cogeneration Project, 2-8, 2-27 (March 30,
2012), *available at* <http://aqmd.gov/ceqa/nonaqmd.html>. Relevant portions attached as
Exhibit 7.

26 ⁵⁶42 U.S.C. §§ 7412(d) (Maximum Achievable Control Technology (MACT)) and 7503(d)
(Best Available Control Technology (BACT) or Lowest Achievable Emissions Rate (LAER)).

27 ⁵⁷*See, e.g.* San Joaquin Valley Air Pollution Control District Rule 2201, South Coast Air
28 Quality Management District Regulation XIII; *see also* 42 U.S.C. §§ 7503(c) and 7511a;
Avenal Permit, *supra* note 55, at 38-48 (offsets required for NO_x, VOC, and PM₁₀).

1 **4. Cap and Trade exacerbates the cumulative environmental and social**
2 **inequality in communities living near Cap and Trade facilities.**

3 Cap and Trade does not exist in theoretical isolation, but rather adds additional impacts
4 to communities already suffering existing environmental and social inequalities which
5 cumulatively affect the health and well-being of people of color. This cumulative burden is
6 thus further exacerbated by Cap and Trade's deprivation of potential co-pollutant reductions
7 and localized increases in co-pollutants. Given the factors articulated in *Angelita C.* and the
8 *Investigative Guidance*, cumulative impacts are relevant to whether Cap and Trade is a
9 significant adverse impact.⁵⁸ These cumulative impacts include, but are not limited to,
10 localized and regional toxic and conventional air pollution, exposure to additional toxins in
11 food and water, and social inequalities that exacerbate public health outcomes, such as
12 unequal access to healthy food (food deserts) and unequal access to health care that plague
13 low-income communities of color such as those near Cap and Trade facilities. Such
14 cumulative health and social vulnerabilities in the San Joaquin Valley and South Coast Air
15 Basin have been exceptionally well documented in the scientific literature and further
16 establish the significant adverse impact of Cap and Trade.⁵⁹

17 **B. The Cap and Trade Regulation Disproportionately Impacts People of Color in**
18 **California.**

19 The EPA *Draft Revised Guidance for Investigating Title VI Administrative Complaints*
20 *Challenging Permits (Investigative Guidance)* provides five steps for determining disparate
21 impact.⁶⁰ These steps include 1) identifying the affected population, 2) identifying the
22 comparison population, 3) characterizing the demographics of the affected population, 4)
23

24 ⁵⁸See *Draft Investigation Guidance*, 65 Fed. Reg. at 39678.

25 ⁵⁹See James L. Sadd, *et al.*, *Playing it Safe: Assessing Cumulative Impact and Social*
26 *Vulnerability through an Environmental Justice Screening Method in the South Coast Air*
27 *Basin, California*, Int. J. Environ. Res. Public Health, 8, 1441-1459 (2011); Jonathan London,
et al., *Land of Risk, Land of Opportunity: Cumulative Environmental Vulnerabilities in*
28 *California's San Joaquin Valley*, UC Davis Center for Regional Change, 12 (Nov. 2011).

⁶⁰*Draft Investigation Guidance*, 65 Fed. Reg. at 39681-39682.

1 conducting a disparate impact analysis, and 5) determining the significance of this disparity.
2 EPA employed this procedure to support its preliminary finding of disparate impact for
3 *Angelita C.*⁶¹

4 These five steps, as addressed below, demonstrate that people of color in California
5 face a significant disparate impact from co-pollutant emissions from Cap and Trade facilities
6 compared to the state's non-Hispanic white population. Furthermore, the pattern of disparate
7 impact holds across all major racial and ethnic subpopulations in California. While this
8 disparity is greatest among the African-American population, it is also significant for the
9 state's Latino and Asian/Pacific Islander populations, as well as for recent immigrants. In
10 implementing Cap and Trade, CARB will entrench these significant disparities in clear
11 violation of Title VI.

12 **1. The affected population is residents of California living within six miles of**
13 **a Cap and Trade facility.**

14 For the purposes of this Complaint, we contend that "affected population"⁶² is
15 residents of California living within 6 miles of a Cap and Trade facility known to emit large
16 quantities of both carbon dioxide and co-pollutants. A total of 15,492,631 people, or 45.9% of
17 the population of California, live within six miles of such a facility.⁶³ For the purpose of this
18 Complaint, we use a six-mile radius as a threshold and indicator of those at greatest risk of
19 co-pollutant exposure from Cap and Trade facilities. The California Energy Commission
20

21 ⁶¹See *Preliminary Finding*, *supra* note 33; Jonathan Cohen & Arlene Rosenbaum, *Exposure*
22 *Assessment and Disparity Analysis for Administrative Complaint 16R-99-R9*, 25-51, Apr. 21,
23 2011 (Hereinafter, *Disparity Analysis*) (utilizing the following steps in its "approach to
24 disparity analysis": "identification of affected and comparison populations," "comparison of
25 demographic characteristics of affected versus comparison population," "disparity assessment
26 results"); *Investigative Report* (employing these steps to arrive at its finding of significant
27 disparity).

26 ⁶²*Disparity Analysis* at 26 (explaining that "OCR defines the *affected population* as the
27 population with a predicted exposure of interest from the environmental stressors at issue.");
28 *Draft Investigation Guidance* at 39681.

⁶³Unless otherwise specified, data and statistics discussed in this section are drawn from
Minding the Climate Gap, *supra* note 2.

1 similarly utilizes a six-mile distance to determine whether environmental justice communities
2 are located nearby proposed power plants.⁶⁴

3 The size of the affected population underscores both the importance of this issue and
4 the significance of the disparate impact findings, discussed below. The fact that the affected
5 population is composed of nearly half of the total population of California minimizes the
6 chance that the disparities illustrated below are due to chance.

7 California hosts over 150 Cap and Trade facilities intensively emitting greenhouse
8 gases, including petroleum refineries, cement plants, and power plants.⁶⁵ As they emit
9 greenhouse gases, each of these facilities releases differing amounts of toxic and criteria
10 co-pollutants, with significant adverse health effects discussed in Section IV.A, *supra*.
11 Furthermore, many communities within the affected group are burdened by exposures from
12 more than one polluting facility.

13 To account for aggregate exposures, *Minding the Climate Gap* assessed the relative
14 burden of co-pollutant emissions born by the affected population. This assessment revealed
15 that 6.9% of Californians (2,317,884 people) experience the highest level of co-pollutant
16 emissions within the 6-mile reference area, 32.4% (10,940,640 people) of the population of
17 California experience a middle range of emissions, and 6.6% (2,234,107 people) experience
18 relatively low emissions compared to these previous two groups.

19 Though power plants are the most numerous among these facilities, they average a
20 much lower level of co-pollutant emissions than petroleum refineries and cement plants.
21 Cement plants are particularly dirty in terms of their co-pollutant emissions: only 13 plants
22 account for 4,513 tons of PM10 emitted per year. In addition, 25 refineries spew a further
23

24 ⁶⁴*Id.* at 8.

25 ⁶⁵Data on greenhouse gas and co-pollutant emissions is drawn from the 2006 CARB
26 Emissions Inventory and CARB's 2008 annual release under California's mandatory GHG
27 Reporting Program. *Minding the Climate Gap* at 5. Demographic and socioeconomic data is
28 taken from the 2000 U.S. Census, using the demographically and economically homogenous
census block groups as the unit of analysis. *Id.* at 5, 7. EPA recommends the use of census
blocks groups in conducting disparity assessments. *Draft Investigation Guidance* at 39681.

1 2,995 tons of PM10 while 108 power plants emit an additional 2,395 tons. Along with PM10,
2 each of these facilities emit similar levels of the particularly potent PM2.5, as well as sulfuric
3 acid, nitrous oxides, and toxic pollutants.⁶⁶ This heavy total load of pollutants, generating
4 immediate and severe localized health impacts, is predominantly born by the affected
5 population within a 6-mile radius of these facilities.

6 **2. The comparison population is the population of California residing**
7 **outside of the six mile range of a Cap and Trade facility.**

8 EPA defines the comparison population for a disparity analysis as “the population
9 selected for comparison with the affected population.”⁶⁷ The OCR uses the comparison
10 population in Title VI investigations “to evaluate whether there is a significant difference
11 between [comparison and affected populations] with respect to demographic characteristics or
12 degree of impact.”⁶⁸ According to OCR’s disparate impact analysis in *Angelita C.*, the
13 comparison population should represent a “group of people that could have been equally likely
14 to be affected if the recipient’s actions had resulted in alternative location.”⁶⁹ If possible, the
15 comparison population should not overlap with the affected population in order to create two
16 “statistically independent” groups for disparity analysis.⁷⁰

17 In this Complaint, we contend that the comparison population is the total population of
18 California residing outside of the six mile zone of impact of the facilities subject to Cap and
19 Trade. Exposure to co-pollutants diminishes substantially beyond the six mile range of a
20 facility.⁷¹ Though emissions dispersion patterns may extend exposures to some degree beyond
21

22 ⁶⁶*See Minding the Climate Gap* at 1. For CARB’s inventory of co-pollutant emissions from
23 major stationary sources, including CO, PM10, PM2.5, NOx, and SOx, see *2008 Estimated*
24 *Annual Average Emissions: Stationary Sources*, CARB,
25 [http://www.arb.ca.gov/app/emsmv/emssumcat_query.php?F_YR=2008&F_DIV=-](http://www.arb.ca.gov/app/emsmv/emssumcat_query.php?F_YR=2008&F_DIV=-4&F_SEASON=A&SP=2009&F_AREA=CA#stationary)
26 [4&F_SEASON=A&SP=2009&F_AREA=CA#stationary](http://www.arb.ca.gov/app/emsmv/emssumcat_query.php?F_YR=2008&F_DIV=-4&F_SEASON=A&SP=2009&F_AREA=CA#stationary).

26 ⁶⁷*Disparity Analysis* at 29.

26 ⁶⁸*Id.*

27 ⁶⁹*Id.*

27 ⁷⁰*Id.*

28 ⁷¹*Minding the Climate Gap* at 16.

1 this range, we follow *Minding the Climate Gap* and the California Energy Commission in
2 assuming, for the purposes of this Complaint only, that co-pollutant exposures are
3 comparatively negligible beyond this identified six mile zone of impact.⁷²

4 The use of this particular comparison population provides our disparity analysis with
5 two substantial strengths. First, as the comparison population does not overlap at all with the
6 affected population, we are able to compare two “statistically independent” populations.
7 Doing so bolsters and simplifies our statistical analysis as well as future analyses conducted to
8 investigate this Complaint. Second, as explained above, we are able to employ a comparison
9 population that closely matches the affected population in size, as the comparison population
10 comprises 54.1% of the total population of California.⁷³ The similarity in, and large size of,
11 the two populations minimize the possibility that identified disparities could be due to chance.

12 **3. The affected population is disproportionately people of color.**

13 The population of California residing within six miles of a Cap and Trade facility (the
14 affected population) is composed of 62% people of color compared to only 38% non-Hispanic
15 whites.⁷⁴ By contrast, the population residing outside of the six-mile zone of impact (the
16 comparison population), without the heavy burden of co-pollutant exposures, is 46% people of
17 color and 54% non-Hispanic white.⁷⁵

18 The disproportionate presence of people of color within six-miles of a facility holds
19 across all major racial and ethnic groups. African Americans are the most hyper-represented
20 within the area of impact: their share of the population within six miles of a facility (8.6%) is
21 almost twice their share outside of the six-mile range (4.6%). The Latino population also
22 makes up 37.5% of the population within six miles of a facility versus only 28.1% outside of
23 the range, while Asian/Pacific Islanders comprise 12.6% of the population within six miles of
24 a facility compared to 9.7% outside of the range. Recent immigrants, differentiated by their

26 ⁷²*Id.* at 8.

27 ⁷³*Id.* at 10, table 1.

27 ⁷⁴*See* Table 1; Exhibit 1.

28 ⁷⁵*Id.*

national origin, are also overrepresented in the zone of co-pollutant impact. They make up 21.4% of the population within six miles of a facility but only 15.4% of the total comparison population outside of the six-mile range.

Together these figures illustrate a consistent pattern in California whereby each of these minority racial, ethnic, and immigrant groups live with substantially heavier exposures to co-pollutants from Cap and Trade facilities than their white co-patriots.

Table 1: Average Characteristics by Distance from a Facility

	< Half Mile	< 1 Mile	< 2.5 Miles	< 5 Miles	< 6 Miles	> 6 Miles
Total Population	93,362	575,014	4,368,581	12,844,279	15,492,631	18,226,753
% California Population	0.3%	1.7%	13.3%	38.8%	45.9%	54.1%
Non-Hispanic White	42.6%	41.2%	37.4%	37.5%	38.0%	54.0%
People of Color	57.4%	58.8%	62.6%	62.5%	62.0%	46.0%
African American	8.7%	8.2%	8.3%	8.5%	8.6%	4.6%
Latino	35.0%	38.1%	40.2%	38.6%	37.5%	28.1%
Asian/Pacific Islanders	10.2%	8.9%	10.6%	12.0%	12.6%	9.7%
1980s and 1990s Immigrants	19.1%	20.3%	20.9%	21.3%	21.4%	15.4%

To further substantiate this disparate impact, we assess the relative emissions burdens borne by the affected and comparison populations.⁷⁶ Data on relative exposures is critical because proximity to a facility may not precisely correspond with a census block's actual co-pollutant exposures. As *Minding the Climate* explains, "some neighborhoods are within range of several facilities, and not all facilities emit the same amount of pollution."⁷⁷ The

⁷⁶*Id.* at 11, table 2.

⁷⁷*Id.* at 11.

1 authors produce the data displayed below by summing “up the tons of co-pollutant emissions
2 for each co-pollutant by neighborhood (block group) from all facilities within six miles” and
3 classifying them by three categories according to their level of emissions burden.⁷⁸

4 The disparities assessed above become even more pronounced when comparing the
5 relative burden of co-pollutants borne by each group.⁷⁹ As *Minding the Climate Gap* reports,

6 African Americans are *drastically overrepresented* in the High Emissions
7 group of neighborhoods, making up about 16 percent of the population - more
8 than three times their share in either the Low Emissions group of
neighborhoods or neighborhoods outside the six mile range of any facility.⁸⁰

9 Latinos, Asian/Pacific Islanders, and recent immigrant are also all overrepresented at every
10 level of emissions compared to their proportion of the comparison population.

11 Table 2: Average Characteristics of PM10 Emissions from Facilities Within 6 Miles

	High Emissions	Middle Range	Low Emissions	No Facilities Within 6 Miles
Total Population	2,317,884	10,940,640	2,234,107	18,226,753
% California Population	6.9%	32.4%	6.6%	54.1%
Non-Hispanic White	34.4%	37.7%	43.5%	54.0%
People of Color	65.6%	62.3%	56.5%	46.0%
African American	15.9%	7.8%	4.9%	4.6%
Latino	34.5%	38.8%	33.9%	28.1%
Asian/Pacific Islanders	11.7%	12.5%	14.3%	9.7%
1980s and 1990s Immigrants	18.7%	22.2%	20.2%	15.4%

23
24 As a group, people of color have their highest population representation in the most
25 severely impacted emissions range, making up 66% of the Californian population in high

26
27 ⁷⁸*Id.*

⁷⁹See Table 2; Exhibit 1.

28 ⁸⁰*Id.* at 11 (emphasis added).

1 emissions areas. They are also over-represented at the middle emissions range (62%) and low
2 emissions range (57%), as compared to their much lower proportion of the comparison
3 population - the state population beyond six miles of a facility (46%).

4 By contrast, non-Hispanic whites are under-represented at every emissions level and
5 over-represented in the comparison population beyond six miles of a facility. A telling mirror
6 image to the pattern for African Americans in California, non-Hispanic whites have their
7 lowest population representation at the high emission range (35%), with an increasing share of
8 the middle and low emissions range and a dramatically greater share of the comparison
9 population beyond six miles of a facility (54%).

10 In terms of health impacts, disparities are again more severe than these figures suggest.
11 *Minding the Climate Gap* reports exposures from PM10 as its unit of analysis. However, Cap
12 and Trade facilities that emit carbon dioxide also emit PM2.5 and ultrafine particular matter
13 (resulting in more severe health impacts than from PM10 exposure alone), sulfur oxides,
14 ozone forming nitrous oxides and volatile organic carbon, as well as a variety of toxic air
15 pollutants.⁸¹ Our allegations cover the disproportionate cumulative impacts of all of these
16 exposures on people of color in California. Accordingly, it is crucial that investigative action
17 by the EPA address disparate exposures and health impacts from all co-pollutants emitted by
18 Cap and Trade facilities, not just PM10.

19 **4. Co-pollutant emissions from Cap and Trade facilities inflict a disparate**
20 **impact on people of color.**

21 People of color bear a consistently higher load of co-pollutants emitted from facilities
22 that generate large amounts of carbon dioxide. People of color make up 62% of the
23

24 ⁸¹See Part VI.A, *supra*. The authors of *Minding the Climate Gap* employ PM10 as a proxy for
25 these other co-pollutants. However, they also make clear that vulnerable populations “are
26 disproportionately exposed to and impacted by many of the co-pollutants associated with
27 GHG emissions, such as NO_x, PM, and emissions of other contaminants that can have
28 localized impacts,” such as air toxics. Shonkoff, et. al., *Minding the Climate Gap: Environmental Health and Equity Implications of Climate Change Mitigation Policies in California*, Environmental Justice, vol. 2, no. 4, 175 (2009).

1 population within the six-mile range of impact of a Cap and Trade facility. By contrast, they
2 make up a much lower share (46%) of the population outside the six-mile range. When the
3 actual burden of pollution borne by this population is assessed, the discrepancy becomes even
4 starker: people of color make up 66% of the state population experiencing high emissions
5 compared to 46% of the comparison population outside the six mile range and experiencing
6 negligible localized co-pollutant emissions from these facilities.

7 Figures 7 and 8 in Exhibit 1 provide visual depictions of the disparate impact of
8 co-pollutant exposures on people of color. According to *Minding the Climate Gap*, “[p]eople
9 of color experience over 70% more particulate pollution from large GHG-emitting facilities
10 within two and a half miles than non-Hispanic whites.”⁸² Much of this burden is explained by
11 the concentration of petroleum refineries in or near communities of color: “petroleum
12 refineries account for the largest portion (93%) of the state-wide...difference between the
13 emissions burden for people of color and non-Hispanic whites.”⁸³ Of the ten greenhouse
14 gas-emitting facilities in California with the greatest health impacts, eight are petroleum
15 refineries. Eight of the ten facilities “that were identified as the most disparate by
16 race/ethnicity” also rank among the top fifteen facilities in terms of severity of health
17 impacts.⁸⁴

18 The following Table (Table 3) illustrates disparate burden borne by people of color as
19 compared to non-Hispanic whites, using PM10 as the indicator.⁸⁵ By adjusting for the relative
20 size of each population group within California, we see that each ethnic or racial minority
21 group in the affected population experiences substantially greater exposures to PM10 than
22

23 ⁸²*Minding the Climate Gap* at 18, figure 7.

24 ⁸³*Id.* at figure 8.

25 ⁸⁴*Id.* at 22. For a visual depiction of the distribution of pollution-disparity across all major
26 greenhouse gas-emitting facilities in California, see *id.* at 19, figure 9. Included in *Health
Impact Assessment of a Cap-and-Trade Framework*, California Department of Public Health,
70 (2010) (hereinafter, *Health Impact Assessment*).

27 ⁸⁵ Complainants do not limit our disparate impact allegation to only PM10, and contend that
28 all co-pollutants inflict a disparate impact. Unlike EPA or the authors of *Minding the Climate
Gap*, Complainants lack the capacity to provide a statistical analysis for all co-pollutants.

1 non-Hispanic whites in the affected population. Even at closer distances to the facilities, “the
2 relative emissions burden for all people of color combined is always above that for
3 non-Hispanic whites.”⁸⁶

4 Table 3: Population Weighted Average Annual PM10 Emissions (Tons) Burden by
5 Race/Ethnicity within 6 Mile Zone of Impact

6 Non-Hispanic White	41.51
7 All People of Color	70.98
8 African American	115.03
9 Latino	66.37
10 Asian/Pacific Islander	63.57

11
12 When comparing health effects of co-pollutants, actual disparate impacts on people of
13 color are even more severe than can be captured by discrepancies in exposure alone, as a result
14 of the particular vulnerabilities of this population. As the California Department of Public
15 Health (CDPH) explained in its 2010 Health Impact Assessment of Cap and Trade,

16 [l]ow-income communities and communities of color in California are
17 disproportionately impacted by environmental exposures and have a greater
18 susceptibility to the negative health impacts of environmental risk because of
existing health and socioeconomic vulnerabilities.⁸⁷

19 Co-pollutant exposures from Cap and Trade facilities add to the tremendous
20 cumulative exposures to a variety of environmental stressors borne predominantly by people
21 of color.⁸⁸ As people of color tend to be more susceptible to health risks and have lower
22 access to services to mitigate negative health outcomes, exposures to co-pollutants are

23
24 ⁸⁶*Minding the Climate Gap* at 16.

25 ⁸⁷CDPH, *Health Impact Assessment* at 60.

26 ⁸⁸A study by researchers at UC Davis of conditions in California’s San Joaquin Valley
27 confirmed that “environmental hazards tend to be clustered around populations with high and
28 very high levels of social vulnerability.” The study also demonstrated that the percentage of
non-white residents within the Valley study area increases with increasing levels of social
vulnerability and cumulative environmental hazards. Jonathan London, *et. al.*, *Land of Risk,*
Land of Opportunity, *supra* note 59.

1 “exacerbated by poverty, poor quality housing, and insufficient health care access in these
2 communities.”⁸⁹ The resulting picture is one of stark discrepancies in both exposures and
3 health outcomes.⁹⁰

4 Moreover, as the CDPH identified, CARB’s Cap and Trade program stands to
5 exacerbate these preexisting disparities. As CDPH identified, “the distribution of these
6 impacts” from a cap-and-trade program in California “is uncertain; market-based systems are
7 designed to reduce aggregate emissions, but can be ‘distribution neutral.’”⁹¹ Because
8 “individual firms comply with the statewide cap in a manner that best fits their needs,” the
9 health and economic impacts on local communities “will vary.”⁹² If emissions-intensive
10 facilities purchase allowances and offsets, rather than reduction emissions on-site as Cap and
11 Trade allows,⁹³ Cap and Trade will cause localized pollution “to increase in some
12 communities.”⁹⁴ Such increases will deepen already severe disparate impacts of localized
13 greenhouse-gas co-pollution that communities of color live under.

14 **5. The disparate impact from Cap and Trade is significant.**

15 The disparities detailed in Section VI.B.3 are unequivocally significant for people of
16 color residing in California, as well as for all major racial and ethnic minority groups. To
17 assess significance of disparate impact findings, we follow the methodology utilized by EPA’s
18 *Investigative Report*.⁹⁵ The OCR investigation included an assessment of “whether members
19

20 ⁸⁹CDPH, *Health Impact Assessment* at 61.

21 ⁹⁰CDPH illustrated these disparities in both exposure and health outcome, caused by
22 underlying susceptibilities, poor access to resources, and deleterious land use patterns, for the
23 communities of Wilmington-Harbor City-San Pedro, the City of Richmond, and the San
24 Joaquin Valley. *See id.* at 59-91. Areas characterized by high levels of cumulative
25 environmental vulnerabilities tend to be “characterized by high levels of cumulative health
26 problems.” Jonathan London, *Land of Risk, Land of Opportunity*, *supra* note 59, at 18.

27 ⁹¹CDPH, *Health Impact Assessment* at 90.

28 ⁹²*Id.* at 21.

⁹³*California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms*,
Cal. Code of Reg., Art. 5, sections 95800 *et. seq.*

⁹⁴CDPH, *Health Impact Assessment* at 90.

⁹⁵*See Investigative Report*, *supra* note 33.

1 of the protected population group comprise a substantially greater proportion of the affected
2 population than of the non-affected population.”⁹⁶ In evaluating the significance of disparities
3 according to this criteria, we calculate comparative disparity ratios for people of color and
4 racial and ethnic subpopulations between the affected and comparison populations. In doing
5 so, we find consistently greater proportions of people of color in the affected population than
6 in the non-affected comparison population. By contrast, we find that the non-Hispanic white
7 population comprises a significantly greater proportion of the non-affected population than of
8 the population exposed to co-pollutants.

9 Disparities are overwhelmingly significant with regards to the proportion of the
10 protected population residing within the six mile affected range of a facility. People of color
11 comprise 34.8% more of the affected population within six miles of a GHG-emitting facility
12 than of the non-affected comparison population beyond the six mile range of impact. The
13 percentage change is even more pronounced for African Americans, who make up 87% more
14 of the population inside the six-mile zone of impact than in the comparison population.
15 Latinos and Asians follow a similar pattern: they represent 33.5% and 29.9% more of the
16 population inside the zone of impact than outside. In fact, the only population that does not
17 follow this trend is non-Hispanic whites. The state population within six miles of a facility is
18 29.6% *less* non-Hispanic white than outside the six-mile range.

19 Again, the significance of these disparities increases when considering the relative
20 burden of co-pollutant emissions borne by each sub-population. People of color make up
21 42.6% more of the population in a high co-pollutant emissions range compared to the
22 percentage of people of color living beyond six miles from a cap and trade facility. In terms of
23 their co-pollutant exposure burden, African-Americans are overrepresented by an order of
24 magnitude: they comprise **245.7%** more of the population experiencing high co-pollutant
25 emissions than they comprise of the population beyond the six-mile reach of a facility. The
26 discrepancies for Latinos, Asian/Pacific Islanders, and immigrants are also significant: they

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28 ⁹⁶*Id.* at 30.

1 respectively represent 22.8%, 20.6%, and 21.4% more of the population impacted by high
2 co-pollutant emissions than their proportion of the state population beyond six miles of a
3 facility. In addition, the disparity between people of color and non-Hispanic whites is again
4 more pronounced: the population of California in high emissions zones is composed of 36.3%
5 less non-Hispanic whites than outside the six-mile radius of impact.

6 As discussed above, the significance of these disparities becomes even more acute
7 when accounting for underlying vulnerabilities of these communities to health risks from
8 environmental exposures. The significance also grows after accounting for the cumulative
9 exposure from all health-harming co-pollutants (PM2.5, ultrafine particulate matter, NOx,
10 SOx, and toxic pollutants) emitted from facilities that intensively emit greenhouse gases.
11 OCR should assess this total burden from all Cap and Trade associated co-pollutants in
12 investigative action following on this Complaint to derive a complete picture of the
13 significance and depth of adverse disparities.

14 By allowing heavily polluting facilities to trade away their co-pollutant emissions
15 reductions obligations under Cap and Trade, CARB will exacerbate these existing inequities
16 and further heighten their significance.

17 **C. There are Less Discriminatory Alternatives**

18 CARB had less discriminatory alternatives to implement AB32 before them, yet
19 CARB chose to adopt Cap and Trade.⁹⁷ For example, CARB could have decided to directly
20 regulate each facility and require greenhouse gas emission reductions. This alternative would
21 not allow facilities the option to trade pollution credits or buy offsets. By requiring emission
22 reductions at each facility site, the local impacts due to co-pollutants described above would
23 be reduced as well. Direct regulation is a less discriminatory alternative that would achieve
24 greenhouse gas reductions and protect California communities of color from the disparate and
25 adverse impacts of co-pollutant emissions caused by Cap and Trade.

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27 ⁹⁷See EJAC letters, *supra* notes 13, 18; CARB's alternatives analysis available at
28 http://www.arb.ca.gov/cc/scopingplan/document/appendices_volume3.pdf; Public comments,
supra note 19.

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VII. REMEDIES

Under EPA regulations, EPA may use any means authorized by law to obtain compliance with Title VI.⁹⁸ EPA regulations require a recipient who has previously discriminated on the basis of race to take affirmative action to provide remedies to those who have been injured by the discrimination.⁹⁹

In order to provide effective remedies for the discrimination set forth in this Complaint, EPA should require as a condition of continuing to provide federal financial assistance to CARB that the Board:

- (1) Reverse its October 2011 decision to approve the Cap and Trade regulation;
- (2) Adopt less discriminatory alternatives to meet the requirements of AB 32, such as direct regulations;
- (3) Sue to compel compliance with the law, to the extent that imposition of the foregoing remedies proves in any way to be ineffectual;
- (4) Provide complainants with copies of all documents related to the investigation, including but not limited to all correspondence to or from CARB throughout the course of the investigation, deliberation, and disposition of this Complaint; and
- (5) Notify Complainants of, and meaningfully include Complainants in, any settlement negotiations or voluntary compliance negotiations with CARB.

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⁹⁸40 C.F.R. § 7.130(a).
⁹⁹40 C.F.R. § 7.35(a)(7).

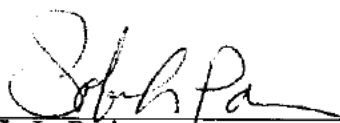
1 **VIII. CONCLUSION**

2 The California Air Resources Board's decision of October 20, 2011, which became
3 final on December 13, 2011, to adopt Cap and Trade inflicts a significant disparate and
4 adverse impact on people of color living within 6 miles of Cap and Trade facilities in
5 California. This violates Title VI and EPA's implementing regulations.

6
7 DATE: June 8, 2012

8 Respectfully submitted,

9 **CENTER ON RACE, POVERTY & THE
ENVIRONMENT**

10 
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28 On the Complaint:
Stephanie Safdi, CRPE Legal Intern