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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.

17  
18 California Air Resources Board,

19 Respondent.

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

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## 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.<sup>1</sup> 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.<sup>2</sup> 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

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<sup>1</sup>Gov. Code §§ 11340.5(b) and 11343.

<sup>2</sup>Manuel 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.<sup>3</sup> 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.

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28 <sup>3</sup>*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.<sup>4</sup> 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.<sup>5</sup> 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.<sup>6</sup> 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.<sup>7</sup> 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.<sup>8</sup>

### 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 <sup>4</sup>40 C.F.R. § 7.120(b)(2).

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

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

27 <sup>7</sup>40 C.F.R. § 7.15.

28 <sup>8</sup>See 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.<sup>9</sup> 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.”<sup>10</sup> 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.<sup>11</sup> To assist with the goal of  
7 protecting over-burdened communities, the legislature created the Environmental Justice  
8 Advisory Committee (“EJAC”).<sup>12</sup> 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.<sup>13</sup>

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.<sup>14</sup> CARB  
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19 <sup>9</sup>Health & Safety Code § 38510; *see also* §§ 38501(f) - (h), 38505(n), and 38550.

20 <sup>10</sup>*Id.* at § 38501(h).

21 <sup>11</sup>*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 <sup>12</sup>*Id.* at § 38591(a).

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

<sup>14</sup>*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.<sup>15</sup> Cap and Trade facilities  
2 are also able to purchase additional allowances at an auction or from one another.<sup>16</sup> 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.<sup>17</sup> During the process of  
10 preparing the Scoping Plan, EJAC advised against a cap and trade system for various efficacy  
11 and justice reasons.<sup>18</sup> 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.<sup>19</sup> 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").<sup>20</sup>  
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 <sup>15</sup>*Id.* at Subarticle 8 §§95870 *et seq.*

24 <sup>16</sup>*Id.* at Subarticle 11 §§ 95870 *et seq.*

25 <sup>17</sup>AB32 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 <sup>18</sup>*See* Recommendations on DRAFT AB 32 Scoping Plan (October 1, 2008) available at  
[http://www.arb.ca.gov/cc/ejac/ejac\\_comments\\_final.pdf](http://www.arb.ca.gov/cc/ejac/ejac_comments_final.pdf).

27 <sup>19</sup>*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 <sup>20</sup>*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.<sup>21</sup> 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.<sup>22</sup> 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.<sup>23</sup> Five days after receiving the stay,  
8 CARB Chairman Mary Nichols announced that CARB would defer implementation to  
9 January 1, 2013.<sup>24</sup> 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.<sup>25</sup> CARB ignored the public comments and voted to re-approve  
15 the same Scoping Plan, with Cap and Trade included.<sup>26</sup>

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 <sup>21</sup>*Id.*, Judgement (May 20, 2011).

25 <sup>22</sup>*Id.*

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

27 <sup>24</sup>Margot 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>.

<sup>25</sup>Public comments, *supra* note 19.

<sup>26</sup>Resolution 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.<sup>27</sup> 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.<sup>28</sup> 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.<sup>29</sup>

13 CARB, a recipient of federal financial assistance from EPA, has violated Title VI by its  
14 decision to approve Cap and Trade.<sup>30</sup> 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.<sup>31</sup> 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  
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20 <sup>27</sup>See 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 <sup>28</sup>Resolution 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 <sup>29</sup>Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d.

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

<sup>31</sup>40 C.F.R. §§ 7.35(b) - (c).



1 of a State or of a local government.<sup>32</sup> 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,<sup>33</sup> 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.<sup>34</sup> 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 <sup>32</sup>42 U.S.C. § 2000d-4a

19 <sup>33</sup>This 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>.

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

1 concentration threshold are generally recognized as adverse under Title VI.<sup>35</sup> 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.<sup>36</sup>

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.<sup>37</sup> 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.

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26 <sup>35</sup>*Id.* at 26.

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

28 <sup>37</sup>*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.<sup>38</sup> 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 pollutants<sup>39</sup> 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)<sup>40</sup>, and toxic air contaminants (or hazardous air pollutants).<sup>41</sup> 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

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

26 <sup>39</sup>Criteria air pollutants are pollutants for which a health based National Ambient Air Quality  
27 Standard (NAAQS) has been set by the U.S. EPA.

28 <sup>40</sup>Many VOCs, such as benzene and methanol, are both VOCs and toxic compounds.

<sup>41</sup>Toxic 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  
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.<sup>42</sup>

5 California cities and counties consistently rank highest in exposure to short and long  
6 term PM2.5 exposure and ozone exposure.<sup>43</sup> 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.<sup>44</sup> 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.<sup>45</sup> 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.<sup>46</sup>

12 Exposure to these criteria co-pollutants exceed the NAAQS in many California air  
13 basins where Cap and Trade facilities are located.<sup>47</sup> 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 <sup>42</sup>See 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](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>.

<sup>43</sup>See *State of the Air 2012* at 14-18.

<sup>44</sup>*Id.* at 14-15.

<sup>45</sup>*Id.* at 17-18.

<sup>46</sup>*Id.* at 14, 17.

<sup>47</sup>See *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.<sup>48</sup> The Bay Area Air Quality Management District is in  
2 marginal nonattainment for the 1997 8-hour ozone standard.<sup>49</sup> 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.<sup>50</sup>

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.”<sup>51</sup> 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.<sup>52</sup> Reducing the greenhouse gas  
21 emissions at the Torrance facility would reduce the PM emission as well. However, Cap and  
22

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23 <sup>48</sup>76 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 <sup>49</sup>*Supra* note 47.

26 <sup>50</sup>76 Fed. Reg. 69896 (Nov. 9, 2011) (San Joaquin Valley); 75 Fed. Reg. 71294, 71295  
(November 22, 2010) (South Coast); *supra* note 47.

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

28 <sup>52</sup>*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.<sup>53</sup> 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."<sup>54</sup> 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

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27 <sup>53</sup>Cal. Code Regs. tit. 17 §§ 95870 *et seq.*

28 <sup>54</sup>Health 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.<sup>55</sup> 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.<sup>56</sup> 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.<sup>57</sup> 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.

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19 <sup>55</sup>Two 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,  
26 Ultramar, Inc. Wilmington Refinery Proposed Cogeneration Project, 2-8, 2-27 (March 30,  
27 2012), *available at* <http://aqmd.gov/ceqa/nonaqmd.html>. Relevant portions attached as  
28 Exhibit 7.

<sup>56</sup>42 U.S.C. §§ 7412(d) (Maximum Achievable Control Technology (MACT)) and 7503(d)  
(Best Available Control Technology (BACT) or Lowest Achievable Emissions Rate (LAER)).

<sup>57</sup>*See, e.g.* San Joaquin Valley Air Pollution Control District Rule 2201, South Coast Air  
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 NOx, 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.<sup>58</sup> 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.<sup>59</sup>

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.<sup>60</sup> These steps include 1) identifying the affected population, 2) identifying the  
22 comparison population, 3) characterizing the demographics of the affected population, 4)  
23

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24 <sup>58</sup>See *Draft Investigation Guidance*, 65 Fed. Reg. at 39678.

25 <sup>59</sup>See 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).

<sup>60</sup>*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.*<sup>61</sup>

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"<sup>62</sup> 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.<sup>63</sup> 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

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21 <sup>61</sup>See *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 <sup>62</sup>*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.

28 <sup>63</sup>Unless 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.<sup>64</sup>

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.<sup>65</sup> 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

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24 <sup>64</sup>*Id.* at 8.

25 <sup>65</sup>Data 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.<sup>66</sup> 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.”<sup>67</sup> 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.”<sup>68</sup> 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.”<sup>69</sup> 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.<sup>70</sup>

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.<sup>71</sup> Though emissions dispersion patterns may extend exposures to some degree beyond  
21

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22 <sup>66</sup>*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 <sup>67</sup>*Disparity Analysis* at 29.

26 <sup>68</sup>*Id.*

27 <sup>69</sup>*Id.*

27 <sup>70</sup>*Id.*

28 <sup>71</sup>*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.<sup>72</sup>

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.<sup>73</sup> 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.<sup>74</sup> 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.<sup>75</sup>

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

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26 <sup>72</sup>*Id.* at 8.

27 <sup>73</sup>*Id.* at 10, table 1.

27 <sup>74</sup>*See* Table 1; Exhibit 1.

28 <sup>75</sup>*Id.*

1 national origin, are also overrepresented in the zone of co-pollutant impact. They make up  
 2 21.4% of the population within six miles of a facility but only 15.4% of the total comparison  
 3 population outside of the six-mile range.

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

7 Table 1: Average Characteristics by Distance from a Facility

8		< Half Mile	< 1 Mile	< 2.5 Miles	< 5 Miles	< 6 Miles	> 6 Miles
9	Total Population	93,362	575,014	4,368,581	12,844,279	15,492,631	18,226,753
10	% California Population	0.3%	1.7%	13.3%	38.8%	45.9%	54.1%
11							
12							
13	Non-Hispanic White	42.6%	41.2%	37.4%	37.5%	38.0%	54.0%
14	People of Color	57.4%	58.8%	62.6%	62.5%	62.0%	46.0%
15	African American	8.7%	8.2%	8.3%	8.5%	8.6%	4.6%
16	Latino	35.0%	38.1%	40.2%	38.6%	37.5%	28.1%
17	Asian/Pacific Islanders	10.2%	8.9%	10.6%	12.0%	12.6%	9.7%
18	1980s and 1990s Immigrants	19.1%	20.3%	20.9%	21.3%	21.4%	15.4%
19							

20  
 21 To further substantiate this disparate impact, we assess the relative emissions burdens  
 22 borne by the affected and comparison populations.<sup>76</sup> Data on relative exposures is critical  
 23 because proximity to a facility may not precisely correspond with a census block's actual  
 24 co-pollutant exposures. As *Minding the Climate* explains, "some neighborhoods are within  
 25 range of several facilities, and not all facilities emit the same amount of pollution."<sup>77</sup> The  
 26

27 <sup>76</sup>*Id.* at 11, table 2.

28 <sup>77</sup>*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.<sup>78</sup>

4 The disparities assessed above become even more pronounced when comparing the  
 5 relative burden of co-pollutants borne by each group.<sup>79</sup> 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.<sup>80</sup>

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 <sup>78</sup>*Id.*

<sup>79</sup>See Table 2; Exhibit 1.

28 <sup>80</sup>*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.<sup>81</sup> 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

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24 <sup>81</sup>See 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 NOx, 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.”<sup>82</sup> 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.”<sup>83</sup> 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.<sup>84</sup>

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.<sup>85</sup> 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

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23 <sup>82</sup>*Minding the Climate Gap* at 18, figure 7.

24 <sup>83</sup>*Id.* at figure 8.

25 <sup>84</sup>*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 <sup>85</sup> 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.”<sup>86</sup>

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  
19 existing health and socioeconomic vulnerabilities.<sup>87</sup>

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

24 <sup>86</sup>*Minding the Climate Gap* at 16.

25 <sup>87</sup>CDPH, *Health Impact Assessment* at 60.

26 <sup>88</sup>A 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.”<sup>89</sup> The resulting picture is one of stark discrepancies in both exposures and  
3 health outcomes.<sup>90</sup>

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.’”<sup>91</sup> 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.”<sup>92</sup> If emissions-intensive  
10 facilities purchase allowances and offsets, rather than reduction emissions on-site as Cap and  
11 Trade allows,<sup>93</sup> Cap and Trade will cause localized pollution “to increase in some  
12 communities.”<sup>94</sup> 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*.<sup>95</sup> The OCR investigation included an assessment of “whether members

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20 <sup>89</sup>CDPH, *Health Impact Assessment* at 61.

21 <sup>90</sup>CDPH 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 <sup>91</sup>CDPH, *Health Impact Assessment* at 90.

28 <sup>92</sup>*Id.* at 21.

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

<sup>94</sup>CDPH, *Health Impact Assessment* at 90.

<sup>95</sup>*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.”<sup>96</sup> 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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27  
28 <sup>96</sup>*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.<sup>97</sup> 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 <sup>97</sup>See EJAC letters, *supra* notes 13, 18; CARB's alternatives analysis *available at*  
28 [http://www.arb.ca.gov/cc/scopingplan/document/appendices\\_volume3.pdf](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.<sup>98</sup> 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.<sup>99</sup>

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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<sup>98</sup>40 C.F.R. § 7.130(a).  
<sup>99</sup>40 C.F.R. § 7.35(a)(7).

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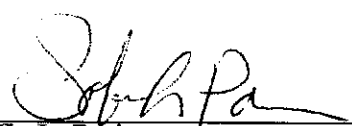
**VIII. CONCLUSION**

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

DATE: June 8, 2012

Respectfully submitted,

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



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On the Complaint:  
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