BAY AREA AIR QUALITY MANAGEMENT DISTRICT

BOARD OF DIRECTORS
FINANCE AND ADMINISTRATION COMMITTEE
December 6, 2023

COMMITTEE MEMBERS

JOHN J. BAUTERS – CHAIR
MARGARET ABE-KOGA
DAVID HAUBERT
DAVID HUDSON
SERGIO LOPEZ
MARK ROSS

DAVINA HURT - VICE CHAIR
BRIAN BARNACLE
LYNDA HOPKINS
TYRONE JUE
KATIE RICE

MEETING LOCATION(S) FOR IN-PERSON ATTENDANCE BY COMMITTEE MEMBERS AND MEMBERS OF THE PUBLIC

Bay Area Metro Center
1st Floor Board Room
375 Beale Street
San Francisco, CA 94105

Office of Alameda County Supervisor
David Haubert
4501 Pleasanton Avenue
Pleasanton, CA 94566

Office of Contra Costa County
Supervisor John Gioia
Conference Room
11780 San Pablo Ave., Suite D
El Cerrito, CA 94530

Santa Rosa Junior College Campus
Doyle Library, Room 148
1501 Mendocino Ave.
Santa Rosa, CA, 95401

THE FOLLOWING STREAMING OPTIONS WILL ALSO BE PROVIDED

These streaming options are provided for convenience only. In the event that streaming connections malfunction for any reason, the Finance and Administration Committee reserves the right to conduct the meeting without remote webcast and/or Zoom access.

The public may observe this meeting through the webcast by clicking the link available on the air district's agenda webpage at www.baaqmd.gov/bodagendas.

Members of the public may participate remotely via Zoom at https://bayareametro.zoom.us/j/82749266352, or may join Zoom by phone by dialing (669) 900-6833 or (408) 638-0968. The Webinar ID for this meeting is: 827 4926 6352

Public Comment on Agenda Items: The public may comment on each item on the agenda as the item is taken up. Members of the public who wish to speak on a matter on the agenda will have two minutes each to address the Committee on that agenda item, unless a different time limit is established by the Chair. No speaker who has already spoken on an item will be entitled to speak to that item again.

The Committee welcomes comments, including criticism, about the policies, procedures, programs, or services of the District, or of the acts or omissions of the Committee. Speakers shall not use threatening, profane, or abusive language which disrupts, disturbs, or otherwise impedes the orderly conduct of a Committee meeting. The District is committed to maintaining a workplace free of unlawful harassment and is mindful that District staff regularly attend Committee meetings. Discriminatory statements or conduct that would potentially violate the Fair Employment and Housing Act – i.e., statements or conduct that is hostile, intimidating, oppressive, or abusive – is *per se* disruptive to a meeting and will not be tolerated.

FINANCE AND ADMINISTRATION COMMITTEE MEETING AGENDA

WEDNESDAY, DECEMBER 6, 2023
1:00 PM

1. **Call to Order - Roll Call**

   The Committee Chair shall call the meeting to order and the Clerk of the Boards shall take roll of the Committee members.

2. **Pledge of Allegiance**

CONSENT CALENDAR (Item 3)

3. Approval of the Draft Minutes of the Finance and Administration Committee Meeting of November 1, 2023

   The Committee will consider approving the Draft Minutes of the Finance and Administration Committee Meeting of November 1, 2023.

ACTION ITEM(S)

4. Conduct Interviews and Consider Recommending the Board of Directors' Approval of Candidates for Appointment to the Advisory Council

   The Finance and Administration Committee will conduct interviews and consider recommending the Board of Directors' approval of candidates for appointment to the Advisory Council positions for a two-year term 2024-2026.

5. Recommend Authorization of Fiscal Year Ending 2024 Mid-year Budget and Staffing Adjustments

   This is an action item for the Finance and Administration Committee to consider recommending the Board of Directors approve the FYE 2024 mid-year budget and staffing adjustments to: 1) Authorize use of Community Air Protection Program grant for six (6) new Full Time Equivalents (FTEs) and seven (7) new Limited-Term Contract Employees (LTCEs) to support AB 617 initiatives; 2) Authorize one (1) new FTE for executive operations and reclassify vacant positions to support organizational operations, and 3) transfer $100,000 from the Legal Division's professional services budget to the salaries budget specifically designated to hire one (1) temporary staff attorney. This item will be presented by Dr. Philip Fine, Executive Officer/Air Pollution Control Officer.

INFORMATIONAL ITEM(S)

6. Air District Preliminary Annual Financial Report for the Fiscal Year Ending June 30, 2023, and the Fiscal Year 2023-2024 Financial Report for the First Quarter ending September 30, 2023

The Committee will receive an update on the Air District's preliminary financial results for the Fiscal Year (FY) 2022-2023 and the FY 2023-2024 financial update for the first quarter ending September 30, 2023.

OTHER BUSINESS

7. Public Comment on Non-Agenda Matters

Pursuant to Government Code Section 54954.3, members of the public who wish to speak on matters not on the agenda will be given an opportunity to address the Committee. Members of the public will have two minutes each to address the Committee, unless a different time limit is established by the Chair. The Committee welcomes comments, including criticism, about the policies, procedures, programs, or services of the District, or of the acts or omissions of the Committee. Speakers shall not use threatening, profane, or abusive language which disrupts, disturbs, or otherwise impedes the orderly conduct of a Committee meeting. The District is committed to maintaining a workplace free of unlawful harassment and is mindful that District staff regularly attend Committee meetings. Discriminatory statements or conduct that would potentially violate the Fair Employment and Housing Act – i.e., statements or conduct that is hostile, intimidating, oppressive, or abusive – is per se disruptive to a meeting and will not be tolerated.

8. Committee Member Comments

Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov't Code § 54954.2)

9. Time and Place of Next Meeting

Wednesday, December 20, 2023, at 1:00 p.m. at 375 Beale Street, San Francisco, CA 94105. The meeting will be in-person for the Finance and Administration Committee members and members of the public will be able to either join in-person or via webcast.

10. Adjournment

The Committee meeting shall be adjourned by the Chair.

CONTACT:
MANAGER, EXECUTIVE OPERATIONS **(415) 749-4941**
375 BEALE STREET, SAN FRANCISCO, CA 94105 **FAX: (415) 928-8560**
vjohnson@baaqmd.gov **BAAQMD homepage:**
www.baaqmd.gov

- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the Air District's offices at 375 Beale Street, Suite 600, San Francisco, CA 94105, at the time such writing is made available to all, or a majority of all, members of that body.

Accessibility and Non-Discrimination Policy

The Bay Area Air Quality Management District (Air District) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the Air District's policy to provide fair and equal access to the benefits of a program or activity administered by Air District. The Air District will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by the Air District. Members of the public who believe they or others were unlawfully denied full and equal access to an Air District program or activity may file a discrimination complaint under this policy. This non-discrimination policy also applies to other people or entities affiliated with Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the Air District in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to an Air District program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the Air District's Non-Discrimination Coordinator, Suma Peesapati, at (415) 749-4967 or by email at speesapati@baaqmd.gov.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 BEALE STREET, SAN FRANCISCO, CA 94105
FOR QUESTIONS PLEASE CALL (415) 749-4941

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

DECEMBER 2023

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Nominating Committee	**Wednesday**	**6**	**8:45 a.m.**	**1st Floor Board Room**
Board of Directors Meeting	**Wednesday**	**6**	**9:00 a.m.**	**1st Floor Board Room**
Board of Directors Finance and Administration Committee	**Wednesday**	**6**	**1:00 p.m.**	**1st Floor Board Room**
Board of Directors Stationary Source and Climate Impacts Committee - CANCELLED	**Wednesday**	**13**	**10:00 a.m.**	**1st Floor, Yerba Buena Room**
Board of Directors Mobile Source and Climate Impacts Committee - CANCELLED	**Wednesday**	**13**	**1:00 p.m.**	**1st Floor, Yerba Buena Room**
Board of Directors Meeting	**Wednesday**	**20**	**9:00 a.m.**	**1st Floor Board Room**
Board of Directors Finance and Administration Committee	**Wednesday**	**20**	**1:00 p.m.**	**1st Floor Board Room**
Board of Directors Community Equity, Health and Justice Committee - CANCELLED	**Wednesday**	**20**	**1:00 p.m.**	**1st Floor Board Room**

MB 12/01/2023 – 9:15 a.m. **G/Board/Executive Office/Moncal**

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson John J. Bauters and Members
of the Finance and Administration Committee

From: Philip M. Fine
Executive Officer/APCO

Date: December 6, 2023

Re: Approval of the Draft Minutes of the Finance and Administration Committee Meeting of November 1, 2023

RECOMMENDED ACTION

Approve the Draft Minutes of the Finance and Administration Committee Meeting of November 1, 2023.

BACKGROUND

None.

DISCUSSION

Attached for your review and approval are the Draft Minutes of the Finance and Administration Committee Meeting of November 1, 2023.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

ATTACHMENTS:

1. Draft Minutes of the Finance and Administration Committee Meeting of November 1, 2023

Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5073

Finance and Administration Committee
Wednesday, November 1, 2023

DRAFT MINUTES

This meeting was webcast, and a video recording is available on the website of the Bay Area Air Quality Management District at
www.baaqmd.gov/bodagendas

CALL TO ORDER

1. **Opening Comments:** Finance and Administration Committee (Committee) Chairperson, John J. Bauters, called the meeting to order at 1:07 p.m.

   Roll Call:

   Present, In-Person (375 Beale Street, 1st Floor Board Room, San Francisco, California, 94105): Chairperson John J. Bauters; Vice Chairperson Davina Hurt; and Directors Lynda Hopkins, Tyrone Jue, and Sergio Lopez.

   Present, In-Person Satellite Location (San Ramon City Hall, 7000 Bollinger Canyon Road, Community Conference Room, 2nd Floor, San Ramon, California, 94583): Director David Hudson.

   Absent: Directors Margaret Abe-Koga, Brian Barnacle, David Haubert, Katie Rice, and Mark Ross.

2. **PLEDGE OF ALLEGIANCE**

CONSENT CALENDAR

3. **APPROVAL OF THE DRAFT MINUTES OF THE FINANCE AND ADMINISTRATION COMMITTEE SPECIAL MEETING OF OCTOBER 18, 2023**

4. **HEARING BOARD QUARTERLY REPORT: JULY - SEPTEMBER 2023**

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Vice Chair Hurt made a motion, seconded by Director Hudson, to **approve** Consent Calendar Items 3 and 4, inclusive; and the motion **carried** by the following vote of the Committee:

AYES:	Bauters, Hopkins, Hudson, Hurt, Jue, Lopez.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Abe-Koga, Barnacle, Haubert, Rice, Ross.

ACTION ITEM

5. **IMPLEMENTATION POLICIES TO SUPPORT PROPOSED NEW ADMINISTRATIVE CODE**

Alexander Crockett, District Counsel, Sharon Landers, Interim Chief Operating Officer, and Amy Ackerman of Renne Public Law Group, gave the presentation *Administrative Code Update: Implementation Policies,* including: outcome; requested action; overview; Administrative Code versus policies; meeting compensation and expense reimbursement policy; records management and access policy; records retention schedule; procurement policy; grants policy; sponsorships policy; non-discrimination policy; employer-employee relations resolution; executive leadership continuity policy; remote teleconference meeting policy for standing committee meetings; project timeline; and action requested.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed concerns regarding the security provision of the proposed draft policy, including the purpose of the provision, whether Air District staff will dictate requirements that must be met by all remote teleconferencing locations, and potential liability issues; Procurement Policy timeline; applicant criteria for sponsorships; the request to revise the draft language of the security provision; and the request for a future amendment providing proactive Board approval for attendance and compensation for the "Bay Area AQMD Member" on CARB's Governing Board to attend CARB meetings.

Committee Action

Chair Bauters made a motion, seconded by Director Hopkins, to recommend that the Board does the following:

Adopt a comprehensive suite of Implementation Policies and related documents to accompany the proposed new Administrative Code on November 15, 2023, with the following adjustments:

1) Revise the draft language of the Remote Teleconferencing Meeting Policy accordingly: ~~*Board members are responsible for ensuring that security is provided at the remote teleconferencing location consistent with any security needs identified or directed by Air District staff.*~~ *Security will be provided in the manner dictated by existing security policies at each remote location, to the extent that special circumstances arise, at which point, the Board member who procured the remote location will confirm with the Chair and Vice Chair of the Air District Board committee of any special arrangements that may be required to facilitate and effective meeting.*

2) Revise the draft language of the Meeting Compensation and Expense Reimbursement Policy to add a new paragraph approving payments to the Governor-appointed "Bay Area AQMD Member" on CARB's Governing Board for attendance at any regularly scheduled or special CARB Board and committee meetings.

3) The Sponsorship Policy will come back to the Committee by the first calendar quarter of 2024.

The motion **carried** by the following vote of the Committee:

AYES:	Bauters, Hopkins, Hudson, Hurt, Jue, Lopez.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Abe-Koga, Barnacle, Haubert, Rice, Ross.

OTHER BUSINESS

6. PUBLIC COMMENT ON NON-AGENDA MATTERS

No requests received.

7. COMMMITTEE MEMBER COMMENTS

None.

8. TIME AND PLACE OF NEXT MEETING

Wednesday, December 6, 2023, at 1:00 p.m. at 375 Beale Street, San Francisco, CA 94105. The meeting will be in-person for the Committee members and members of the public will be able to either join in-person or via webcast.

9. ADJOURNMENT

The meeting was adjourned at 2:03 p.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson John J. Bauters and Members
of the Finance and Administration Committee

From: Philip M. Fine
Executive Officer/APCO

Date: December 6, 2023

Re: Conduct Interviews and Consider Recommending the Board of Directors' Approval of Candidates for Appointment to the Advisory Council

RECOMMENDED ACTION

The Finance and Administration Committee will conduct interviews and consider recommending the Board of Directors' approval of candidates for appointment to the Advisory Council positions for a two-year term 2024-2026.

BACKGROUND

Pursuant to Section 40262 of the California Health & Safety Code, the Air District is required to maintain an Advisory Council consisting of seven appointed members skilled and experienced in the fields of air pollution, climate change, or the health impacts of air pollution. Members shall be selected to include a diversity of perspectives, expertise and backgrounds. The Advisory Council advises and consults with the Air District Board and the Executive Officer/Air Pollution Control Officer on implementation of the Air District's regulatory authority. Advisory Council members serve a term of two years and may be reappointed to a maximum of twelve consecutive years.

DISCUSSION

The term of the Advisory Council members expired in July 2023. Air District staff initiated a recruitment to fill these positions. The Advisory Council recruitment was posted to the Air District website from January to March 2023 and was outreached to social media and various job boards. Staff gave particular attention to attract a diverse candidate pool. Recognizing a shift in Air District priorities, and the need for an Advisory Council that could speak to those matters, the Air District re-opened the recruitment from August to September 2023 with new questions focused on the cumulative impacts of pollution and other social stressors on the health of people living in overburdened communities. Previous applicants were not asked to resubmit questions. After opening the recruitment for approximately 13 weeks, the Air District received a total of 15 applications.

Candidates were initially screened by a panel of Air District staff that share subject matter expertise and have worked closely with the Advisory Council in the past. Ten candidates were advanced to the next step and interviewed by a panel composed of Air District Executive Officer Dr. Phillip Fine, Deputy Executive Officer Greg Nudd and Community Advisory Councilmember Dr. Juan Aguilera. The interview panel assessed the ten candidates listed in the table below. The panel found that four of the candidates were highly qualified in the subject of cumulative impacts. All 10 of the candidates are qualified to serve on the Advisory Council.

The panel recommends the Committee interview some or all of the candidates to determine a slate of seven for the Board to consider appointing to the Advisory Council.

Candidate	**Panel Recommendation**
Stephanie Holm	Highly Qualified
Phil Martien	Highly Qualified
Garima Raheja*	Highly Qualified
Gina Solomon*	Highly Qualified
Jared Briskman	Qualified
Ann Marie Carlton	Qualified
Jessica Coria	Qualified
Michael Kleinman*	Qualified
David Reichmuth	Qualified
Michael Schmeltz	Qualified

*Current Advisory Council member

The length of each interview will be approximately 10 minutes. The application materials, including a one-page biography that has been developed in collaboration with each candidate, are provided for your review.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Sonam Shah-Paul and Judy Yu
Reviewed by: Gregory Nudd

ATTACHMENTS:

1. Advisory Council Interview Packet

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

ADVISORY COUNCIL INTERVIEWS

FINANCE AND ADMINISTRATION COMMITTEE

December 6, 2023

ADVISORY COUNCIL INTERVIEWS
TABLE OF CONTENTS

December 6, 2023

- Advisory Council Vacancy Announcement
- Advisory Council Member Roster/Attendance Sheet
- Applicants' Application Materials:

CANDIDATE	PANEL RECOMMENDATION	IN-PERSON / VIRTUAL
Ann Marie Carlton	Qualified	In-Person
David Reichmuth	Qualified	In-Person
Garima Raheja	Highly Qualified	Virtual
Gina Solomon	Highly Qualified	In-Person
Jared Briskman	Qualified	In-Person
Jessica Coria	Qualified	In-Person
Michael Kleinman	Qualified	Virtual
Michael Schmeltz	Qualified	In-Person
Phil Martien	Highly Qualified	In-Person
Stephanie Holm	Highly Qualified	In-Person

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
invites applications for the position of:

Advisory Council Member

An Equal Opportunity Employer

OPENING DATE: 01/19/23

CLOSING DATE: 03/24/23 05:00 PM

DESCRIPTION:

The Bay Area Air Quality Management District (Air District) is a regional government agency, committed to achieving clean air to protect the public's health and the environment. The Air District accomplishes this goal through regulation of industrial facilities and various outreach and incentive programs designed to encourage clean air choices.

The Air District's jurisdiction encompasses all of seven counties - Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Napa, and portions of two others - southwestern Solano and southern Sonoma.

ABOUT THE ADVISORY COUNCIL
The purpose of the Advisory Council is to advise and consult with the Board of Directors and the Executive Officer/Air Pollution Control Officer (APCO) on issues related to air pollution emissions control and the environment. This may include studying and making recommendations on specific matters referred to the Advisory Council from the Board of Directors or the Executive Officer/APCO, including the technical, social, economic and environmental aspects of matters being addressed by the Air District. The Council also may identify areas of interest for exploration and study. The Advisory Council consists of seven members who are experienced in the fields of air pollution, climate change, or the health impacts of air pollution.

EXAMPLES OF DUTIES FOR THIS POSITION:
These are volunteer positions. There is no salary. Members of the Advisory Council are reimbursed for actual and necessary expenses incurred by them in attending meetings of the Advisory Council and meetings and public hearings conducted by the Board of Directors.

Advisory Council members serve a term of two years and may be reappointed to a maximum of twelve consecutive years. Meetings of the Advisory Council are held at least four (4) times per year. The Council meets at the Air District's offices at 375 Beale Street Suite 600 in San Francisco.

MINIMUM QUALIFICATIONS:
The applicants for the Advisory Council are skilled and experienced in the fields of air pollution, climate change, or the health impacts of air pollution. Members shall be selected to include a diversity of perspectives, expertise, and backgrounds.

HOW TO APPLY & SELECTION CRITERIA:
Interested individuals must submit the following materials by **5:00 pm, March 24, 2023**:

1) A completed application
2) A chronological resume
3) Responses to the supplemental questions

Applications are accepted online. Please visit our website at www.baaqmd.gov/jobs to apply.

Supplemental Questions Instructions
Individuals who apply for this position must respond to each of the required supplemental questions. Applications must be received no later than the time and date specified in this announcement. Please limit your responses to no more than 500 words per question.

APPLICATIONS MAY BE FILED ONLINE AT:
http://www.baaqmd.gov

Job #JY 2023-01
ADVISORY COUNCIL MEMBER
JY

OUR OFFICE IS LOCATED AT:
375 Beale Street Suite 600
San Francisco, CA 94105
415-749-4980
415-749-4980
HR_Staff@baaqmd.gov

An Equal Opportunity Employer

Advisory Council Member Supplemental Questionnaire

* 1. Please describe any experience or education which directly relates to air quality, climate change, or health impacts of air pollution, with a focus on particulate matter exposure reduction. Please describe how you think your experience (professional and lived) can be valuable to the Air District and provide any relevant references. Include any relevant leadership positions, accomplishments, publications or awards. Note, we recognize individuals may not have experience in all the categories listed here − please include information in your areas of expertise.

* 2. Please describe any environmental justice (EJ) and/or other public health, equity, or social justice work you have been a part of and how it relates to EJ issues in the Bay Area. If you have not been a part of such work, please include your understanding of the topic and of the work required by local governments, like the Air District.

* 3. The Air District may soon begin the process of developing an attainment plan for particulate matter for inclusion in the State Implementation Plan (SIP). Please explain your experience that would be useful for working with and implementing the Clean Air Act, particularly around the development of plans to attain the National Ambient Air Quality Standards. If you can, please include examples of innovative strategies to use discretionary authorities to develop an approvable plan that also considers cumulative impacts and reduces air quality disparities in overburdened communities and advances environmental justice.

* 4. Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

❑ Yes ❑ No

* Required Question

Bay Area Air Quality Management District
Advisory Council

OPENING DATE 08/18/2023

CLOSING DATE 9/22/2023 5:00 PM Pacific

The Bay Area Air Quality Management District (Air District) is a regional government agency, committed to achieving clean air to protect the public's health and the environment. The Air District accomplishes this goal through regulation of industrial facilities and various outreach and incentive programs designed to encourage clean air choices.

The Air District's jurisdiction encompasses all of seven counties - Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Napa, and portions of two others - southwestern Solano and southern Sonoma.

ABOUT THE ADVISORY COUNCIL

The purpose of the Advisory Council is to advise and consult with the Board of Directors and the Executive Officer/Air Pollution Control Officer (APCO) on issues related to air pollution emissions control and the environment. This may include studying and making recommendations on specific matters referred to the Advisory Council from the Board of Directors or the Executive Officer/APCO, including the technical, social, economic and environmental aspects of matters being addressed by the Air District. ?It is anticipated that the coming years will include a focus on assessing and addressing the cumulative impacts of pollution in overburdened communities. The Council also may identify areas of interest for exploration and study. The Advisory Council consists of seven members who are experienced in the fields of air pollution, climate change, or the health impacts of air pollution.

Examples of Duties for this Position

These are volunteer positions. There is no salary. Members of the Advisory Council are reimbursed for actual and necessary expenses incurred by them in attending meetings of the Advisory Council and meetings and public hearings

conducted by the Board of Directors. In addition, the Air District has the authority to provide a stipend consistent with similar scientific advisory boards on a per meeting basis and is considering such a policy.

Advisory Council members serve a term of two years and may be reappointed to a maximum of twelve consecutive years. Meetings of the Advisory Council are held at least four (4) times per year. The Council meets at the Air District's offices at 375 Beale Street in San Francisco.

Minimum Qualifications

The applicants for the Advisory Council are skilled and experienced in the fields of air pollution or the health impacts of air pollution. Members shall be selected to include a diversity of perspectives, expertise, and backgrounds.

How to Apply & Selection Criteria

Interested individuals must submit the following materials by **5:00 pm on Friday, September 22, 2023**:

1. A completed application;
2. A chronological resume;
3. Responses to the supplemental questions

Applications are accepted online. Please visit our website at www.baaqmd.gov/jobs to apply.

Supplemental Questions Instructions

Individuals who apply for this position must respond to each of the required supplemental questions. Applications must be received no later than the time and date specified in this announcement. Please limit your responses to no more than 200 words per question.

Agency
Bay Area Air Quality Management District

Address
375 Beale Street Suite 600

San Francisco, California, 94105

Phone
415-749-4980

Website
http://www.baaqmd.gov

Advisory Council Supplemental Questionnaire

***QUESTION 1**

Please describe any experience or education which directly relates to the cumulative impacts of pollution, systemic racism, and socioeconomic factors on the health of people living and/or working in overburdened communities.

***QUESTION 2**

Please describe any experience or education which directly relates to the statutory and regulatory tools that air pollution control districts or other regulatory agencies can use to address the cumulative impacts described above.

***QUESTION 3**

Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

- ○ Yes
- ○ No

* Required Question

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
ADVISORY COUNCIL ROSTER

As of February 2023

Name	Appointed Term(s)	County of Residence
Dr. Linda Rudolph, Co-Chair	June 2018- June 2020	Alameda (CA)
	July 2021- July 2023	
Dr. Gina Solomon, Co-Chair	June 2018- June 2020	San Francisco (CA)
	July 2021- July 2023	
Dr. Michael Kleinman, Vice Chair	June 2018- June 2020	Orange (CA)
	July 2021- July 2023	
Dr. Danny Cullenward	July 2021- July 2023	San Francisco (CA)
Dr. Adrrienne Hollis	July 2021- July 2023	Prince George's County (MD)
Dr. Pallavi Phartiyal	July 2021- July 2023	San Francisco (CA)
Garima Raheja	July 2021- July 2023	Alameda (CA)

Advisory Council Memember Attendance

Mtg Date	Cullenward	Hollis	Kleinman	Phartiyal	Raheja	Rudolph	Solomon	Mtg Type
9/13/2021	x	x	x	x	x		x	100% remote
10/25/2021	x	x	x	x	x	x	x	100% remote
11/8/2021	x		x		x	x	x	100% remote
12/13/2021	x	x	x		x	x	x	100% remote

	Cullenward	Hollis	Kleinman	Phartiyal	Raheja	Rudolph	Solomon	
2/14/2022	x	x	x	x	x	x	x	100% remote
4/11/2022		x	x	x	x	x	x	100% remote
7/11/2022	x	x	x		x	x	x	100% remote
9/12/2022	x	x		x	x	x	x	100% remote

	Cullenward	Hollis	Kleinman	Phartiyal	Raheja	Rudolph	Solomon	
1/30/2023	x	x	x		x	x	x	100% remote
6/12/2023			x				x	In Person
9/11/2023			x			x	x	In Person

red indicates "ABSENT"

grey undicates "NO LONGER ON COUNCIL"

ANN MARIE CARLTON

RECENT EXPERIENCE

PROFESSOR

DEPT. OF CHEMISTRY, UNIVERSITY OF CALIFORNIA AT IRVINE

JULY 2016 - PRESENT

- Successfully secured $10s of millions in external research grants from various Federal and State Agencies: NASA, DoD, USEPA, NSF, DoJ, NOAA
- Effectively mentored postdocs, graduate students and undergraduates
- Elected chair of the Atmospheric Chemistry Gordon Conference
- 50+ invited seminars and conference presentations in addition to publications

FELLOW

WHITE HOUSE OFFICE OF SCIENCE & TECHNOLOGY POLICY

- Fellow of the OSTP Historic Climate and Environment Team
- A chief author of the Whitehouse report to Congress on solar radiation management
- Contributing developer of Interagency Workgroup effort: greenhouse gas: measurement, monitoring, reporting and verification (GHG-MMRV)
- Technical expert and policy advisor with emphasis on air pollution, air quality and climate related to agriculture, carbon sequestration and credits
- Mission scientist for NASA SARP flight in the Central Valley of CA crops

EDUCATION

RUTGERS UNIVERSITY

Doctorate – Environmental Science

RUTGERS UNIVERSITY

Masters – Bioenvironmental Engineering

RUTGERS UNIVERSITY

Bachelors – Bioenvironmental Engineering

INTERVIEW HIGHLIGHTS

- Worked on cumulative impacts policy at the Federal level.
- Collaborated with community organizations on EJ issues in the San Joaquin Valley.
- Demonstrated a good understanding of the importance of giving weight to the lived experience of community members when making policy decisions.

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-04 - Advisory Council

Contact Information -- Person ID: 55177078

Name:	Ann Marie Grover Carlton	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California , Class CM
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Doctorate

Preferences

Minimum Compensation:	$0.00 per hour; $0.00 per year
Are you willing to relocate?	
Types of positions you will accept:	Regular , Temporary
Types of work you will accept:	Full Time , Part Time , Per Diem
Types of shifts you will accept:	Day , Rotating , On Call (as needed)

Objective

Education

Graduate School
Rutgers University
1/2003 - 8/2006
New Brunswick, New Jersey

Did you graduate: Yes
Major/Minor: Environmental Science
Degree Received: Doctorate

Graduate School
Rutgers University
9/1995 - 9/1999
New Brunswick, New Jersey

Did you graduate: Yes
Major/Minor: Bioenvironmental Engineering
Degree Received: Master's

College/University
Rutgers University
9/1991 - 5/1995
New Brunswick, New Jersey

Did you graduate: Yes
Major/Minor: Bioenvironmental Engineering
Degree Received: Bachelor's

Work Experience

Professor
7/2016 - Present

UC - Irvine, Dept. of Chemistry
Irvine, California

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
* Successfully secured $10s of millions in external research grants from various Federal and State Agencies: NASA, DoD, USEPA, NSF, DoJ, NOAA
* Effectively mentored postdocs, graduate students and undergraduates
* Elected chair of the Atmospheric Chemistry Gordon Conference
* 50+ invited seminars and conference presentations in addition to publications

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Vice Chair
7/2023 - Present

Univ. of California - Irvine
1102 Natural Sciences 2
IRVINE, California 92697

Hours worked per week: 40
Monthly Salary: $0.00
Name of Supervisor: Ann Marie G Carlton
May we contact this employer? Yes

Duties
for Chemistry, University of California, also Vice Chair from 2020-2021
* Large Dept.: 50+ research active faculty, 10 administrative staff, 250 graduate students, 1000+ undergraduates
* Focus on academic advancement in line with diversity, equity and inclusion goals
* Negotiated with faculty graduate students and the University Adminsitration to develop and publish first inclusive statement to appear on UCI chemistry webpage, established graduate student inclusive mentoring opportunities
* Analyzed and presented data that changed Department admission and retention policies for faculty and graduate students
* Developed novel community-building and recruiting activities during the pandemic

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Fellow
9/2021 - 9/2023

White House Office of Science & Technology Policy
Washington DC, District of Columbia 20005

Hours worked per week: 40
Monthly Salary: $0.00
Name of Supervisor: Laura Petes
May we contact this employer? Yes

Duties
Fellow & Special Gov. Employee, Whitehouse Office of Science & Technology Policy ----
* Fellow of the OSTP Historic Climate and Environment Team
* A chief author of the Whitehouse report to Congress on solar radiation management
* Contributing developer of Interagency Workgroup effort: greenhouse gas: measurement, monitoring, reporting and verification (GHG-MMRV)
* Technical expert and policy advisor with emphasis on air pollution, air quality and climate related to agriculture, carbon sequestration and credits
* Mission scientist for NASA SARP flight in the Central Valley of CA

Reason for Leaving
Fellowship Ended

Assistant Professor
7/2010 - 6/2016

Rutgers University
New Brunswick, New Jersey

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Dept. of Env. Sciences Rutgers University, -------

* Promoted with tenure
* Scientific leader of the Southern Oxidant and Aerosol Study (SOAS), scientific lead (20+ PIs, 100+ graduate students) for large NSF/NOAA/EPA/EPRI supported field study in the southeast U.S. There is a short documentary "Skycatcher" on Vimeo made by undergraduate filmmakers
* USDA Hatch Project for Land Grant Institutioons investigating air quality impacts on NJ agricultural crops

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Research Physical Scientist
8/2008 - 7/2010

U.S. EPA - Office of Research & Development
109 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
* model development team, chief CMAQ developer for cloud and secondary organic aerosol modules
* frequent science advisor to Office of Air Quality Planning and Standards

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Research Physical Scientist
8/2006 - 8/2008

National Oceanic and Atmospheric Adminsitration
109 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer? Yes

Duties
Air Resources Lab
Chief model developer for the CMAQ model
* National gold medal for bringing the CMAQ research modeling tool to the operational scale for daily forecasting in cooperation with the National Weather Service.

Environmental Engineer
12/1996 - 11/2002

U.S. EPA - Region 2
290 Broadway
New York, New York 10007

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer? Yes

Duties
* Oversight and quality assurance of air quality monitoring sites in NY, NY, PR and USVI
* Inspection of various industrial facilities, water and wastewater treatment plants and construction sites in NY, NY, PR and USVI
* National team award for development of PM2.5 monitoring network and quality assurance auditing program
* National team award for disaster response after Hurricane Georges, developed priority structure for water and wastewater treatment plant repairs for delivery to the Army Corps
* Developed EPA's Leak Detection and Repair Quality Assurance Program

Certificates and Licenses

Type: Professional Engineer

Number: [redacted]

Issued by: NJ Board of Prof. Engineers & Land Surveyors

Date Issued: 3 /2003 Date Expires: 4 /2024

Skills

Office Skills

Typing:
Data Entry:

Additional Information

Honors & Awards

AAAS Roger Revelle Fellowship in Global Stewardship, 2021
AEESP Plenary Lecture at American Assoc. for Aerosol Research, 2020
Rising Star, American Chemical Society, Women Chemists Committee, 2019
ASCENT Award, Atmospheric Sciences of the American Geophysical Union, 2017
Dennis M. Fenton Disguished Graduate Alumni Award, 2017
Rutgers University Board of Trustees Research Fellowship for Scholarly Excellence, 2016
U.S.EPA -Science Advisory Board: Level II Science and Technology Achievement Award, 2012
U.S.EPA National Honor Award (Bronze Medal) for CMAQ Model Development, 2010
Distinguished Alumnus (early career) Rutgers University, 2009
U.S.EPA National Honor Award (Gold Medal) for Air Quality Forecasting, 2009

References

Resume

Text Resume

Attachments

Agency-Wide Questions

1. Q: How did you find out about this position?
   A: District Employee

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2. Q: If other, please tell us where.
   A:

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3. Q: Are you currently legally authorized to work in the United States on a full-time basis?
   A: Yes

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4. Q: Are you related to any District employee or Board member?
   A: No

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5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?
   A: No

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6. Q: If related to a District employee or Board member, what is their name and their relationship to you?
   A: N/A

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to the cumulative impacts of pollution, systemic racism, and socioeconomic factors on the health of people living and/or working in overburdened communities.

   A: My first job post college was as an inspector for Region 2 of the U.S. EPA. The overwhelming majoring of major polluting facilities are located in overburdened, frontline communities that suffer the cumulative impacts of pollution and unfair governance across systems levels. I understand how poverty and racism affect the urban and rural poor differently. Further, in the White House, I worked with CEQ on revising NEPA. Revisions spoke to these exact issues.

2. Q: Please describe any experience or education which directly relates to the statutory and regulatory tools that air pollution control districts or other regulatory agencies can use to address the cumulative impacts described above.

   A: Region 2 of the U.S. EPA is unique because the U.S.VI and Puerto Rico have not been delegated all enforcement authority under the CAA or CWA. For those areas I have direct experience with implementing policies and programs at the "State"-level. NY and NJ have been delegated all enforcement authorities and for those areas I have direct experience of Federal level oversight of State policies and systems.

3. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

DAVID REICHMUTH

RECENT EXPERIENCE

SENIOR ENGINEER, CLEAN TRANSPORTATION PROGRAM
UNION OF CONCERNED SCIENTISTS
FEBRUARY 2013 – PRESENT

- Collaborated with The Greenlining Institute to analyze the air quality impacts of older passenger vehicles. Analysis found gasoline- and diesel-powered vehicles 20 years old or older expose Californians to significant harmful air pollution even though they represent a relatively small fraction of the passenger vehicles on the road. The harm falls disproportionately on Latino and Black Californians, lower-income households, and communities the state designates as disadvantaged.
- Responsible for technical and policy analysis to support the adoption of transportation solutions that reduce global warming emissions, air pollution and petroleum use.
- Work includes advocacy at the federal and state level for policies that increase the adoption and use of electric drive vehicles like plug-in electric cars and hydrogen fuel cell vehicles. Expertise in U.S. and California vehicle policy, including providing technical comments and testimony on the California's Advanced Clean Cars II regulations.

SENIOR MEMBER OF THE TECHNICAL STAFF
SANDIA NATIONAL LABORATORIES
JULY 2007 – FEBRUARY 2013

- Compared the costs/benefits of electric and hydrogen vehicles under different technology and policy assumptions by using parametric analysis for the Department of Energy's Office of Energy Efficiency and Renewable Energy.
- Analyzed impact of alternative vehicles on key environmental and energy metrics and examined potential regional differences in technology adoption or performance.
- Built models of alternative vehicle and fuel adoption for both domestic and international markets to inform Department of Energy (DOE) decision making.

EDUCATION

UC BERKELEY
Doctorate – Chemical Engineering
UC BERKELEY
Masters – Chemical Engineering
UC DAVIS
Bachelors – Biochemical and Chemical Engineering

INTERVIEW HIGHLIGHTS

- Strong background on climate change and clean transportation
- Demonstrated understanding of the inequities caused by the location of transportation corridors and policies to address these inequities

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-01 - Advisory Council Member

Contact Information -- Person ID: 53270818

Name:	David Reichmuth	Address:	[redacted]
Home Phone:		Alternate Phone:	
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California , Class C CDL
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Doctorate

Preferences

Minimum Compensation:

Are you willing to relocate?

Types of positions you will accept:

Types of work you will accept:

Types of shifts you will accept:

Objective

Education

Graduate School
University of California, Berkeley
[Unspecified Start] - 2002
Berkeley, California

Did you graduate: Yes
Major/Minor: Chemical Engineering
Degree Received: Doctorate

Graduate School
University of California, Berkeley
[Unspecified Start] - 1998
Berkeley, California

Did you graduate: Yes
Major/Minor: Chemical Engineering
Degree Received: Master's

College/University
University of California, Davis
[Unspecified Start] - 1996
Davis, California

Did you graduate: Yes
Major/Minor: Biochemical and Chemical Engineering
Degree Received: Bachelor's

Work Experience

Senior Engineer, Clean Transportation Program
2/2013 - Present

Union of Concerned Scientists

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?
Yes

[redacted]

Duties
Responsible for technical and policy analysis to support the adoption of transportation solutions that reduce global warming emissions, air pollution and petroleum use. Work includes advocacy at the federal and state level for policies that increase the adoption and use of electric drive vehicles like plug-in electric cars and hydrogen fuel cell vehicles. Expertise in U.S. and California vehicle policy, including providing technical comments and testimony on the California's Advanced Clean Cars II regulations.

Senior Member of the Technical Staff
7/2007 - 2/2013

Sandia National Laboratories
Livermore, California

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Compared the costs/benefits of electric and hydrogen vehicles under different technology and policy assumptions by using parametric analysis for the Department of Energy's Office of Energy Efficiency and Renewable Energy. Analyzed impact of alternative vehicles on key environmental and energy metrics and examined potential regional differences in technology adoption or performance.
Built models of alternative vehicle and fuel adoption for both domestic and international markets to inform Department of Energy (DOE) decision making.

Limited Term Technical Staff
1/2005 - 7/2007

Sandia National Laboratories
Livermore, California

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Microfluidic Research

Postdoctoral Researcher, Microfluidics Department
5/2002 - 1/2005

Sandia National Laboratories
Livermore, California

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Microfluidic research

Certificates and Licenses

Skills

Office Skills

Typing:
Data Entry:

Additional Information

References

Professional
Phartiyal, Pallavi
VP of Programs, Policy & Advocacy, Union of Concerned Scientists
[redacted]

Professional
Anair, Don
Deputy Director, Clean Transportation Program, Union of Concerned Scientists
[redacted]

Resume

Text Resume

Attachments

Attachment	File Name	File Type	Created By
20230324 Reichmuth short resume.pdf	20230324 Reichmuth short resume.pdf	Resume	Job Seeker

Agency-Wide Questions

1. Q: How did you find out about this position?
   A: Other

2. Q: If other, please tell us where.
   A: Current Advisory Board Member

3. Q: Are you currently legally authorized to work in the United States on a full-time basis?
   A: Yes

4. Q: Are you related to any District employee or Board member?
   A: No

5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?
   A: No

6. Q: If related to a District employee or Board member, what is their name and their relationship to you?
   A: N/A

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to air quality, climate change, or health impacts of air pollution, with a focus on particulate matter exposure reduction. Please describe how you think your experience (professional and lived) can be valuable to the Air District and provide any relevant references. Include any relevant leadership positions, accomplishments, publications or awards. Note, we recognize individuals may not have experience in all the categories listed here – please include information in your areas of expertise.

   A: I have over 10 years' experience in the field of low-carbon transportation research, with a focus on the electrification of light-duty vehicles as a solution to meet air quality and global warming emissions targets. I currently am a Senior Engineer in the Clean Transportation program at the Union of Concerned Scientists (UCS), where I am deeply engaged in both policy and analysis work.
   I was our organization's leader for analysis and advocacy work supporting the adoption of the Advanced Clean Cars II (ACCII) regulation in 2022 by the California Air Resources Board (CARB). I engaged with CARB staff to improve their cost estimates of zero emission vehicle (ZEV) technologies and produced analysis of the fleet turnover and global warming emissions impacts of higher ZEV sales requirements. This work helped lead to the development of a ZEV requirement that will require ZEVs make up about 35% of new car sales for model year 2026 vehicles. The ACCII regulations will provide significant global warming and criteria pollutant emissions reductions.
   My research at UCS has included the use of a reduced-form air quality model (InMAP) to estimate the exposure to fine particulate matter (PM2.5) from on-road transportation. As part of this research, we investigated the relationship between race, ethnicity, and income to exposure and found that people of color and low-income communities are exposed to substantially more PM2.5 pollution from cars, trucks and buses than other demographic groups in California [1]. I am currently working on a project (in partnership with an EJ organization) to use CARB's EMFAC emissions and fleet databases in conjunction with the InMAP model to investigate the contribution from older (pre-2004) gasoline and diesel vehicles to PM2.5 exposure and our preliminary findings show that the air pollution from these vehicles is significant, with 69% of all nitrogen oxides exhaust from passenger vehicles coming from the oldest 18% of vehicles. Because of the location of older vehicles, the resulting particulate matter pollution disproportionately harms people of color, lower-income households, and areas designated by the state as disadvantaged communities by the CalEnviroScreen tool.
   I also have experience in the lifecycle analysis of global warming emission from vehicles [2]. This work has been used to advocate at the federal, state, and local level for the rapid transition from combustion-engine powered vehicles to electric drive vehicles.

   [1] Reichmuth, David. Inequitable Exposure to Air Pollution from Vehicles in California: Who Bears the Burden? Union of Concerned Scientists, 2019. JSTOR, http://www.jstor.org/stable/resrep24108.
   [2] Reichmuth, David, et al. Driving Cleaner: Electric Cars and Pickups Beat Gasoline on Lifetime Global Warming Emissions. Union of Concerned Scientists, 2022. JSTOR, http://www.jstor.org/stable/resrep42203

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2. Q: Please describe any environmental justice (EJ) and/or other public health, equity, or social justice work you have been a part of and how it relates to EJ issues in the Bay Area. If you have not been a part of such work, please include your understanding of the topic and of the work required by local governments, like the Air District.

   A: My work at the Union of Concerned Scientists (UCS) has included research into inequities in exposure to fine particulate matter pollution that results from light-duty vehicle use in the state [1]. I am currently working with a local EJ organization to investigate the contributions to exposure from older gasoline and diesel vehicles. We intend to use this research to advocate for funding of new and existing programs to reduce use of these polluting vehicles, through replacement with cleaner vehicles or by removing barriers to

mode-shifting.
I also collaborated with the Greenlining Institute in a report on low- and zero-emissions zones, including the equity considerations of this local emissions reduction tool [2].

[1] Reichmuth, David. Inequitable Exposure to Air Pollution from Vehicles in California: Who Bears the Burden? Union of Concerned Scientists, 2019. JSTOR, http://www.jstor.org/stable/resrep24108.
[2] https://greenlining.org/2021/zero-emissions-zones-vehicle-electrification/

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3. Q: The Air District may soon begin the process of developing an attainment plan for particulate matter for inclusion in the State Implementation Plan (SIP). Please explain your experience that would be useful for working with and implementing the Clean Air Act, particularly around the development of plans to attain the National Ambient Air Quality Standards. If you can, please include examples of innovative strategies to use discretionary authorities to develop an approvable plan that also considers cumulative impacts and reduces air quality disparities in overburdened communities and advances environmental justice.

   A:
   I do not have direct experience with the development of a SIP. However, I am very familiar with development of state-level mobile source regulations and incentive programs and participated in the public workshops for the 2020 Mobile Source Strategy. I also have experience using tools like CalEnviroScreen to identify burdened communities.

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4. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

DAVID REICHMUTH, Ph.D.
[redacted]

EDUCATION

University of California, Berkeley
Doctor of Philosophy, Chemical Engineering, December 2002.
Thesis advisors: Professors Harvey Blanch and Jay Keasling.
Master of Science, Chemical Engineering, December 1998.

University of California, Davis
Bachelor of Science, Biochemical & Chemical Engineering, June 1996.
Graduated with honors.

EXPERIENCE

2/13 - present
Senior Engineer, Clean Transportation Program, Union of Concerned Scientists, Oakland, CA

- Responsible for technical and policy analysis to support the adoption of transportation solutions that reduce global warming emissions, air pollution and petroleum use. Work includes advocacy at the federal and state level for policies that increase the adoption and use of electric drive vehicles like plug-in electric cars and hydrogen fuel cell vehicles. Expertise in U.S. and California vehicle policy, including providing technical comments and testimony on the California's Advanced Clean Cars II regulations.

7/07 - 2/13
Senior Member of the Technical Staff, Systems Biology, Sandia National Laboratories, Livermore, CA
1/05 - 7/07
Limited Term Technical Staff, Microfluidics Department, Sandia National Laboratories
5/02 - 1/05
Postdoctoral Researcher, Microfluidics Department, Sandia National Laboratories

- Compared the costs/benefits of electric and hydrogen vehicles under different technology and policy assumptions by using parametric analysis for the Department of Energy's Office of Energy Efficiency and Renewable Energy. Analyzed impact of alternative vehicles on key environmental and energy metrics and examined potential regional differences in technology adoption or performance.
- Built models of alternative vehicle and fuel adoption for both domestic and international markets to inform Department of Energy (DOE) decision making.

SELECTED PUBLICATIONS AND PRESENTATIONS

D. Reichmuth, J. Dunn, and D. Anair
"Driving Cleaner: Electric Cars and Pickups Beat Gasoline on Lifetime Global Warming Emissions."
Union of Concerned Scientists: Cambridge, MA (2022).
JSTOR, http://www.jstor.org/stable/resrep42203

L. Aguayo, D. Reichmuth, and C. Weintraub
"Low- and Zero-Emissions Zones."
Union of Concerned Scientists: Cambridge, MA (2021).
https:/www.ucsusa.org/resources/low-and-zero-emissions-zones

D. Reichmuth
"Inequitable Exposure to Air Pollution from Vehicles in California: Who Bears the Burden?"
Union of Concerned Scientists: Cambridge, MA (2019).
JSTOR, http://www.jstor.org/stable/resrep24108.

M.C. Pinto de Moura and D. Reichmuth.
"Inequitable exposure to air pollution from vehicles in the Northeast and Mid-Atlantic."
Union of Concerned Scientists: Cambridge, MA (2019).

D. Reichmuth
"Going from Pump to Plug: Adding Up the Savings from Electric Vehicles,"
Union of Concerned Scientists: Cambridge, MA (2017).

R. Nealer, D. Reichmuth, and D. Anair
"Cleaner Cars from Cradle to Grave,"
Union of Concerned Scientists: Cambridge, MA (2015).

D.S. Reichmuth, A.E. Lutz, D.K. Manley, and J.O. Keller
"Comparison of the Technical Potential for Hydrogen, Battery Electric, and Conventional Light-Duty Vehicles to Reduce Greenhouse Gas Emissions and Petroleum Consumption in the United States,"
International Journal of Hydrogen Energy, vol 38, pp 1200-1208 (2013).

G. Barter, D. Reichmuth, T. West, and D. Manley
"The Future Adoption and Benefit of Electric Vehicles: A Parametric Assessment,"
SAE International Journal of Alternative Powertrains, vol 2, pp 82-95 (2013).

G.E. Barter, D. Reichmuth, J. Westbrook, L.A. Malczynski, T.H. West, D.K. Manley, K.D. Guzman, and D.M. Edwards
"Parametric Analysis of Technology and Policy Tradeoffs for Conventional and Electric Light-Duty Vehicles,"
Energy Policy, vol 46, pp 473-488 (2012).

D.S. Reichmuth, T.E. Drennen, and J.O. Keller
"Impact of Hydrogen Vehicles on U.S. Greenhouse Gas Emissions and Petroleum Use," 9th Fuel Cell Science, Engineering and Technology Conference, American Society of Mechanical Engineers, Washington, DC, August 2011.

GARIMA RAHEJA

RECENT EXPERIENCE

AIR QUALITY FELLOW

US DEPARTMENT OF STATE & US ENVIRONMENTAL PROTECTION AGENCY

SEPTEMBER 2018 – PRESENT

- US Department of State Air Quality Fellow for US Consulate Kolkata, India. I serve as an expert adviser for the Kolkata Consulate's air quality team by giving presentations and offering project-based recommendations.
- During Air Quality Awareness Week (May 9-16), I gave a presentation to US Diplomats, local scientists, and social media managers regarding air pollution changes due to COVID-19, recovery strategies, and monitoring recommendations.
- On World Environment Day (June 5), I gave a presentation to 100+ youth through the India Clean Air Champions program, and I am starting to serve as a long-term mentor for a select cohort of the students.
- 2019 and before: As a US State Department Air Quality Fellow, I'm part of a team of specialists developing a USDOS Air Quality App to provide real-time high-quality pollution information for US strategic outposts. I also offer scientific commentary on current State Department air pollution-related projects.

COMMUNITY SCIENCE FELLOW

AMERICAN GEOPHYSICAL UNION – THRIVING EARTH EXCHANGE

NOVEMBER 2019 – PRESENT

- As the Community Science Fellow, I am a liaison between community activists, scientists, Ohio EPA, legislators, investors, and nonprofits in the Ohio River Valley, co-producing plans for sustainable development and economic growth while monitoring and assessing environmental risk. Bringing community-science based facilitation models, I help create town halls, public meetings, scientific translations, and more.

EDUCATION

COLUMBIA UNIVERSITY

Doctoral Candidate – Earth and Environmental Science

UC BERKELEY

Bachelors – Data Science; Civil and Environmental Engineering

INTERVIEW HIGHLIGHTS

- Current Advisory Council Member
- Experienced in air quality monitoring in overburdened communities in the Bay Area
- Direct experience doing technical work with community-based organizations
- Created a course on how to collaborate with community members on participatory science projects
- Deep understanding of the key facets of working with environmental justice communities
- Excellent understanding of the current science on cumulative impacts

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **highly qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-01 - Advisory Council Member

Contact Information -- Person ID: 45036899

Name:	Garima Raheja	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Doctorate

Preferences

Minimum Compensation:	$0.00 per year
Are you willing to relocate?	
Types of positions you will accept:	Regular , Temporary , Seasonal , Internship
Types of work you will accept:	Full Time , Part Time , Per Diem
Types of shifts you will accept:	Day , Evening , Night , Rotating , Weekends , On Call (as needed)

Objective

Garima Raheja is a PhD candidate at Columbia University, with a BS Civil/Environmental Engineering + BA Data Science from UC Berkeley. She is an air pollution researcher, community organizer, and advocate for marginalized peoples, dedicated to creating environmental justice, with experience at local, regional, and international levels. Garima seeks to bring the voice of young, queer, & POC, which are identities severely underrepresented in the BAAQMD Advisory Council.

Education

College/University
University of California, Berkeley
berkeley.edu
8/2015 - 6/2019
Berkeley, California

Did you graduate: Yes
Major/Minor: BS Civil and Environmental Engineering
Degree Received: Bachelor's

College/University
University of California, Berkeley
berkeley.edu
8/2015 - 6/2019
Berkeley, California

Did you graduate: Yes
Major/Minor: BA Data Science - Sustainable Development Emphasis
Degree Received: Bachelor's

Graduate School
Columbia University in the City of New York
8/2020 - [Unspecified End]
New York, New York

Did you graduate:
Major/Minor: Earth and Environmental Science
Degree Received: Doctorate

Work Experience

Air Quality Fellow
9/2018 - Present

US Department of State + US Environmental Protection Agency
Washington, District of Columbia

Hours worked per week: 10
Monthly Salary: $0.00
May we contact this employer?

Duties
Present: US Department of State Air Quality Fellow for US Consulate Kolkata, India. I serve as an expert adviser for the Kolkata Consulate's air quality team by giving presentations and offering project-based recommendations. During Air Quality Awareness Week (May 9-16), I gave a presentation to US Diplomats, local scientists, and social media managers regarding air pollution changes due to COVID-19, recovery strategies, and monitoring recommendations. On World Environment Day (June 5), I gave a presentation to 100+ youth through the India Clean Air Champions program, and I am starting to serve as a long-term mentor for a select cohort of the students. I am now serving as an advisor for the Consulate's inaugural Air Quality Hackathon, which will engage youth, stakeholders, and corporations across India. Once a month, I meet with other USDOS AQ Fellows to discuss novel research and collaboration opportunities.

2019 and before: As a US State Department Air Quality Fellow, I'm part of a team of specialists developing a USDOS Air Quality App to provide real-time high-quality pollution information for US strategic outposts. I also offer scientific commentary on current State Department air pollution-related projects.

Community Science Fellow
11/2019 - Present

American Geophysical Union - Thriving Earth Exchange
thrivingearthexchange.org
Washington, District of Columbia

Hours worked per week: 15
Monthly Salary: $0.00
# of Employees Supervised: 5
Name of Supervisor: Raj Pandya - Director
May we contact this employer?

Duties
AGU's Thriving Earth Exchange strengthens and enhances collaboration among communities, scientists, and partner organizations so that all communities can build healthy, resilient, thriving, just, and ecologically responsible futures. Thriving Earth Exchange is a leader in contributing to global well-being by supporting communities' awareness and application of science, and promotes equity by ensuring that all communities benefit from the opportunity to participate in, contribute to, and guide the use of scientific knowledge.

As the Community Science Fellow, I am a liaison between community activists, scientists, Ohio EPA, legislators, investors, and nonprofits in the Ohio River Valley, co-producing plans for sustainable development and economic growth while monitoring and assessing environmental risk. Bringing community-science based facilitation models, I help create town halls, public meetings, scientific translations, and more.

Fall Meeting Leadership Team - Science/Society/Art Section Leader
8/2018 - 12/2020

Hours worked per week: 10
Monthly Salary: $0.00
May we contact this employer?

American Geophysical Union
www.agu.org
Washington, District of Columbia

Duties
The American Geophysical Union Fall Meeting is the largest conference of geoscientists, attended by 30,000 members from across the world and from hundreds of disciplines. As the incoming Lead for the Science/Society/Art Section, I chair the committee which strategizes, plans, and executes sessions and events that bring together artists, scientists, regulators, and policymakers towards common goals, primarily at the Fall Meeting but increasingly year-round. As the Section Lead, I am a lead convener for Science/Society/Art sessions, selecting which abstracts are accepted into the conference, assessing the rigor and quality of projects, and selecting whether abstracts are granted oral or posters or eLightning sessions. I meet regularly with AGU executive-level staff and advise on diversity and inclusion efforts, drafting public statements and creating program plans to increase equity throughout the Fall Meeting. Before serving as a Section Lead, I served as a Committee Member for 2 years, during which I was responsible for creating the current Committee structure, setting up networking infrastructure used by Committee leads and section members, and hosting events at the Fall Meeting.

Reason for Leaving
End of term

Environmental Equity Researcher
12/2019 - 7/2020

Hours worked per week: 20
Monthly Salary: $0.00
May we contact this employer?

University of Washington
Seattle, Washington

Duties
The Center for Air, Climate, and Energy Solutions has developed a suite of free, easy-to-use computational models which offer a new approach to estimating the human health impacts caused by air pollutant emissions, and understanding how those impacts are distributed among different groups of people. As part of my contributions, I:

- Created a network to disburse resources, training materials, customized support, and more to environmental justice nonprofits, community and tribal organizations, and regulatory agencies. Managing outreach to 300+ organizations, I facilitated discussions with 20+ groups including BAAQMD and SMAQMD.

- Developed a walkthrough video featured on the CACES homepage.

- Automated retrieval and analysis of global NO2 data from AirNow and CMU Environmental Sensor Data Repository

- Generated a series of crosswalks between the InMAP model, US Census boundaries, historical race/income/ demographic data, and the 2014 National Emissions Inventory

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Equity Lab Organizer
2/2020 - 4/2020

Hours worked per week: 10
Monthly Salary: $0.00
May we contact this employer?

The Greenlining Institute
Oakland, California

Duties
Founded in 1993, The Greenlining Institute is a policy, research, organizing, and leadership institute working for racial and economic justice. We work on a variety of major policy issues, from the economy to environmental policy, health care and many others, because economic opportunity has many parts, and they all connect.

Working with the Environmental Equity Team, I am co-leading the organization of an Equity Lab session on Prosperity and Collective Ownership for the We The Future Summit in May 2020. (Summit postponed indefinitely due to COVID-19).

Native Endangered Plant Species Seed Banking Fellow - AmeriCorps
9/2019 - 11/2019

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Maui Nui Botanical Garden
Kahului, Hawaii

Duties
Maui Nui Botanical Gardens (MNBG) is dedicated to the protection of Maui Nui's rich native plants and cultural heritage. By collecting, cultivating, and distributing native and Polynesian-introduced plants MNBG provides people with a gathering place to see and understand the important relationship these plants have to our economic, social, and cultural livelihoods.

I managed seed banking and outplanting of native Hawai'ian endangered plant species.I also served as community liaison at fundraising events and group visits, collaborating with Maui Ocean Center, Haleakala National Park, Maui Seabird Recovery Project, and other conservation organizations in Hawai'i.

(300 hour fellowship term)

KSES Scientist
6/2019 - 8/2019

Hours worked per week: 6
Monthly Salary: $0.00
May we contact this employer?

Oakland Unified School District
Oakland, California

Duties
As a KSES Scientist, I helped create and lead a workshop for 6th grade teachers to integrate top-notch weather and climate research into their classroom curriculums. I also developed a workshop curriculum and subsequently visited 5th grade classrooms to lead workshops with students, integrating mapping activities with sensor-based investigations and social justice theory.

Tutor / Volunteer
8/2018 - 5/2019

Hours worked per week: 5
Monthly Salary: $0.00
May we contact this employer?

Leadership High School
San Francisco, California

Duties

Mentor Black and brown high school youth in STEM academic subjects, and provide college guidance.

Environmental Data Scientist
5/2017 - 5/2019

Hours worked per week: 20
Monthly Salary: $0.00
May we contact this employer?

NASA Ames Research Center / Science Systems and Applications
Moffett Field, California

Duties
NASA TCCON is a network of ground-based Fourier Transform Spectrometers recording direct solar spectra in the near-infrared spectral region. From these spectra, accurate and precise column-averaged abundance of CO2, CH4, N2O, HF, CO, H2O, and HDO are retrieved.

I performed data analytics and management for Ground-based Fourier Transform Spectrometers in NASA'S Total Carbon Column Observation Network at the Dryden, CA site. I collaborated with international community of NASA and affiliated institutional scientists to ensure delivery to TCCON public data archive for global climate monitoring and modeling, and satellite validation research.

Funded through NASA/BAERI (Bay Area Environmental Research Institute).

President, Senior Advisor, Project Manager, Associate Consultant
2/2016 - 5/2019

Hours worked per week: 30
Monthly Salary: $0.00
# of Employees Supervised: 60
May we contact this employer?

Bay Area Environmentally Aware Consulting Network
Berkeley, California

Duties
BEACN is the premier environmental and corporate social responsibility consulting club at UC Berkeley. As President, I oversaw the client acquisition, project management, and development for this 100+ member organization and 20+ projects. BEACN has consulted for clients ranging from small businesses to emerging startups to national franchise chains, and Fortune 500 giants on developing business practices that emphasize responsibility to environmental, social, and community values.

Past: Project Manager for national franchise client, leading a team to develop CSR and marketing strategy to be implemented immediately as the client doubles the number of franchises across the country.

Past: Associate Consultant for the fastest growing alternative food manufacturing company in America, creating frameworks and implementations for supply chain reform for sustainable production of high-end meat substitutes.

Past: Associate Consultant for emerging geothermal energy start-up led by energy and finance industry veterans, developing market analysis of competing technologies and quantifying externalities of the client's inventional technology. I collaborated with students and professionals from various disciplines to research and create market entry tools to be utilized in the seed- and early- stage funding acquisitions.

Researcher
1/2016 - 5/2019

Hours worked per week: 30
Monthly Salary: $0.00
May we contact this employer?

University of California Berkeley - Dept of Chemistry - Ron
Cohen Lab
Berkeley, California

Duties
BEACO2N is a new approach to observing atmospheric gases over an urban area. Instead of using a small number of extremely sensitive instruments to measure a large area, we blanket interesting locations with a high density network of instruments, with each instrument representing a network "node." Individually, measurements from these nodes are of moderate quality, but when taken together as a network produce an accurate, highly resolved picture of real-time pollutant concentrations. Each node measures carbon dioxide, a major anthropogenic (human-influenced) contributor to climate change, and reports back to this site where the collected data is publicly available for viewing and download. The nodes also collect data on nitrogen oxides, ozone, and carbon monoxide which are indicators for the overall air quality of an area, and may be useful for tracing the origins of CO2 emissions. These data are not yet ready for public viewing, but will be added to the site soon.

I integrated data from the BEACO2N (Berkeley Atmospheric CO2 Observation Network) Project with historic geospatial emissions inventories to model CO2 concentrations over the Bay Area and create a visualization of this atmospheric model to be exhibited at the Exploratorium Museum of Science in San Francisco, CA. After this project, I worked with total carbon column data to develop tools for understanding local and global emissions using novel total column modeling technology. Presented at AGU 2016 and AGU 2018 conferences.

Abstracts:
https://agu.confex.com/agu/fm18/meetingapp.cgi/Paper/365228
https://agu.confex.com/agu/fm16/meetingapp.cgi/Paper/141901

Field Volunteer
6/2018 - 8/2018

Hours worked per week: 5
Monthly Salary: $0.00
May we contact this employer?

Kaniela Ing Campaign
Honolulu, Hawaii

Duties
As a Field Volunteer, I went door-to-door knocking and phonebanked for advocating for Kaniela Ing. Ing is a radical candidate running on climate change advocacy, native Hawaiian representation, and other social justice platforms.

Climate Researcher
6/2018 - 8/2018

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

University of Hawaii at Manoa
Honolulu, Hawaii

Duties
As a Visiting Researcher, I collaborated with UH scientists to collect atmospheric data and create models of atmospheric stability. I also helped lead a day-long workshop for local community college students interested in working with the School of Ocean Sciences and Technology, facilitating a weather balloon launch and kite- based data collection as well as workshops on local climate issues. While at UH, I participated in twice-a-week public local weather dialogue presentations with the National Weather Service.

Community Advocate and Policy Wonk
8/2017 - 5/2018

Code for Berkeley
Berkeley, California

Hours worked per week: 8
Monthly Salary: $0.00
May we contact this employer?

Duties
As a founding member of Code for Berkeley (a chapter of Code for America), I served as the community liaison and policy wonk on inaugural projects building mobile resources for homeless shelters in Berkeley and web- based services for the Berkeley Fire Department. My role included community surveying and research, as well as development of strategic partnerships to enhance the production and outreach of our projects.

Field Biologist
5/2017 - 7/2017

NOAA National Oceanic and Atmospheric Administration
Newport, Oregon

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
As a Field Biologist, I served aboard a NOAA ship on collecting field data on environmental changes affecting oceans as we sailed from San Francisco, CA to Newport, Oregon on a 15 day oceanic research trip. I underwent rigorous ocean safety and sea emergency preparedness training.

Engineering Consultant
1/2017 - 7/2017

Planting Justice
El Sobrante, California

Hours worked per week: 5
Monthly Salary: $0.00
May we contact this employer?

Duties
Planting Justice is a grassroots organization with a mission to empower people impacted by mass incarceration and other social inequities with the skills and resources to cultivate food sovereignty, economic justice, and community healing. I worked with a team in developing engineering solutions to help the farm become independent from an expensive water utility by developing a pumping system to use water from a natural spring on the farm, while also maintaining sustainable downstream water levels as requested by local Native American groups. We created presentations to ensure that future groups would be able to carry on our work. My team also contributed to planting and weeding work with the farm, helped with planning of planting schedules and locations, and spent a lot of our semester volunteering and listening to other volunteers at the garden.

Director of Environmental Education Policy
8/2015 - 5/2017

Associated Students of the University of California
Berkeley, California

Hours worked per week: 8
Monthly Salary: $0.00
May we contact this employer?

Duties
Worked with the Office of ASUC Senator Wes Adrianson (ECO Senator 2015-2016) and the Office of ASUC Senator Rigel Robinson (ECO Senator 2016-2017) to increase sustainability education on campus. Created infographics and student campaign materials. Met with graduate policy researchers and campus administrative officials to investigate sustainability policy on the Berkeley campus. Currently working on initiating and implementing a sustainability course requirement for

students across the various Berkeley schools.
Past: Communications Coordinator

Course Assistant: Data Science of Social Networks
9/2016 - 12/2016

Hours worked per week: 8
Monthly Salary: $0.00
May we contact this employer?

Berkeley Institute for Data Science (BIDS)
Berkeley, California

Duties
Worked with Professor Dennis Feehan to develop materials for LS 88: Social Networks, a "Connector Course" part of the Berkeley Data Science Initiative. Mentored students in a lab setting and taught students about data analytics, computer science, graph theory, classification, and data-backed social science research.

Earth Science Researcher
6/2016 - 8/2016

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

NASA - National Aeronautics and Space Administration (DEVELOP Program)
Moffett Field, California

Duties
Collaborated with an interdisciplinary team of researchers at the NASA Ames Research Center and professionals at the Bay Area Air Quality Management District (BAAQMD) to integrate satellite (GOSAT, TES), airborne (AJAX), and in situ greenhouse gas measurements, along with NOAA NDFD historical wind forecasts for generating methane hotspot detection algorithms to be used by greenhouse gas measurement projects at BAAQMD. I also created the first-ever algorithm that used simultaneous meteorological measurements for detecting flight-specific planetary boundary layer altitude for the Alpha Jet Atmospheric eXperiment (AJAX).
(SSAI Contractor for NASA DEVELOP at NASA Ames Research Center)

Environmental Sustainability Officer (UC-Wide)
9/2015 - 6/2016

Hours worked per week: 8
Monthly Salary: $0.00
May we contact this employer?

University of California Student Association
Oakland, California

Duties
Provided environmental sustainability policy recommendations for cross-campus implementation for the 9 undergraduate and graduate University of California campuses. Provided detailed monthly reports on the status of sustainability policy and education on the UC Berkeley campus. Represented 285,000 UC students in environmental policymaking.

Lifestlye Columnist
9/2012 - 6/2014

Hours worked per week: 5
Monthly Salary: $0.00
May we contact this employer?

Bay Area News Group
Oakland, California

Duties

Wrote bi-weekly to bi-monthly columns about teen issues and trends. Columns were published online and in nine in-print Bay Area newspapers. 3,000-17,000 hits per online story.

Museum Docent
2/2013 - 2/2014

Hours worked per week: 16
Monthly Salary: $0.00
May we contact this employer?

Exploratorium
San Francisco, California

Duties
Developed demonstrations about thought-provoking scientific topics and presented to visitor crowds at various galleries in the Exploratorium, a museum of science, art, and human psychology. Represented Explainers on the Explainer Committee to facilitate conversations between various Exploratorium departments. Later while at Berkeley, I reconnected with Exploratorium staff and Explainers to collaboratively develop low-cost climate science exhibits, and trained Explainers on navigating climate justice conversations with local and international museum visitors.

Research Apprentice
7/2013 - 9/2013

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Scripps Institute of Oceanography
San Diego, California

Duties
Developed and researched methods for investigating the viability of solar and wind energy systems in times of high electricity demand in coastal communities.

Awarded Gordon Engineering Research Fellowship for excellence in research project.

Certificates and Licenses

Skills

Office Skills

Typing:
Data Entry:

Other Skills

Data Science Expert - 4 years and 0 months

Air Pollution Expert - 5 years and 0 months

Community-Based Science Expert - 3 years and 0 months

Project Management Expert - 4 years and 0 months

Climate Change Research Expert - 5 years and 0 months

Health Impacts Assessment Expert - 5 years and 0 months

Town Hall Organization Intermediate - 2 years and 0 months

Scientific Consulting (Air Pollution) Expert - 4 years and 0 months

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Languages

English - Speak, Read, Write

French - Speak, Read, Write

Hindi - Speak, Read, Write

Korean - Speak, Read, Write

Additional Information

Honors & Awards

Regents' and Chancellor's Scholarship, given to top 2% of students at UC Berkeley (4 year scholarship)

Honors & Awards

Cal Alumni Leadership Award, for exceptional service and leadership in the Berkeley community (4x recipient)

Honors & Awards

Koret Research Scholarship Recipient, for funded independent research outside of UC Berkeley (2x recipient)

Honors & Awards

Regents and Chancellors Research Scholarship Recipient, for exceptional research proposals by Regents Scholars

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Honors & Awards

Gordon Engineering Research Fellowship - Scripps Institute of Oceanography

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Honors & Awards

Dean's Fellowship - Awarded to top PhD Students at Columbia University

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Volunteer Experience

Bay Area Air Quality Management District - Advisory Council

Honors & Awards

Certificate of Congressional Recognition from US Senator Jacky Rosen (D-NV)

Honors & Awards

Women in Science Incentive Prize - The Story Exchange

Honors & Awards

Health Effects Institute - Jane Warren Award

Honors & Awards

NSF Fellowship for the American Meteorological Society - Summer Policy Colloquium

Honors & Awards

NSF Graduate Research Fellowship

References

Resume

Text Resume

Attachments

Agency-Wide Questions

1. Q: How did you find out about this position?

   A: District Website

2. Q: If other, please tell us where.

   A: I have been an Advisory Council member since 2021.

3. Q: Are you currently legally authorized to work in the United States on a full-time basis?

   A: Yes

4. Q: Are you related to any District employee or Board member?

   A: No

5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?

   A: No

6. Q: If related to a District employee or Board member, what is their name and their relationship to you?

   A: N/A

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to air quality, climate change, or health impacts of air pollution, with a focus on particulate matter exposure reduction. Please describe how you think your experience (professional and lived) can be valuable to the Air District and provide any relevant references. Include any relevant leadership positions, accomplishments, publications or awards. Note, we recognize

individuals may not have experience in all the categories listed here – please include information in your areas of expertise.

A: ---- EDUCATION ----

-- MA + PhD, Columbia University - Dept of Earth and Environmental Science (Air Pollution & Atmosphere)
Thesis: Using low-cost sensors and data science techniques for measuring and mitigating PM2.5 in low-resource urban areas in Africa, Asia and the United States
Reference: Prof Dan Westervelt, danielmw@ldeo.columbia.edu (August 2020 - present)

-- BA, University of California Berkeley - Data Science (Emphasis: Sustainable Development and Engineering)
-- BS, University of California Berkeley - Civil and Environmental Engineering
Reference: Prof Ron Cohen, rccohen@berkeley.edu (August 2015 - June 2019)
Research: Using sensors to understand urban CO2 heterogeneity

---- EXPERIENCES ----

Personal Experience: My name is Garima Raheja (she/hers). I'm a young, brown woman, an air and climate researcher, and a community activist. I seek to represent marginalized communities on the BAAQMD Advisory Board, since the identities I represent are severely underrepresented in this Board and generally in this field of work. I bring a high level of expertise to the table, including technical expertise in air pollution monitoring, modeling, and liaising between agencies, as well as deep ties to a multitude of Bay Area communities groups and grassroots organizations. I grew up in New Delhi, where air pollution has become the status quo, harming my family every single day. My research now is focused on community-based mitigation strategies for anthropogenic air pollution and climate change, and I strive to bring equity to my community and my people. I have highlighted key positions and experiences below; I am happy to provide any references or recommendations as desired.

– BAAQMD Advisory Councilmember (2021 - current)

– Fieldwork experience including setting up the first reference-grade PM2.5 monitor in the country of Togo, utilizing low-cost sensors, collaborating with governing agencies and scientists on research and exposure mitigation in Togo, Ghana, Burkina Faso, Rwanda, Kenya, South Korea, France, UK, India, and Brazil

-- US Dept of State / US EPA Air Pollution Fellow (4 years) - Expert consultant for the US Consulate in Kolkata, India, advising on regional air pollution issues and exposure reduction and health-related community education

-- Univ of Washington Environmental Equity Researcher (1 year) - Developing network to distribute open-source air modeling tools to 300+ orgs and facilitate conversations with 20+ groups including BAAQMD

-- UC Berkeley Dept of Chem - BEACO2N Project (Ron Cohen Lab) (3 years) - Atmospheric and air pollution researcher for sensor network project + educational materials for local schools

-- NASA Total Carbon Column Observation Network (2 years) - Staff data scientists for global NASA project

-- NASA / BAAQMD Project (summer 2016) - Created pipeline of data and tools between NASA Alpha Jet Atmospheric Experiment and BAAQMD divisions

-- Bay Area Environmentally Aware Consulting Network - president of consulting organization of 100+ members doing 20+ environmental and social justice projects with

nonprofits, govt, corporations

-- University of Hawaii at Manoa - Climate and atmospheric guest researcher

-- Scripps Institute of Oceanography / UC San Diego - research apprentice in electricity demand forecasting

— PUBLICATIONS —
(in prep) Raheja, G., et al. A Universal Correction Factor for Low-Cost PM2.5 monitors using Gaussian Mixture Regression Trained On a Global Colocation Dataset
(in prep) Raheja, G., et al. Legal pathways for integrating community air pollution science and low-cost sensing into regulatory and permitting frameworks.
(in review) Raheja, G., et al (2022). Low-Cost Sensor Performance Intercomparison, Correction Factor Development, and 2+ Years of Ambient PM2.5 monitoring in Accra, Ghana. Environmental Science & Technology.
(in review) Hèzouwè Sonla , Kokou Sabi , Raheja, G., et al (2022). Daily PM2.5 concentrations levels at Agoè-Minamadou in the city of Lomé, Togo. Clean Air Journal.
(accepted) Bonilla, E., Mickley, L., Raheja, G., et al (2022). Health impacts of smoke exposure in South America. Environmental Research Health.
Raheja, G. et al. (2022). Community-Based Participatory Research for Low-Cost Air Pollution Monitoring in the Wake of Unconventional Oil and Gas Development in the Ohio River Valley - Empowering Impacted Residents through Community Science. Environmental Research Letters. https://iopscience.iop.org/article/10.1088/1748-9326/ac6ad6 (media coverage) (top 5% of all research tracked by Altmetric)
Raheja, G. et al. (2022). Two Years of Field-Calibrated Low-Cost Sensor Measurements of PM2.5 in Lomé, Togo. ACS Earth and Space Chemistry. https://pubs.acs.org/doi/10.1021/acsearthspacechem.1c00391. (top 5% of all research tracked by Altmetric)
Jeanty, Julia and Raheja, G. (2021). A Breath of Fresh Air: Policies for Comprehensive Asthma Mitigation in New York State. Data For Progress. Retrieved from https://www.filesforprogress.org/memos/policies_for_comprehensive_asthma_mitigation_in_new_york_state.pdf
Raheja, G., Goodkind, A., Tessum, C., Coggins, J., Hill, J., & Marshall, J. (2020, June 7). Census demographic data for the InMAP Source-Receptor Matrix (ISRM) dataset. Zenodo. Retrieved from https://doi.org/10.5281/zenodo.3884115.
McFarlane, C., Raheja, G., Malings, C., Appoh, E. K., Hughes, A. F., & Westervelt, D. M. (2021). Application of gaussian mixture regression for the correction of low cost PM2.5 Monitoring Data in Accra, Ghana. ACS Earth and Space Chemistry, 5(9), 2268−2279. https://doi.org/10.1021/acsearthspacechem.1c00217

— LEADERSHIP —
− AGU Community Science Fellow (2019 - present): liaising between community groups, federal, state and local agencies and university scientists on developing low-cost PM2.5 and tVOC monitoring networks and conducting exposure and inequity analysis
− AGU Art and Science Section Co-Lead (2017-2020)
− Environmental Sustainability Officer, UC Student Association (student government of all 9 UC campuses of 285,000 students)
− Director of Environmental Education, Associated Students of UC Berkeley (representing 41,000 UCB students)
− US-Korea Young Climate Activists Program (Selected as one of 10 climate activists in the US by the US Embassy in Seoul to conduct climate diplomacy with grassroots organizations and top-level policymakers in South Korea)
− Data for Progress Fellow (Data for Progress is an analytical think-tank for the future of progressivism. I collaborated with DFP to produce memos and policy briefs, most recently including the Asthma Policy Memo presented to NY State lawmakers.)
− Columbia Earth Institute Postdoc Selection Committee
− Co-Founder, South Asians for Black Lives (featured in NYTimes, MIT Tech Review)

− Data Team, Sunrise Movement

— AWARDS —
Certificate of Congressional Recognition from US Senator Jacky Rosen (D-NV) 2022: Awarded for diplomatic efforts with climate activists and governing bodies in South Korea
Women in Science Incentive Prize - The Story Exchange 2022: Awarded $5,000 in recognition of work in the air quality field
Health Effects Institute - Jane Warren Award 2022: The HEI JW Award is given to 6 scientists at the Annual Meeting for outstanding research on the health effects of air pollution
NSF Fellowship for the American Meteorological Society - Summer Policy Colloquium 2022: The selective Fellowship is awarded to outstanding graduate students in the Policy Colloquium
NSF Graduate Research Fellowship 2022: Prestigious 3-year fellowship recognizes outstanding graduate students in STEM disciplines
Dean's Fellowship, Columbia University 2020: Awarded to top incoming PhD students at Columbia University
Regents' and Chancellor's Scholarship: Awarded to top 2% of undergraduates at UC Berkeley
Cal Alumni Leadership Award: Exceptional service and leadership in the Berkeley community
Koret Research Scholarship: Excellence in independent atmospheric research conducted at the Univ of Hawaii, Manoa
Regents' and Chancellor's Research Scholarship: Excellence in research conducted by a University of California Regents Scholar

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2. Q: Please describe any environmental justice (EJ) and/or other public health, equity, or social justice work you have been a part of and how it relates to EJ issues in the Bay Area. If you have not been a part of such work, please include your understanding of the topic and of the work required by local governments, like the Air District.

A: - My PhD work is deeply rooted in environmental justice: I work on using low-cost sensors and community based approaches for monitoring and mitigating air pollution exposure. The scope of my work is across Africa, Asia and in many communities in the US including Ohio, NYC, the Bay Area and more. I have published papers on sensor data correction methodology and using networks of sensors for understanding disproportionate exposure in communities and have presented my EJ work extensively in scientific communities, including to the National Academies of Science Standing Committee on Medical and Epidemiological Aspects of Air Pollution and the World Climate Research Program, and have worked with local governments in multiple countries on issues of creating policy for mitigating harmful impacts.
- As one of the first AGU Community Science Fellows, I liaise between community groups, federal, state and local agencies and university scientists on developing low-cost PM2.5 and tVOC monitoring networks and conducting exposure and inequity analysis. I also now mentor new AGU Community Science Fellows.
- As President of the Bay Area Environmentally Aware Consulting Network, I led 100+ students in 20+ environmental and social justice consulting projects, such as cradle-to-grave accounting, product development, employment and immigration reform, bike lane advocacy and more
- I led the development and teaching of two semesters of the Race, Climate Change and Environmental Justice Seminar at Columbia. I designed syllabus, led lecture (attended by 100+ undergrad/grad students/faculty in conversation with invited guests speakers such as Dr Robert Bullard, Dr Mona Hanna-Attisha, and more) and discussion (20+ students) with hands-on activities and guest speakers, created accessibility through live captioning, reviewed final assignments, led 20+ students in co-writing a Community Research Handbook. This seminar was the recipient of $500,000 Graduate Equity Initiative Award to hire a postdoc, adjunct faculty, and create seed funding for graduate training in community-based environmental science projects for 3 years of future iterations of RCEJ class.

- I also developed and taught a semester-long "Environmental Injustice" course for low-income high school students in NYC, in collaboration with the Columbia Double Discovery Center
- I have trained teachers in the Oakland Unified School District on teaching environmental justice in elementary school classrooms (in collaboration with BASIS and Community Resources for Science)
- I convened an Innovative Session at the American Geophysical Union Fall Meeting 2020 with 80+ attendees with invited guest speakers from local government, the White House, community activists and more
- I frequently do science communication events about environmental justice for the general public, including at middle schools in the Bay Area, community centers in NYC, and elementary schools in remote India, and also at adult education centers in France
- I co-founded South Asians 4 Black Lives, a woman-led initiative to counter anti-Blackness in South Asian communities; our group's Instagram advocacy page has about 50,000 active followers and we have done events with prominent Indian-American activists including Sohla El-Waylly (from Bon Appetit), Zahra Billoo (Council on American Islamic Relations) and the Blindian Project.

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3. Q: The Air District may soon begin the process of developing an attainment plan for particulate matter for inclusion in the State Implementation Plan (SIP). Please explain your experience that would be useful for working with and implementing the Clean Air Act, particularly around the development of plans to attain the National Ambient Air Quality Standards. If you can, please include examples of innovative strategies to use discretionary authorities to develop an approvable plan that also considers cumulative impacts and reduces air quality disparities in overburdened communities and advances environmental justice.

A: I have experience in planning sensor networks, setting up reference-grace and low-cost sensors, analyzing / calibrating / correcting the big data from large networks and comparing collected data with NAAQS and WHO Air Quality Guidelines to ascertain attainment. I suggest that low-cost air pollution monitoring networks, developed in conjunction with community groups (especially AB 617 communities that are on the frontlines of environmental injustice and are receiving support from existing policies), should be a major part of the SIP. In the past 5-10 years there has been immense advancement in low-cost sensor science and acceptance, and now they are being considered seriously at many agencies including at the USEPA. Dense urban networks can help understand exposure inequity in ways that reference monitors lag behind, and can have a much greater reach in marginalized communities, such as low-income communities, homeless populations, disabled residences, and more where real-time ambient sensor data can be vital for making informed personal health protection decisions. Further, low-cost sensor networks offer deep opportunities for community involvement, education, and meaningful and substantial participation.

Additionally, we must consider revising our permit structures to account for cumulative impact and further include additional considerations regarding racial and socioeconomic factors in the permitting process. This can be performed by incorporating a multitude of novel observations like low-cost sensors as mentioned above, field campaigns, satellite data, and novel model results such as those from the InMAP collaboration. While there is possibility that such revisions to permitting structure might be challenged in court, they are important to consider because of (1) BAAQMD's legacy of leadership, especially when it comes to rulemaking and equity and the importance of continuing that, and (2) setting legal precedent in our region might then support local agencies in other communities where environmental justice faces big challenges, and that changes started by BAAQMD, even if small and local, might then magnify in effect throughout the state and the country. As the first regional air pollution control agency, we hold a responsibility to make bold and forward-

thinking changes and lead other agencies in doing the same.

While monitoring and permitting are important aspects that should be considered for the State Implementation Plan, mitigation is also a vital challenge and should be addressed through interagency teams. One of the biggest emissions and therefore mitigation challenges that I believe shows immense promise in solutions is transportation. Working together with BART, MTC, the SF Bay Ferry system, the Bay Area Toll Authority, and AC Transit to develop additional, faster, and safer public transportation is an important first step in mitigating PM2.5 exposure but also increasing economic access and quality of life in the Bay Area. Public transit access and safety remains an increasing concern for many marginalized communities in the Bay Area, but promoting campaigns such as the BART "Not One More Girl" campaign seeking to reduce gender-based violence on public transit, and promoting affordable housing close to public transit, can help increase ridership. Further, there have been efforts around the country to increase adoption of electric vehicles and electric bikes, and to increase access to bikeshare programs. In NYC for example, CitiBike has increased participation from low-income communities by offering reduced-price ($5/month) memberships in low-income zip codes and also to SNAP-eligible families. Working hand-in-hand with public agencies and also private providers such as Lyft to create door-to-door public transportation and micromobility solutions can engender a cleaner air future for the Bay Area and also increase access to jobs and facilitate sustainable tourism.

In conclusion, I believe that creating a feasible and forward-thinking SIP is a challenge but one that BAAQMD is perfectly equipped to rise to considering its deep ties with agencies across the Bay Area and the immense knowledge, drive and capabilities of the staff of the Air District. I have learned a lot from my first term as an Advisory Councilmember, and look forward to applying what I have learned in conjunction with my technical skills and personal experiences, working together with the new Council to lead the way to clean air.

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4. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

A: Yes

GINA SOLOMON

RECENT EXPERIENCE

PRINCIPAL INVESTIGATOR
PUBLIC HEALTH INSTITUTE
FEBRUARY 2018 – PRESENT

- Leading a 3-year project to develop air filtration for homes of farmworkers in the Central Valley of California to protect people from air pollution and wildfire smoke. We are also measuring cumulative exposure to multiple pollutants and their biological effects in women farmworkers.
- Conducting a 3-year research project on drinking water contaminants across California and completed a 2-year project monitoring for drinking water contaminants in the area affected by the 2018 Camp fire.
- Conducting research projects on community environmental and health resilience, harmful algal blooms, and hormone residues in beef and potential risk of breast cancer.
- Completed studies on the mental health effects of the COVID pandemic in hospital workers, and on air pollution and COVID morbidity and mortality in California.
- Conducted a research project evaluating the California Green Chemistry Initiative; published a report and a scientific paper; presented the findings at a joint hearing of the California legislature.
- Convened a range of environmental, health, environmental justice, and labor groups to develop consensus recommendations for California Governor Gavin Newsom on environmental health and justice.

DEPUTY SECRETARY FOR SCIENCE AND HEALTH
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
MAY 2012 – JANUARY 2018

- Appointed by Governor Jerry Brown as science advisor to the Secretary; provided advice and information on issues related to toxicology, health, and risk assessment; oversaw activities related to chemical contaminants in drinking water; coordinated California's response to domoic acid contamination in shellfish.

EDUCATION

YALE UNIVERSITY
Doctorate – Medicine
HARVARD UNIVERSITY
Masters – Occupational Medicine
BROWN UNIVERSITY
Bachelors – Comparative Literature

INTERVIEW HIGHLIGHTS

- Current co-chair of the Advisory Council
- Published several papers on cumulative impacts
- Many collaborative projects with community members
- High-level government experience

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **highly qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-04 - Advisory Council

Contact Information -- Person ID: 35761055

Name:	Gina M Solomon	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	[redacted]
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California , Class C
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Doctorate

Preferences

Minimum Compensation:	$0.00 per hour; $0.00 per year
Are you willing to relocate?	
Types of positions you will accept:	
Types of work you will accept:	
Types of shifts you will accept:	Day , Evening

Objective

Education

Graduate School
Harvard University School of Public Health
6/1993 - 6/1994
Boston, Massachusetts

Did you graduate: Yes
Major/Minor: Occupational Medicine
Degree Received: Master's

Professional
Yale University School of Medicine
5/1987 - 5/1991
New Haven, Connecticut

Did you graduate: Yes
Major/Minor:
Degree Received: Professional

College/University
Brown University
5/1982 - 5/1986
Providence, Rhode Island

Did you graduate: Yes
Major/Minor: Comparative Literature
Degree Received: Bachelor's

Work Experience

Principal Investigator
2/2018 - Present

Public Health Institute

Hours worked per week: 36
Monthly Salary: $0.00
# of Employees Supervised: 3
Name of Supervisor: Matthew

http://www.phi.org/people/?name=gina-solomon
555 12th Street, 6th Floor
Oakland, California 94602
[redacted]

Marsom - Vice President
May we contact this employer?
Yes

Duties
• Leading a U.S. EPA-funded project to develop and test filtration for evaporative ("swamp") coolers to protect Central Valley farmworkers from high concentrations of wildfire smoke and particulate matter inside their homes.
• Leading a project funded by the California Breast Cancer Research Program to measure exposure to air pollution in women farmworkers in the Central Valley, along with urinary biological markers of oxidative and nitrative stress and chromosomal alterations.
• Conducting a 3-year research project studying drinking water contaminants across California.
• Conducting research projects on community environmental and health resilience strategies related to heat exposure, wildfire smoke exposure, and other climate stressors in farmworker communities in California.
• Conducted a research project evaluating the California Green Chemistry Initiative; published a report and a scientific paper; presented the findings at a joint hearing of the California legislature.

Reason for Leaving
NA

Deputy Secretary for Science and Health
5/2012 - 1/2018

California Environmental Protection Agency
www.calepa.ca.gov
1001 I Street
Sacramento, California 95812
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
# of Employees Supervised: 1
Name of Supervisor: Matthew Rodriquez - Secretary, Environmental Protection
May we contact this employer?
Yes

Duties
• Appointed by Governor Jerry Brown as science advisor to the Secretary; provided advice and information on issues related to toxicology, health, and risk assessment; oversaw activities related to chemical contaminants in drinking water; coordinated California’s response to domoic acid contamination in shellfish.
• Coordinated science-policy activities across agencies and departments, including with Health and Human Services Agency, California Department of Food and Agriculture, the Office of Emergency Services, and the Governor's office.
• Reviewed scientific reports and other documents produced by CalEPA Boards, Departments, and Office.
• Represented CalEPA with stakeholders, other organizations, and the public.
• Oversaw Agency-wide external peer review activities; chaired the Peer Review Working Group; identified and recruited qualified candidates for appointment to scientific panels within CalEPA.
• Coordinated CalEPA's responses to Federal chemical policy under the Toxic Substances Control Act; led CalEPA’s work on refinery safety.

Reason for Leaving
Personal reasons: My father was ill and in hospice and the commute from the Bay Area was difficult.

Director, Occupational and Environmental Medicine Residency Program

Hours worked per week: 10
Monthly Salary: $0.00

5/2008 - 5/2012

University of California, San Francisco
http://profiles.ucsf.edu/gina.solomon
San Francisco, California 94110
[redacted]

# of Employees Supervised: 5
Name of Supervisor: John Balmes, M.D. - Division Director, Occupational and Environmental Medicine
May we contact this employer? Yes

Duties
• Directed all aspects of a nationally preeminent residency training program in occupational and environmental medicine.
• Evaluated the curriculum and made changes to address gaps and weaknesses. Enhanced the program's focus on environmental medicine and health policy. Restructured aspects of the program to meet new training requirements.
• Represented the residency program within the UCSF system and at national meetings of residency program directors. Ensured compliance with all UCSF, national graduate medical education, and medical board requirements.
• Successfully managed a site-visit and reaccreditation process by the Accreditation Council for Graduate Medical Education (ACGME), the national certifying organization for graduate physician training programs.

Reason for Leaving
I was appointed by the Governor to be Deputy Secretary at CalEPA. However, I have retained my faculty appointment as a Clinical Professor at UCSF.

Senior Scientist
5/1996 - 5/2012

Natural Resources Defense Council
www.nrdc.org
111 Sutter Street
San Francisco, California 94110

Hours worked per week: 30
Monthly Salary: $0.00
# of Employees Supervised: 10
Name of Supervisor: Linda Greer - Director, Health and Environment Program
May we contact this employer? Yes

Duties
Managed all aspects of NRDC's health program work in California. Raised a budget of approximately $700,000 per year. Managed a staff of attorneys, scientists, and policy experts working on a wide array of issues ranging from diesel exhaust sources and control to pesticides and children's health. Researched, wrote, and published multiple papers and reports. Served as NRDC's principal spokesperson to the media, legislators, and the public on health-related issues. Advocated for the listing of diesel exhaust as a Toxic Air Contaminant in California. Published some of the earliest papers linking diesel exhaust particulate matter to asthma. Published the first study of diesel exhaust particulate matter and black carbon concentrations inside school buses.
Led NRDC's response efforts to Hurricane Katrina and the Gulf Oil Spill. Performed independent environmental testing and analysis after both events. Worked closely with community groups, tribes, and environmental justice organizations in the Gulf Coast and in California.

Reason for Leaving
I was appointed by the Governor to be Deputy Secretary for Science and Health at CalEPA.

Associate Director, Pediatric Environmental Health Specialty Unit
1/2002 - 5/2012

Hours worked per week: 10
Monthly Salary: $0.00
# of Employees Supervised: 2
Name of Supervisor: Mark Miller,

University of California, San Francisco
https://wspehsu.ucsf.edu/
San Francisco, California 94110

M.D., M.P.H. - Director, Western States PEHSU
May we contact this employer?
Yes

Duties
Helped establish a Pediatric Environmental Health Specialty Unit (PEHSU) at UCSF. Formed collaborations between the Department of Pediatrics and the Division of Occupational and Environmental Medicine. Saw pediatric patients and entire families in clinic at UCSF to evaluate potential environmental illnesses. Gave lectures and Grand Rounds, and taught classes at hospitals throughout California on pediatric environmental health.

Reason for Leaving
Appointed to be Deputy Secretary at CalEPA. Note, this job started at 10 hours per week in 2002 and then decreased after I began working as the Residency Program Director at UCSF.

Certificates and Licenses

Type: Medical Board of California

Number: [redacted]

Issued by: Department of Consumer Affairs

Date Issued: 6 /1996 Date Expires: 5 /2024

Skills

Office Skills

Typing:
Data Entry:

Languages

Spanish - Speak, Read, Write

French - Speak, Read

Additional Information

Additional Information

Curriculum vitae and list of publications

References

Professional
Balmes, John
Member, California Air Resources Board
[redacted]

Professional
Zeise, Lauren
Director, Office of Environmental Health Hazard Assessment
[redacted]

Professional
English, Paul
Director, Tracking California
[redacted]
[redacted]

Resume

Text Resume

Attachments

Attachment	File Name	File Type	Created By
CV.pdf	CV.pdf	Resume	Job Seeker

Agency-Wide Questions

1. Q: How did you find out about this position?
   A: District Employee
   Other

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2. Q: If other, please tell us where.
   A: I am currently Co-Chair of the Advisory Council and I would be happy to serve another term.

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3. Q: Are you currently legally authorized to work in the United States on a full-time basis?
   A: Yes

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4. Q: Are you related to any District employee or Board member?
   A: No

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5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?
   A: No

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6. Q: If related to a District employee or Board member, what is their name and their relationship to you?
   A: N.A.

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to the cumulative impacts of pollution, systemic racism, and socioeconomic factors on the health of people living and/or working in overburdened communities.
   A: I have done multiple projects in partnership with community groups in overburdened communities. My introduction to cumulative impacts was in 2005 when I was involved in the response to the flooding of New Orleans during Hurricane Katrina. The combination of environmental contamination, systemic racism (such as the failure to maintain levees protecting low-income Black communities), and socioeconomic stresses made it clear to me how climate change will particularly harm already overburdened communities.

Since that time I have been working in multiple ways to identify those burdens, educate people about them, and address them. For example, I teach a class every year for medical students in which we focus on the issue of cumulative impacts and their effects on health. I have published several scientific papers on the topics of cumulative impacts and environmental justice, and my current work focuses primarily in farmworker communities in California that directly face cumulative impacts from air quality, wildfire smoke, pesticides, excessive heat, and socioeconomic disadvantage.

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2. Q: Please describe any experience or education which directly relates to the statutory and regulatory tools that air pollution control districts or other regulatory agencies can use to address the cumulative impacts described above.

   A: I was appointed by former governor, Jerry Brown, to serve as the Deputy Secretary for Science and Health at the CalEPA in 2012. That same year, the Chevron Richmond refinery experienced an explosion and fire that harmed local communities in the Bay Area. I co-led the Governor's Interagency Refinery Task Force and was the principal author of a report with recommendations to improve air monitoring around refineries and to change laws and regulations to enhance refinery safety. I then worked with multiple agencies, including CARB, Cal/OSHA, CalOES, the BAAQMD and the SCAQMD to implement the recommendations in the report. We successfully made changes that have helped improve community safety in the overburdened communities near refineries.

   I also worked closely with the Office of Environmental Health Hazard Assessment (OEHHA) to develop the CalEnviroScreen environmental justice mapping tool. This tool was recommended by a working group called the Cumulative Impacts and Precautionary Approaches working group, and I attended meetings across California to gather community input into the development of CalEnviroScreen and successfully get the tool launched and implemented.

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3. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

GINA M. SOLOMON M.D., M.P.H.
Public Health Institute
[redacted]

Principal Investigator **February 2018 - Present**
Public Health Institute
Oakland, CA

- Leading a 3-year project to develop air filtration for homes of farmworkers in the Central Valley of California to protect people from air pollution and wildfire smoke. We are also measuring cumulative exposure to multiple pollutants and their biological effects in women farmworkers.
- Conducting a 3-year research project on drinking water contaminants across California, and completed a 2-year project monitoring for drinking water contaminants in the area affected by the 2018 Camp fire.
- Conducting research projects on community environmental and health resilience, harmful algal blooms, and hormone residues in beef and potential risk of breast cancer.
- Completed studies on the mental health effects of the COVID pandemic in hospital workers, and on air pollution and COVID morbidity and mortality in California.
- Conducted a research project evaluating the California Green Chemistry Initiative; published a report and a scientific paper; presented the findings at a joint hearing of the California legislature.
- Convened a range of environmental, health, environmental justice, and labor groups to develop consensus recommendations for California Governor Gavin Newsom on environmental health and justice.

Deputy Secretary for Science and Health **May 2012 - January 2018**
California Environmental Protection Agency (CalEPA)
Sacramento, CA

- Appointed by Governor Jerry Brown as science advisor to the Secretary; provided advice and information on issues related to toxicology, health, and risk assessment; oversaw activities related to chemical contaminants in drinking water; coordinated California's response to domoic acid contamination in shellfish.
- Coordinated science-policy activities across agencies and departments, including with Health and Human Services Agency, California Department of Food and Agriculture, the Office of Emergency Services, and the Governor's office.
- Reviewed scientific reports and other documents produced by CalEPA Boards, Departments, and Office.
- Represented CalEPA with stakeholders, other organizations, and the public.
- Oversaw Agency-wide external peer review activities; chaired the Peer Review Working Group; identified and recruited qualified candidates for appointment to scientific panels within CalEPA.
- Coordinated CalEPA's responses to Federal chemical policy under the Toxic Substances Control Act; led CalEPA's work on refinery safety.

Clinical Professor of Medicine **March 2011 - Present**
University of California San Francisco (UCSF)
San Francisco, CA

- Volunteer faculty appointment initially as Assistant Clinical Professor (1998), promoted to Associate Clinical Professor (2006) and Clinical Professor (2011).
- Precept residents in clinic to enhance their learning and evaluate their performance.
- Teach courses in climate change and health, toxicology, and risk communication, and guest lecture to medical and nursing students and residents.

- Serve on the Residency Advisory Committee, Program Evaluation Committee, and interview committee for the occupational medicine residency program.

Director, Occupational and Environmental Medicine Residency June 2008 - May 2012
University of California San Francisco
San Francisco, CA

- Directed all aspects of a nationally preeminent residency training program in occupational and environmental medicine.
- Evaluated the curriculum and made changes to address gaps and weaknesses. Enhanced the program's focus on environmental medicine and health policy. Restructured aspects of the program to meet new training requirements.
- Represented the residency program within the UCSF system and at national meetings of residency program directors. Ensured compliance with all UCSF, national graduate medical education, and medical board requirements.
- Successfully managed a site-visit and reaccreditation process by the Accreditation Council for Graduate Medical Education (ACGME), the national certifying organization for graduate physician training programs.

Associate Director, Pediatric Environmental Health Specialty Unit August 2003 – June 2008
University of California San Francisco
San Francisco, CA

- Worked with a pediatrician to establish a new UCSF program designed to educate doctors, nurses, and the general public about pediatric environmental health.
- Established a clinical consultation practice for children potentially affected by environmental contaminants.
- Provided support to the Agency for Toxic Substances and Disease Registry (ATSDR), U.S. EPA, and other agencies, in situations where children were exposed to environmental toxicants in their communities.
- Assessed the risk to individual children or communities associated with issues such as: mercury in imported face creams, heavy metals associated with air emissions from a steel manufacturing facility, perchloroethylene vapor intrusion at a day care center, and methanol contamination in drinking water.

Senior Scientist May 1996 - May 2012
Natural Resources Defense Council
San Francisco, CA

- Planned and directed the overall work of the NRDC Health Program on the West Coast. Managed a team of scientists, attorneys and policy experts. Worked across a large organization to coordinate legislative, communications, fundraising, and inter-programmatic efforts.
- Directed and oversaw the production of exposure science studies and risk assessments with policy impact, focusing on risks to children and on endocrine disrupting chemicals. Designed and conducted studies of diesel exhaust inside school buses; residues of pesticides on dog fur; air, water, and soil contamination after Hurricane Katrina; and mercury releases to air and water from cement kilns and abandoned mines.
- Represented NRDC with government agencies, elected officials, community groups and the media. Served as a high-profile scientific spokesperson in Congressional hearings and major media appearances.

Consultant 1996 - 1997
Massachusetts Division of Industrial Accidents, Boston, MA

Fellow, Occupational and Environmental Medicine, 1993 - 1996
Harvard School of Public Health, Boston, MA

Clinical Instructor in Medicine 1991 - 1995
Harvard University School of Medicine, Boston, MA

EDUCATION

Master of Public Health August 1993 - May 1994
Harvard School of Public Health, Boston, MA

Doctor of Medicine July 1987 - June 1991
Yale School of Medicine, New Haven, CA

Bachelor of Arts, Comparative Literature, Magna cum Laude September 1982 - May 1986
Brown University, Providence, RI

CERTIFICATION AND LICENSING

National Board of Medical Examiners, 7/92
American Board of Internal Medicine, 8/95, Recertified 5/05
American Board of Preventive Medicine, 2/98, Recertified 12/08, Recertified 01/18
California Medical License number: [redacted] (unrestricted)
Faculty privileges at UCSF Medical Center

PROFESSIONAL ACTIVITIES

Reviewer, National Institutes of Health, ZES1 LKB-K (P2) Exploratory Grants for Climate Change and Health Research Center Development, August 2023

Reviewer, National Institute of Environmental Health Sciences, Funding Opportunity Announcement ES-19-011, October 2022

Co-Chair, Advisory Council, Bay Area Air Quality Management District, 2018-2023

Reviewer, Toxic Substances Control Act (TSCA) New Chemicals Collaborative Research Program, U.S. EPA, 2022

Reviewer, ORD Implementation of PFAS Research and Development, U.S. EPA, 2021

Chair, Planning Committee, Workshop on the Interplay Between Environmental Exposures and Mental Health Outcomes. National Academy of Sciences, 2021.

Scientific Peer Reviewer, Micro- and nano-plastics in our environment: Understanding exposures and impacts on human health, European Commission SC1-BHC-36-2020.

Scientific Peer Reviewer, Agence National de la Recherche (French National Research Agency), 2020.

Planning Committee, Workshop on Emerging Technologies to Advance Research and Decisions on the Environmental Health Effects of Microplastics. *National Academy of Sciences,* 2019.

Invited Participant WHO Science Division Workshop on Expert Groups, *World Health Organization*, 2019

Environmental Health Policy Advisor, *U.C. Davis Environmental Health Sciences Core Center*, 2019 - present

Strategy Advisor, *California Breast Cancer Research Program,* 2019-2022

Member, Advisory Council, *Bay Area Air Quality Management District*, 2018 – present

Member, Committee on Emerging Science for Environmental Health Decisionmaking, *National Academy of Sciences*, 2016-2022

Member, Committee on the Hazards of Organohalogen Flame Retardants. *National Academy of Sciences*, 2018-2019

Member, President's Global Climate Leadership Council, *U.C. Office of the President*, 2018 - 2019

Member, Chemical Safety for Sustainability/Human and Environmental Risk Assessment Subcommittee, Board of Scientific Counselors, *U.S. Environmental Protection Agency*, 2017-2020

Member, Board on Environmental Studies and Toxicology, *National Academy of Sciences*, 2013-2019

Vice-Chair, Chemical Safety for Sustainability Subcommittee, Board of Scientific Counselors, *U.S. Environmental Protection Agency, 2014-2017*

Board of Scientific Counselors Executive Committee, *U.S. Environmental Protection Agency, 2014-2017*

Science Advisory Board, Chartered Executive Committee, *U.S. Environmental Protection Agency, 2011-2017*

Course Director, *UCSF Med 170.01/Epi 170.16 Environmental Health*, 1998-1999, 2002-2004, 2008-2010, 2014

Editorial Review Board, *Environmental Health Perspectives, 2010 – 2018*

Scientific Guidance Panel, *California Environmental Contaminant Biomonitoring Program, 2007- 2012*

Tracking Implementation Advisory Group, *California Department of Public Health, 2006 - 2012*

Board of Directors, *San Francisco Bay Area Physicians for Social Responsibility, 2000 – 2012*

Committee on Human and Environmental Exposure Science in the 21st Century, *National Research Council, 2010 – 2012*

Board of Scientific Counselors, *National Toxicology Program*, *2008 – 2011*

California Climate Adaptation Advisory Panel, *California Governor's Office*, 2010

Science Advisory Board Drinking Water Committee, *U.S. Environmental Protection Agency, 2004- 2010*

Science Advisory Board Acrylamide Panel, *U.S. Environmental Protection Agency, 2007 – 2008*

Reviewer, *American Academy for the Advancement of Sciences* LSDF 09-01: Innovative research programs to improve health and health care, 2009

Committee on Toxicity Testing and Assessment of Environmental Agents, *National Research Council, 2004 - 2007*

Childhood Lead Poisoning Prevention Expert Advisory Committee, *California Department of Health Services, 2004 - 2006*

Scientific Advisory Group, Environmental Epidemiology and Biomonitoring, *CA Dept of Health Services, 2000-2004*

SB702 Expert Working Group on Public Health Tracking, *California Department of Health Services, 2002 - 2004*

Science Advisory Board Trichloroethylene Panel, *U.S. Environmental Protection Agency, 2002*

Strategic Advisory Committee, *National Center for Environmental Health, Centers for Disease Control and Prevention (CDC), 2001 - 2002*

Endocrine Disruptor Screening and Testing Advisory Committee, *U.S. EPA, 1996 - 1998*

Board of Directors, *Consortium for Environmental Education in Medicine, 1998 - 2000*

Pesticides and Environmental Education for Health Providers Committee, *National Environmental Education & Training Foundation*, *1998 - 2000*

Peer Reviewer: *American Family Physician; American Journal of Public Health; American Journal of Epidemiology; American Journal of Preventive Medicine; Canadian Medical Association Journal; Chemosphere; Climatic Change; Environmental Health Perspectives; Environmental Science and Technology; Environmental Research; Environmental Geochemistry and Health; Environmental Pollution; European Journal of Clinical Nutrition; Indoor Air; International Journal of Occupational and Environmental Health; Journal of the American Medical Association (JAMA); Journal of Epidemiology and Community Health; Journal of Occupational and Environmental Medicine; PLoS Biology; PLoS One; Reproductive Toxicology; Tobacco Control.*

AWARDS AND RECOGNITION

Jean Spencer Felton Award, Western Occ and Environ Medical Association, 2023

Birth Defects Research Distinguished Scholar Award, Soc for Birth Defects Res Prevn, 2021

Member, Sigma XI Scientific Research Honor Society, 2020

Certificate of Recognition, City of Los Angeles, 2016

Certificate of Recognition, California State Assembly, 2016

Humanitarian Award, California Safe Schools, 2016

James G. Wilson Publication Award, *Teratology Society, 2016*

Essential Core Teaching Award (Elective), *University of California San Francisco, 2015*

Faculty Sustainability Award, *University of California San Francisco, 2015*

Elected Fellow, *Collegium Ramazzini, 2014*

Certificate of Appreciation for Outstanding Service, *The National Academies*, 2012

Damu Smith Environmental Achievement Award, *American Public Health Association, 2012*

Appreciation of Services, U.S. Dept of Health and Human Services, 2011

Doerenkamp-Zbinden Honour Award, *Doerenkamp-Zbinden Foundation Switzerland*, 2009

Recognition Award, *Johns Hopkins University Center for Alternatives to Animal Testing, 2009*

Certificate of Appreciation, *Center for Community Action and Environmental Justice, 2007*

Certificate of Appreciation, *California Safe Schools, 2004*

Clean Air Award for Research, *American Lung Association of the Bay Area, 2004*

Ten Women's Health Pioneers, *The Green Guide, 2004*

Environmental Heroes Award, *Breast Cancer Fund, 2002*

Will Solimene Award in Medical Writing, *American Medical Writers Association, 2000*

Occupational Physicians Scholarship Fund Award, *1993, 1995*

Farr Scholarship Award, *Yale Medical School, 1988, 1989*

Phi Beta Kappa, *Rhode Island Chapter, 1986*

CURRENT RESEARCH SUPPORT

08/01/2022 – 07/31/2025: California Breast Cancer Research Program (B28TP5832-S, PI: Gina Solomon, MD, MPH) *Farmworker women & Respiratory Exposure to Wildfire Smoke from Swamp Cooler Air (FRESSCA-Mujeres).*

09/01/2021 - 08/31/2024: U.S. Environmental Protection Agency (STAR: 84024201, PI: Gina Solomon, MD, MPH) *Filtration for Respiratory Exposure to Wildfire Smoke from Swamp Cooler Air (FRESSCA).*

01/01/2021 - 12/31/2023: California Air Resources Board (SEP20-036, PI: Paul English, PhD) *Brawley Health ACTION Environmental Study.*

9/1/2020 – 8/31/2025: Centers for Disease Control and Prevention. (#1 NUE1EH001427-01-00, PI: Gina Solomon, MD, MPH) *California Water: Assessment of Toxins for Community Health (CalWATCH)*. CDC-RFA-EH20-2005: Strengthening Environmental Health Capacity (EHC) to Detect, Prevent, and Control Environmental Health Hazards through Data-Driven, Evidence-Based Approaches

6/1/2020 – 5/31/2021: California Air Resources Board. (19RD029, PI: Peggy Reynolds, Ph.D.) *Impact of Air Pollution on COVID-19 Case and Death Risk in California*

12/01/19 – 11/30/2024: Cigna California Community Investment Grant (#56578319, PI: Gina Solomon, MD, MPH) *The Community Resilience Project: Conducting Assessments and Building Capacity to Improve Health.*

6/1/2020 - 5/31/2022: California Breast Cancer Research Program (#B26PB1982, PI: Gina Solomon, MD, MPH) *Hormones And Meat: does Beef Under-Regulation Generate Estrogenic Residues? (HAMBURGER)*

2/1/2020 – 1/31/2021: Environment Now (PI: Gina Solomon, MD, MPH) *Tapwater Analysis Project (TAP): Testing Chemicals in Water in California.*

9/1/2019 – 8/31/2021: National Institute for Environmental Health Sciences (R21ES-031501, PI: Gina Solomon, MD, MPH) *Fire and Water: Investigating Drinking Water Contamination in Paradise, California after the Camp Fire.*

6/1/2019 - 5/31/2021: California Breast Cancer Research Program (25UB-1202, PI: Gina Solomon, MD, MPH) *Tapwater Analysis Project (TAP): Testing Chemicals in Water in California.*

8/1/2017 – 7/31/2022: Centers for Disease Control and Prevention (#5U38EH00095, PI: Paul English, PhD) *National Environmental Public Health Tracking Program – Network Implementation.*

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SELECTED PRESENTATIONS

Legislative Testimony and Briefings:

California's Green Chemistry Initiative at Age 10
Joint hearing of the CA Senate Environmental Quality and Assembly Environ Safety and Toxic Materials Committees, 2/12/2019

Cancer Clusters and the Environment
Hearing of the U.S. Senate Committee on Environment and Public Works, 3/29/2011

Health Hazards of Methyl Iodide
Joint hearing of the CA Assembly Health and Environ Safety and Toxic Materials Committees, *2/22/2011*

Reproductive Health and the Environment
Pew Charitable Trusts Congressional Briefing, 6/11/2010

Health Effects of the Gulf Oil Spill
Hearing of the U.S. House Committee on Energy and Commerce, 6/10/2010

Protecting Children from Environmental Threats
Hearing of the U.S. Senate Committee on Environment and Public Works, 3/17/2010

Endocrine Disrupting Chemicals in Drinking Water
Hearing of the U.S. House Committee on Energy and Commerce, 2/25/2010

Biomonitoring: A Tool for Public Health Policy
American Chemistry Society Congressional Briefing, 3/2009

Health Risks to Children and Communities from Recent EPA Decisions on Air and Water Quality
Hearing of the U.S. Senate Committee on Environment and Public Works, 2/2007

Biomonitoring for Health Surveillance
CA Assembly Health Committee, 6/20/2006

Selected Recent Scientific and Educational Presentations:

Reproductive Toxicology
UCSF School of Medicine/School of Nursing, 2/2020

Fire and Water: Benzene Contamination in Drinking Water after Wildfire
California Department of Public Health Research Seminar, 2/2020
UC Davis Leila Morris Symposium, 1/2020

Risk Assessment
UC Berkeley School of Public Health, 1/2020

Climate Change and Health
Modesto Junior College Institute Day Keynote, 1/2020
Western Occupational Health Conference, 9/2018

Risk and Crisis Communication
UCSF School of Medicine, 11/2019

Developing and Communicating Decision-Relevant Science
California Conference of Directors of Environmental Health Keynote, 10/2019

Emerging Issues in Environmental Health
American Chemical Society, Women Chemists meeting, 2/2018
UCSF Continuing Medical Education Course, 3/2017

Changing World, Changing Practice: Challenges and Opportunities in Environmental Health
Western Occupational Health Conference, 9/2017

Climate Change and Health Equity: Telling the Story With Data
Health Departments Webinar Series, 8/2017

[Full list of presentations available upon request]

Recent Media Appearances

Ho C. How safe is Bay Area drinking water from 'forever chemicals'? San Francisco Chronicle, Mar 4, 2023. https://www.sfchronicle.com/health/article/pfas-forever-chemicals-drinking-water-17871956.php.

Von Kaenel C. Paradise water testing wrapping up more than a year after contamination first confirmed. Chico Enterprise Record, Feb 29, 2020. https://www.chicoer.com/2020/02/29/paradise-water-testing-wrapping-up-more-than-a-year-after-contamination-first-confirmed/.

Solomon G. Q&A: Why California Is Banning Chlorpyrifos, A Widely Used Pesticide. US News and World Report, January 23, 2020. https://www.usnews.com/news/best-states/articles/2020-01-23/reasons-why-california-is-banning-chlorpyrifos-a-widely-used-pesticide

Sterman J, Brauer A. Pesticide that could impact children's health is still widely used in many states. Sinclair Broadcast Group, January 16, 2020. https://wjla.com/news/spotlight-on-america/pesticide-that-could-impact-childrens-health-is-still-widely-used-in-many-states

Petersen M. Paradise Residents Unsure If Their Water Is Safe. KQED, Nov 29, 2019. (Story starts at about 3:27). https://www.kqed.org/news/11789036/homeowners-in-fire-prone-areas-struggle-to-hold-onto-their-insurance

Von Kaenel C. Preliminary findings show that harmful contaminants in burn scar plumbing are rare. Chico Enterprise Record, Nov 19, 2019. https://www.chicoer.com/2019/11/19/preliminary-findings-show-that-harmful-contaminants-in-burn-scar-plumbing-are-rare/

Petersen M. Paradise residents still can't drink the water. KQED, Sept 30, 2019. https://www.kqed.org/science/1948232/paradise-residents-still-cant-drink-the-water.

Von Kaenel C. UC San Francisco researcher gets grant to study water contamination after Camp Fire. Chico Enterprise Record and Oroville Register, Sept. 7, 2019. https://www.chicoer.com/2019/09/07/ucsf-researcher-gets-grant-to-study-water-contamination-after-camp-fire/.

Dooley E. Hidden Danger in Water Confronts California Wildfire Survivors. Bloomberg News, Sept 3, 2019. https://news.bloomberglaw.com/environment-and-energy/hidden-danger-in-water-confronts-california-wildfire-survivors.

California to block food pesticide that Trump's EPA saved from nationwide ban, Bob Egelko, San Francisco Chronicle, May 8, 2019. https://www.sfchronicle.com/science/article/California-moves-to-ban-pesticide-widely-used-by-13829656.php?psid=4QHKF

California to ban controversial pesticide blamed for harming child brain development, CBC News, May 8, 2019. https://www.cbsnews.com/news/california-bans-chlorpyrifos-pesticide-agriculture-state-child-brain-development/

California Moves to Ban Chlorpyrifos, Widely Used Pesticide, Brian Melley, Associated Press, May 8, 2019 https://www.kqed.org/science/1941369/california-moves-to-ban-chlorpyrifos-widely-used-pesticide

After the fire: Blazes pose hidden threat to the West's drinking water, Kaitlin Sullivan, NBC News, Jan 5, 2019. https://www.nbcnews.com/news/us-news/after-fire-blazes-pose-hidden-threat-west-s-drinking-water-n954806

In California, Houses Burned. So Did the Toxic Chemicals They Contained. Sarah Maslin Nir, New York Times, Nov 29, 2018. https://www.nytimes.com/2018/11/29/us/california-fire-chemicals.html

JARED BRISKMAN

RECENT EXPERIENCE

PRODUCT LEAD

QUANT QA

JULY 2022 – PRESENT

- I lead QuantAQ's product development team, including the QuantAQ Cloud platform for Air Quality monitoring, and QuantAQ's professional grade distributed air quality sensors. Cross-functionally engaged across the entire business, from strategy, marketing, sales, operations, and both software and hardware development.

SENIOR PRODUCT MANAGEMENT MANAGER

TABLEAU SOFTWARE/ SALESFORCE, INC

JULY 2019 – JULY 2022

- Product Manager for Ask Data, an augmented analytics capability that allows anyone to answer business questions using natural language, integrated into the Tableau platform. Deeply understanding customer problems, aligning on priority and vision, then collaborating across organizational boundaries to design, develop and deliver solutions. I owned the product roadmap for four teams and launched an overhaul of the product in Summer 2021

CHIEF OPERATING OFFICER

ACRONYM LLC

JANUARY 2017 – JULY 2019

- Founded an engineering consulting firm, and managed a small team of engineers doing product development work for startups, specializing in integrated IoT system prototypes.

EDUCATION

OLIN COLLEGE OF ENGINEERING

Bachelors – Engineering; Modeling and Analysis

INTERVIEW HIGHLIGHTS

- Worked with community groups in Boston to measure air quality and noise impacts from Logan Airport
- Familiar with using sensor networks to improve understanding of local conditions of concern to communities

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-01 - Advisory Council Member

Contact Information -- Person ID: 53067931

Name:	Jared Briskman	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California , Class C
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Bachelor's Degree

Preferences

Minimum Compensation:

Are you willing to relocate?

Types of positions you will accept:

Types of work you will accept:

Types of shifts you will accept:

Objective

Education

College/University
Olin College of Engineering
8/2015 - 5/2019
Needham, Massachusetts

Did you graduate: Yes
Major/Minor: BS in Engineering: Modelling and Analysis
Degree Received: Bachelor's

Work Experience

Product Lead
7/2022 - Present

QuantAQ
https://quant-aq.com/
San Francisco, California 94107
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
Name of Supervisor: David Hagan - CEO
May we contact this employer? Yes

Duties
I lead QuantAQ's product development team, including the QuantAQ Cloud platform for Air Quality monitoring, and QuantAQ's professional grade distributed air quality sensors. Cross-functionally engaged across the entire business, from strategy, marketing, sales, operations, and both software and hardware development.

Senior Product Management Manager
7/2019 - 7/2022

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer? No

Tableau Software / Salesforce, Inc
San Francisco, California

Duties
Product Manager for Ask Data, an augmented analytics capability that allows anyone to answer business questions using natural language, integrated into the Tableau platform. Deeply understanding customer problems, aligning on priority and vision, then collaborating across organizational boundaries to design, develop and deliver solutions. I owned the product roadmap for four teams, and launched an overhaul of the product in Summer 2021.

CEO
1/2017 - 7/2019

Hours worked per week: 20
Monthly Salary: $0.00
May we contact this employer? No

Acronym LLC
Needham, Massachusetts

Duties
Founded an engineering consulting firm, and managed a small team of engineers doing product development work for startups, specializing in integrated IoT system prototypes.

Product Management Intern
5/2018 - 8/2018

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer? No

Tableau Software
Seattle, Washington

Duties
Directed a small team of developers building Tableau's shared frontend component library. Planning product roadmaps, defining feature specifications, and enabling successful execution of internal and external customer facing deliverables.

Data Integration Intern
5/2017 - 8/2017

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer? No

Shell Techworks
Cambridge, Massachusetts

Duties
Worked in Systems Architecture group, engaged in full-stack web development, systems engineering, data science and stakeholder interaction.

Quality Assurance Intern
5/2016 - 8/2016

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer? No

Onshape, Inc
Cambridge, Massachusetts

Duties

Worked on a cloud-based CAD system in-between development and UX, ensuring product features met user needs and that back-end infrastructure was robust

Certificates and Licenses

Skills

Office Skills

Typing:
Data Entry:

Languages

English - Speak, Read, Write

Additional Information

References

Professional
Hagan, David
CEO, QuantAQ
[redacted]

Resume

Text Resume

Attachments

Agency-Wide Questions

1. Q: How did you find out about this position?
   A: Other
   Job board/website (list specific under "other")

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2. Q: If other, please tell us where.
   A: Linkedin

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3. Q: Are you currently legally authorized to work in the United States on a full-time basis?
   A: Yes

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4. Q: Are you related to any District employee or Board member?
   A: No

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5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?
   A: No

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6. Q: If related to a District employee or Board member, what is their name and their relationship to you?
   A: None

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to air quality, climate change, or health impacts of air pollution, with a focus on particulate matter exposure reduction. Please describe how you think your experience (professional and lived) can be valuable to the Air District and provide any relevant references. Include any relevant leadership positions, accomplishments, publications or awards. Note, we recognize individuals may not have experience in all the categories listed here – please include information in your areas of expertise.

   A: In 2018-2019, I worked on a university-affiliated team in conjunction with industry sponsor Aerodyne and a local non-profit Airpartners to build a community-owned air quality monitoring network for disproportionately impacted neighborhoods in East Boston surrounding Logan Airport. Every 20 seconds at peak hour, an airplane lands directly over East Boston and Winthrop, exposing the residents to PM pollution plumes and placing communities at high risk with increased asthma rates. The nearest reference monitoring site was over 5 miles away, preventing community insight into local air quality. The project involved deploying a combination of novel distributed near-reference sensors, mobile regulatory-grade measurements, and a public facing real-time information and education portal, as well as deep engagement with stakeholders through Airpartners. This allowed us to not only measure local air quality variability, actionably inform the community about relevant exposure data and facilitate remediations like window sealing and indoor filtration, but also equip our collaborator Airpartners with the tools to subsequently work with local government officials to introduce legislation aimed at further expanding monitoring and remediation efforts for environmental justice. For more information on the project and further efforts built on the same platform, see Airpartners discussion at https://www.airpartners.org/east-boston

   Since then, through my employment as product lead at QuantAQ, I have been immersed with interactions with air quality initiatives across the globe, and committed to developing technology solutions specifically to facilitate supplemental air quality monitoring for municipal, industrial and EJ applications. Due to QuantAQ's unique particulate matter measurement capabilities, a significant portion of our customers are directly engaged in particulate matter exposure reduction applications using our solutions. Through volunteering with BAAQMD, I hope to bring my formal education in Engineering with a concentration in Modelling and Analysis, as well as my professionally developed experience in air quality measurement technology and applications to better serve my community.

2. Q: Please describe any environmental justice (EJ) and/or other public health, equity, or social justice work you have been a part of and how it relates to EJ issues in the Bay Area. If you have not been a part of such work, please include your understanding of the topic and of the work required by local governments, like the Air District.

   A: First, the Environmental Justice project I described above has significant analogs to environmental justice work in the Bay Area, and it's that experience of facilitating community-owned environmental justice action that shapes my work now delivering solutions that scale for EJ groups. There are now thousands of QuantAQ sensors in customer and community hands, and my work is focused on making it radically easy and affordable for environmental justice stakeholders, either in the bay area or globally, to operate local air quality sensing networks and access near-reference data for local variability in both indoor and ambient air pollution in their community. In particular, QuantAQ's dual detection technology for PM is critical for EJ groups to understand health-relevant coarse-PM exposure in a way that fundamentally cannot be served by other distributed monitoring solutions that these groups have access to, as demonstrated in the recent paper "Size-Resolved Field Performance of Low-Cost Sensors for Particulate Matter Air Pollution" (Rueda et al; Environmental Science & Technology Letters Article

ASAP; DOI:10.1021/acs.estlett.3c00030). My work building scalable PM and gas phase measurement solutions allow communities to leverage more trusted data than indicative monitors, and more spatially relevant data than reference-grade solutions can provide. In addition, my work helping QuantAQ serve compliance plans for fenceline monitoring on community-adjacent industrial pollution sources directly can facilitate EJ goals, reducing health risks for disproportionately impacted areas. I am eager to bring my experience to bay area relevant EJ work, and I think volunteering with BAAQMD would be an effective way to provide impact, as well as bringing a deeper understanding of BAAQMD into improved solutions for EJ applications through my professional work.
Now more than ever, environmental justice for air quality is of paramount importance to the Bay Area. With the upcoming NAAQS changes, continually increasing climate related challenges, and a constantly developing understanding of public health science, effective solutions from the BAAQMD must contain a combination of regulatory grade monitoring, distributed monitoring, public education, impact relief, and structural improvements through stakeholder informed local regulation, guidance, and partnership.

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3. Q: The Air District may soon begin the process of developing an attainment plan for particulate matter for inclusion in the State Implementation Plan (SIP). Please explain your experience that would be useful for working with and implementing the Clean Air Act, particularly around the development of plans to attain the National Ambient Air Quality Standards. If you can, please include examples of innovative strategies to use discretionary authorities to develop an approvable plan that also considers cumulative impacts and reduces air quality disparities in overburdened communities and advances environmental justice.

   A: My direct professional expertise with near-reference air quality monitoring solutions, and experience combining distributed monitoring with regulatory-grade measurement data for compliance, reporting, and action should hopefully be very valuable to BAAQMD in developing a SIP for NAAQS attainment. Deploying scalable networks of near reference monitors is proving to be a tractable way to provide hyperlocal insight into air quality disparities in overburdened communities, while maintaining low operational burden for authorities, and allowing data informed focus on exceedances. These combined approaches can give a better understanding of the frequency, magnitude, duration and affected area of exceedance events, as well as when exceedances are likely due to not reasonably controllable or preventable sources.

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4. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

JESSICA CORIA

RECENT EXPERIENCE

DIRECTOR OF AIR QUALITY AND CLIMATE CHANGE SERVICES
LSA
AUGUST 2023 – PRESENT

- Executive position for department. Responsible for environmental impact analysis preparation, climate action and adaptation planning efforts, client relations, business development, team building, department performance, regulatory tracking and staff education.
- Expertise in regulatory compliance, CEQA, sustainable project design, air pollution control measures and greenhouse gas emissions mitigation

SENIOR SCIENTIST
FIRSTCARBON SOLUTIONS
DECEMBER 2021 – AUGUST 2023

- Technical expertise to support cities/counties and corporations with CEQA compliance, GHG and criteria pollutant mitigation, and the development of sustainability plans and policies
    - Management position for six staff and multiple sub-consultants
    - Project management and coordination across company, and with multiple regulatory agencies
    - Business development and proposal preparation

REGIONAL PROGRAM MANAGER – AIR QUALITY SCIENCE AND PLANNING
SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT
OCTOBER 2019 – DECEMBER 2021

- Responsible for development of clean air plans for the Central Valley in compliance with the Clean Air Act, regulatory development projects, and incentive-based emission reduction programs
    - Position included research, policy development, writing, editing, public and Board presentations
    - Manager for eight staff and lead for multiple project-specific teams across organization
    - Relationship building with staff across a variety of agencies and diverse stakeholders key facet of role, including work with the interested public and elected officials

EDUCATION

JOHNS HOPKINS UNIVERSITY
Masters – Environmental Science and Policy
UC DAVIS
Bachelors – International Relations: Global Environment, Health and Natural Resources

INTERVIEW HIGHLIGHTS

- Experience in implementing AB 617 in the San Joaquin Valley
- Excellent understanding of the relevant statutory and regulatory frameworks
- Good perspective on the need to be realistic in setting implementable goals

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-04 - Advisory Council

Contact Information -- Person ID: 55211103

Name:	Jessica Coria	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California , Class C
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Master's Degree

Preferences

Minimum Compensation:	$0.00 per hour; $0.00 per year
Are you willing to relocate?	Maybe
Types of positions you will accept:	Regular , Temporary
Types of work you will accept:	Per Diem
Types of shifts you will accept:	Day , Evening , Weekends

Objective

My goal is to serve the communities of the Bay Area to reduce air pollution and associated impacts through effective, targeted air pollution control strategies. It would be an honor to act as a member of the BAAQMD Advisory Council to contribute my experience and expertise to support the decision-making processes of the BAAQMD Board of Directors and Executive Director.

Education

Graduate School
Johns Hopkins University
8/2017 - 6/2019
Washington, District of Columbia

Did you graduate: Yes
Major/Minor: Master of Science
Degree Received: Master's

Work Experience

Director of Air Quality and Climate Change Services
8/2023 - Present

LSA
lsa.net
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
# of Employees Supervised: 5
Name of Supervisor: Amy Fischer - President
May we contact this employer? Yes

Duties

* Executive position for department. Responsible for environmental impact analysis preparation, climate action and adaptation planning efforts, client relations, business development, team building, department performance, regulatory tracking and staff education.
* Expertise in regulatory compliance, CEQA, sustainable project design, air pollution control measures and greenhouse gas emissions mitigation

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Senior Scientist
12/2021 - 8/2023

FirstCarbon Solutions
Irvine, California

Hours worked per week: 40
Monthly Salary: $0.00
# of Employees Supervised: 6
Name of Supervisor: Phil Ault - Director of Air Quality and Noise
May we contact this employer? Yes

Duties
* Technical expertise to support cities/counties and corporations with CEQA compliance, GHG and criteria pollutant mitigation, and the development of sustainability plans and policies
o Management position for six staff and multiple sub-consultants
o Project management and coordination across company, and with multiple regulatory agencies
o Business development and proposal preparation

Regional Program Manager
10/2019 - 12/2021

San Joaquin Valley Air Pollution Control District
Fresno, California

Hours worked per week: 40
Monthly Salary: $0.00
# of Employees Supervised: 8
Name of Supervisor: Jon Klassen - Director of Air Quality Planning
May we contact this employer?

Duties
- Responsible for development of clean air plans for the Central Valley in compliance with the Clean Air Act, regulatory development projects, and incentive-based emission reduction programs
* Position included research, policy development, writing, editing, public and Board presentations
* Manager for eight staff and lead for multiple project-specific teams across organization
* Relationship building with staff across a variety of agencies and diverse stakeholders key facet of role, including work with the interested public and elected officials
- Project management, data analysis, regulation development, event coordination, research, technical writing, lifecycle emissions analysis, air quality modeling, and presentations at public meetings and workshops
- Selected as 2017 Strategies and Incentives Employee of the Year for exemplifying and promoting agency cultural values of ``Service, Teamwork, Attitude, and Respect''

Research Intern
4/2014 - 1/2015

United States Geological Society
San Francisco, California

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Project design and implementation of study on intertidal ecosystem response to climate change

Certificates and Licenses

Skills

Office Skills

Typing:
Data Entry:

Additional Information

References

Resume

Text Resume

Attachments

Attachment	File Name	File Type	Created By
CV_Jessica Coria.pdf	CV_Jessica Coria.pdf	Resume	Job Seeker

Agency-Wide Questions

1. Q: How did you find out about this position?
   A: District Website
   Job board/website (list specific under "other")

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2. Q: If other, please tell us where.
   A: LinkedIn

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3. Q: Are you currently legally authorized to work in the United States on a full-time basis?
   A: Yes

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4. Q: Are you related to any District employee or Board member?
   A: No

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5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?
   A: No

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6. Q: If related to a District employee or Board member, what is their name and their relationship to you?
   A: N/A

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to the cumulative impacts of pollution, systemic racism, and socioeconomic factors on the health of people living and/or working in overburdened communities.
   A: Growing up in the San Joaquin Valley, I remember thinking that the hazy, slightly brown sunlight of late summer and winter evenings was normal. When I traveled to the Central Coast, or to my grandfather's home in Petaluma, I remember marveling at the light, and how beautiful and "sparkly" (in my words at the time) everything looked. Then, I didn't understand that the reason the sunlight sparkled in other places, but not at home in the Valley, was due to air pollution, but now I do. Growing up with asthma as a common affliction, I similarly didn't realize that the reason so many of my peers struggled to

breath and had to carry an inhaler was due to the air quality of where we lived. Now, I have an in-depth understanding of the implications of poor air quality on health, and how air pollution, especially when combined with other challenging socioeconomic factors such as systemic racism, can have a profound impact on the lives and opportunities of people living in disadvantaged areas.

I went to college with the goal of working in environmental conservation to have a positive impact on the world, and my career has focused on reducing air pollution and associated impacts to people living and working in historically disadvantaged areas. My education includes a bachelor's degree from UC Davis in International Relations: Global Environment, Health and Natural Resources. I studied the impacts of climate change on coastal ecosystems for my graduate thesis and obtained my Master of Science in Environmental Science and Policy from Johns Hopkins University. This educational track provided me an in-depth understanding of the impact of air pollution on public health and the environment, as well as a strong scientific understanding of air pollution formation and atmospheric processes. I further had the opportunity to travel extensively during my education, including an internship in the San Francisco Bay field office of the United States Geologic Society, study abroad trips to Spain and Italy, and graduate research conducted in Cuba. With the severely disadvantaged Fresno area as my hometown, traveling around the world to see other cultures and communities has expanded my respect for and understanding of perspectives besides my own.

My professional career began at the San Joaquin Valley Air Pollution Control District, where I started as a temporary employee and promoted to the position of Regional Program Manager for the Air Quality Science and Planning Department. In this role, I worked on a variety of projects, from clean air plan development, rules to reduce emissions from stationary sources, efforts to reduce air pollution related to agricultural burning, and the implementation of Assembly Bill (AB) 617 planning and community engagement efforts. Working with a variety of stakeholders, including environmental justice advocates, State and federal agency staff, as well as business owners and agricultural representatives, gave me a broad understanding of the many different perspectives that can and should be considered when approaching environmental issues.

Most recently, I have been working as an environmental consultant, first as a consulting Senior Scientist and now as a Director of a consulting firm's Air Quality and Climate Change Services division. In this position, I am responsible for implementing California Environmental Quality Act (CEQA) requirements for Air Quality, Greenhouse Gas, and Energy environmental impact analysis, as well as assisting developers and municipalities with CEQA compliance. I also lead the development of climate action and adaptation plans for both facilities and for cities and counties. Through this experience, I have an understanding of the direct impacts of rules and regulations that impact development in the Bay Area and throughout the State, both currently and into the future. I continually admire the work of the BAAQMD, and it would be an honor to be able to apply my expertise and experience to support the BAAQMD Board and Executive Officer through decision-making processes as a member of the Advisory Council.

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2. Q: Please describe any experience or education which directly relates to the statutory and regulatory tools that air pollution control districts or other regulatory agencies can use to address the cumulative impacts described above.

   A: Expanding on my career experience, I previously served as a Regional Program Manager for the Planning Department of the San Joaquin Valley APCD. In this role, I worked on emissions control measure development and planning, focusing on regulatory projects as well as developing voluntary incentive measures and informing compliance programs. In my current role, I apply statewide statutory requirements, local municipal code requirements, and regional regulations as a part of understanding the potential environmental impact of proposed projects. I regularly conduct health-risk assessments

to understand the potential localized and regional impact of potential projects. I maintain a current expertise of State and regional regulations and policies, and regularly advise on potential mitigation measures to reduce the air quality and climate change impacts of residential, mixed use, and industrial projects. Nearly 10 years of working in the air pollution control field has provided me with an in-depth understanding of the statutory and regulatory tools that air pollution control districts and other regulatory agencies can use to reduce air pollution impacts and the cumulative impacts of air quality and socioeconomic disadvantages to people that live and work in overburdened communities.

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3. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

[redacted]

JESSICA CORIA

QUALIFICATIONS

- ✓ Experience leading the development and implementation of environmental programs and policies
- ✓ Project management expertise, including contract development, budgeting, and ensuring deliverables are completed on time while prioritizing the highest quality of internal and external customer service
- ✓ Passionate about environmental conservation, and motivated to make a difference through my work
- ✓ Management/work philosophy focused on teambuilding, recognition and appreciation, and inclusion

RELEVANT WORK EXPERIENCE

LSA

Director of Air Quality and Climate Change Services *August 2023– Present*

- Executive position for department. Responsible for environmental impact analysis preparation, climate action and adaptation planning efforts, client relations, business development, team building, department performance, regulatory tracking and staff education.
- Expertise in regulatory compliance, CEQA, sustainable project design, air pollution control measures and greenhouse gas emissions mitigation

FirstCarbon Solutions

Senior Scientist *December 2021 – August 2023*

- Technical expertise to support cities/counties and corporations with CEQA compliance, GHG and criteria pollutant mitigation, and the development of sustainability plans and policies
    - Management position for six staff and multiple sub-consultants
    - Project management and coordination across company, and with multiple regulatory agencies
    - Business development and proposal preparation

San Joaquin Valley Air Pollution Control District

Regional Program Manager –Air Quality Science and Planning *October 2019 – December 2021*

- Responsible for development of clean air plans for the Central Valley in compliance with the Clean Air Act, regulatory development projects, and incentive-based emission reduction programs
    - Position included research, policy development, writing, editing, public and Board presentations
- Manager for eight staff and lead for multiple project-specific teams across organization
- Relationship building with staff across a variety of agencies and diverse stakeholders key facet of role, including work with the interested public and elected officials

Air Quality Specialist/Senior Air Quality Specialist *October 2015 – October 2019*

- Project management, data analysis, regulation development, event coordination, research, technical writing, lifecycle emissions analysis, air quality modeling, and presentations at public meetings and workshops
    - Lead for multiple environmental program and policy development projects
- Selected as 2017 Strategies and Incentives Employee of the Year for exemplifying and promoting agency cultural values of “Service, Teamwork, Attitude, and Respect”

United States Geological Society - San Francisco Bay Estuary Field Station

Research Intern, Climate Adaptation Science Center *2014-2015*

- Project design and implementation of study on intertidal ecosystem response to climate change

EDUCATION

Johns Hopkins University

Master of Science, Environmental Science and Policy, 3.94 GPA

University of California, Davis

B.A. in International Relations: Global Environment, Health, and Natural Resources, 3.8 GPA

INTERESTS

Interests include travel, volunteer conservation work, hiking, animal rescue, and equestrian competition.

MICHAEL KLEINMAN

RECENT EXPERIENCE

CURRENT ACTIVE RESEARCH SUPPORT

- 5 grants or contracts with direct funding totaling $850,000/year

ADJUNCT PROFESSOR (RECALLED)
DEPARTMENT OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH, UC IRVINE
2021 – PRESENT

- Co-Director: Air Pollution Health Effects Laboratory and Faculty Member of the UCI Center for Occupational and Environmental Health and the UCI Chao Family Comprehensive Cancer Center.

ADJUNCT PROFESSOR (RECALLED)
DEPARTMENT OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH
UNIVERSITY OF CALIFORNIA, IRVINE
2011 – PRESENT

ASSOCIATE PROFESSOR IN RESIDENCE
DEPARTMENT OF COMMUNITY AND ENVIRONMENTAL MEDICINE, COLLEGE OF MEDICINE,
UNIVERSITY OF CALIFORNIA, IRVINE
1989 – 1992

HONORS

- University Extension Teacher of the Year (2001)
- National Academy of Science - Co-Principal Investigator- Strategies for Protection of Deployed Forces from Chemical and Biological Weapons (1998-2000)
- UCI Committee of 1000 Award for Research (1997)
- National Cancer Institute - Graduate Assistantship through the NYU Environmental Cancer Center (1973-1977)
- New York State Regents Scholarship (Awarded 1959)

EDUCATION

NEW YORK UNIVERSITY
Doctorate – Environmental Health Sciences
POLYTECHNIC INSTITUTE OF BROOKLYN
Masters – Chemistry/Biochemistry
BROOKLYN COLLEGE, CITY UNIVERSITY OF NEW YORK
Bachelors – Chemistry

INTERVIEW HIGHLIGHTS

- Current Advisory Council member; extensive experience on the Council
- Serves on the AB 617 statewide consultation group
- National expert on health impacts of PM2.5 and disproportionate exposures

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-01 - Advisory Council Member

Contact Information -- Person ID: 44772170

Name:	Michael T. Kleinman	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	[redacted]
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California , Class C
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Doctorate

Preferences

Minimum Compensation:	$0.00 per year
Are you willing to relocate?	N/A
Types of positions you will accept:	
Types of work you will accept:	
Types of shifts you will accept:	On Call (as needed)

Objective

Advise and consult with the Board of Directors and the Air Pollution Control Officer (APCO) on issues related to air pollution emissions control and the environment. This may include studying and making recommendations on specific matters referred to the Advisory Council from the Board of Directors or the APCO, including the technical, social, economic and environmental aspects of matters being addressed by the Air District.

Education

Graduate School
New York University
1972 - 1977
New York, New York

Did you graduate: Yes
Major/Minor: Environmental Health Sciences
Degree Received: Doctorate

Graduate School
Polytechnic Institute of Brooklyn
1971 - 1976
Brooklyn, New York

Did you graduate: Yes
Major/Minor: Biochemistry
Degree Received: Master's

College/University
Brooklyn College, City University of New York
1965 - 1969
Brooklyn, New York

Did you graduate: Yes
Major/Minor: Chemistry
Degree Received: Bachelor's

Work Experience

Adj. Professor
8/1982 - Present

University of California, Irvine
Department of Environ. and Occup. Health, College of Health Sciences, [redacted]

Hours worked per week: 40
Monthly Salary: $0.00
# of Employees Supervised: 12
Name of Supervisor: Dr. Virginia Vieira - Chair
May we contact this employer? Yes

Duties
Dr. Michael T. Kleinman is an Inhalation Toxicologist, a Professor in the Department of Environmental and Occupational Health in the College of Health Sciences and the Co-Director of the Air Pollution Health Effects Laboratory at the University of California, Irvine (UCI). He was previously an environmental scientist with the U.S. Atomic Energy Commission (AEC) and he later directed the Aerosol Exposure and Analytical Laboratory at Rancho Los Amigos Hospital in Downey, CA. His primary research interest is the study of health effects caused by exposures to inhaled environmental contaminants. He holds a M.S. in Chemistry (Biochemistry) from the Polytechnic Institute of Brooklyn and a Ph.D. in Environmental Health Sciences from New York University. He has published more than 140 articles in peer-reviewed journals dealing with environmental contaminants and their effects on cardiopulmonary and immunological systems and on global and regional distribution of environmental or the contaminants including heavy metals and radioactive contaminants from nuclear weapons testing and manufacture. He served on two National Research Council committees that examined issues in protecting deployed U.S. Forces from the effects of chemical and biological weapons. Dr. Kleinman has previously served on U.S. EPA Clean Air Scientific Advisory Committee (CASAC) panels, is a member of the USEPA Board of Scientific Councilors and currently serves as the Chair of the California Air Quality Advisory Committee. He is a member and past Chair of the Scientific Review Panel for Toxic Substances for the California Environmental Protection Agency. He is the Vice-Chair of the Science Advisory Committee for the Bay Area Air Quality Management District in California. His current research focuses on health effects of inhaled particles, including nanomaterials and ultrafine, fine and coarse ambient particles in humans and laboratory animals. His recent studies demonstrate that inhalation of combustion-generated particles can promote airway allergies, induce inflammatory responses in the brain, accelerate the development of cardiovascular disease and that these effects may be associated with organic and elemental carbon components of the ultrafine fraction of the ambient aerosol. In collaborations with engineers and atmospheric chemists at UC Irvine and other Universities, Dr. Kleinman has been evaluating the potential health impacts and benefits of strategies to expand the use of alternative power sources and alternative fuel sources including biodiesel fuels.

Reason for Leaving
N/A

Director, Aerosol and Analytical Laboratory
7/1977 - 6/1982

Rancho Los Amigos Hospital
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
Name of Supervisor: Jack Hackney - M,D,
May we contact this employer? Yes

Duties
Directed laboratory operations. Developed and implemented exposure and monitoring protocols for inhalation toxicology studies using human volunteers and laboratory animals.

Reason for Leaving
Accepted faculty position at University of California, Irvine

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Associate Research Scientist
7/1972 - 6/1977

Institute of Environmental Medicine, New York University Medical Center
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
Name of Supervisor: Theodore Kneip - Ph.D.
May we contact this employer? Yes

Duties
Research on sources of ambient air pollution in New York City. developed an independent air monitoring system, collected and analyzed air filter samples for mass and trace metal constituents with support from EPRI and developed a Source Apportionment analysis that established the contributions of major pollution sources to PM burdens in NYC.

Reason for Leaving
Graduated

Physical Scientist
5/1966 - 6/1972

US Atomic Energy Commission - Radiochemical and Environmental Studies Divisions
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
Name of Supervisor: Herbert Volchok
May we contact this employer? Yes

Duties
Analyze samples and data from global air, soil and food sampling networks for radioactive and trace contaminants associated with nuclear weapons debris, natural and manmade releases of radioactive contaminants and industrial emissions of toxic and radioactive contaminants.

Reason for Leaving
Accepted a fellowship offer from NY University to study for the Ph. D.

Chemist
2/1964 - 4/1966

Electroplating Department, Spectranome Plating Company
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer? Yes

Duties

Chemist, Electroplating Department, Spectranome Plating Company, New York, New York.

Reason for Leaving
Better position

Certificates and Licenses

Skills

Office Skills

Typing:
Data Entry:

Additional Information

Professional Associations

State of California Scientific Review Panel for Toxic Substances

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Professional Associations

Vice- ... Bay Area Air Quality Management District Science Advisory Council

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Professional Associations

Board of Scientific Counselors, U.S. Environmental Protection Agency

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Professional Associations

ACGIH Threshold Limits Value Committee - Chemical Substances Subcommittee

References

Professional
Luderer, Ulrike
Professor and Chief, Environmental ad Occupational Health
Dept. of Medicine/DOEH
[redacted]

Professional
Kloner, Robert
Scientific Director of Cardiovascular Research Institute
HMRI
[redacted]

Professional
Araujo, Jesus
MD-PHD
Ronald Reagan UCLA Medical Center
[redacted]

Resume

Text Resume

Attachments

Attachment	File Name	File Type	Created By
CV Kleinman Jan 2023.pdf	CV Kleinman Jan 2023.pdf	Resume	Job Seeker
Cover Letter.pdf	Cover Letter.pdf	Cover Letter	Job Seeker

Agency-Wide Questions

1. Q: How did you find out about this position?
   A: District Employee

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2. Q: If other, please tell us where.
   A:

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3. Q: Are you currently legally authorized to work in the United States on a full-time basis?
   A: Yes

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4. Q: Are you related to any District employee or Board member?
   A: No

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5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?
   A: No

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6. Q: If related to a District employee or Board member, what is their name and their relationship to you?
   A: N/A

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to air quality, climate change, or health impacts of air pollution, with a focus on particulate matter exposure reduction. Please describe how you think your experience (professional and lived) can be valuable to the Air District and provide any relevant references. Include any relevant leadership positions, accomplishments, publications or awards. Note, we recognize individuals may not have experience in all the categories listed here – please include information in your areas of expertise.
   A: I am a Professor of Environmental Health Sciences with a specialization in Inhalation Toxicology. I have a broad background in inhalation exposure health effects studies and the collection and analysis of contaminant aerosols and gases for organic constituents, including carbonyls and polycyclic organic compounds and for trace metals. My work at the USAEC was in the area of using chemical and radiological signatures of environmental contaminant emissions to develop methodology to integrate air and soil deposition data on a global basis to determine to distribution and potential exposures to toxic radioactive contaminants from deliberate and accidental environmental releases, including weapons tests, nuclear excursions and other environmental releases. As part of

my doctoral dissertation I developed methods to identify and apportion sources of ambient air particulates in urban environments using chemical tracers and meteorological information. The method that was developed became part of the integrated health risk assessment system developed by the US Environmental Protection Agency to estimate the potential health benefits accruing from air quality regulations. My recent research examines effects of short term and chronic exposures to inhaled cigarette smoke and e-cigarette vapor contaminants on immunological function and cardiopulmonary disease progression. Our findings have identified, in addition to adverse effects on cardiac physiology, significant evidence of tissue inflammation and oxidative stress including evidence of lipid peroxidation and free radical generation in arteries that correlate with the development of atherosclerotic plaques following exposures to environmental air contaminants. We have developed a unique capacity to perform inhalation exposures to environmental contaminants and to simulate complex source emissions. We have recently applied the measures of heart rate variability, which we have used as an indicator of cardiovascular function in our toxicology studies, to determine if this may also be an early indicator of the progression of degenerative nerve diseases (i.e. Alzheimer's) in people and examined sex-related differences in responses to environmental exposures.

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2. Q: Please describe any environmental justice (EJ) and/or other public health, equity, or social justice work you have been a part of and how it relates to EJ issues in the Bay Area. If you have not been a part of such work, please include your understanding of the topic and of the work required by local governments, like the Air District.

   A: As part of a team effort my laboratory and other colleagues at UCI are working with two neighborhood groups, Healthy Environments through Community-based Air Monitoring in Orange County, California (HECAM-OCC) and the Madison Park Neighborhood Association (MPNA-GREEN) developing an air monitoring pilot project of the industrial corridor in Santa Ana, CA and plan to expand that monitoring to include more sources of air pollution, which have been identified by residents and confirmed by academic collaborators. These sources include: truck traffic, fireworks, and noise pollution. We will also be expanding our investigation of air pollution from the Madison Park neighborhood and along the industrial corridor to include all of the 21 environmental justice communities located in Santa Ana.

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3. Q: The Air District may soon begin the process of developing an attainment plan for particulate matter for inclusion in the State Implementation Plan (SIP). Please explain your experience that would be useful for working with and implementing the Clean Air Act, particularly around the development of plans to attain the National Ambient Air Quality Standards. If you can, please include examples of innovative strategies to use discretionary authorities to develop an approvable plan that also considers cumulative impacts and reduces air quality disparities in overburdened communities and advances environmental justice.

   A: I have extensively studied the sources and health effects of particle emissions in both urban and rural areas. The Source Apportionment model that I developed as part of my dissertation research, coupled with the monitoring I performed, identified specific emissions and was a part of the information bases that were targeted for mitigation by the city of NY and eventually led to reduced exposures to PM and toxic metals. That was a long time ago but the basic ideas are relevant. 1. Identify the problem and provide reliable, quantitative information that regulators can use for framing and justifying mitigation strategies. 2. Involve stakeholders in formulating solutions. 3. Think tactically - Identify specific targets that can be attained that will advance toward achieving the strategic goal. In developing plans for meeting the PM2.5 NAAQS, it will be important to continue to consider how the plan, in addition to reducing the average PM exposures, will also advance towards environmental equity.

4. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

UNIVERSITY OF CALIFORNIA, IRVINE

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO • SANTA BARBARA • SANTA CRUZ • MERCED

Department of Occupational and Environmental Health
College of Health Sciences
University of California, Irvine
385 Health Sciences
Irvine, CA 92697-1830

Michael T. Kleinman, Ph.D.
Adj. Professor (recalled)
and
Co- Director: Air Pollution Health Effects Laboratory

To Whom It May Concern,
I would like to continue as a member of the Advisory Council. I very much admire the accomplishments that the District has made and their plans going forward to develop plans to meet the PM and other NAAQS. I am submitting my application and I hope that it will be favorably considered.

Sincerely,

Michael T. Kleinman

January 26, 2023

Michael T. Kleinman

Department of Occupational and Environmental Health
College of Health Sciences
[redacted]

PERSONAL:

[redacted]

EDUCATION:

1965:
B.S. (Chemistry) Brooklyn College, City University of New York

1971:
M.S. (Chemistry/Biochemistry) Polytechnic Institute of Brooklyn

1977:
Ph.D. (Environmental Health Sciences) New York University

Honors:
University Extension Teacher of the Year (2001).
National Academy of Science - Co-Principal Investigator- Strategies for Protection of Deployed Forces from Chemical and Biological Weapons (1998-2000).
UCI Committee of 1000 Award for Research (1997)
National Cancer Institute - Graduate Assistantship through the NYU Environmental Cancer Center (1973-1977)
New York State Regents Scholarship (Awarded 1959)

PROFESSIONAL EXPERIENCE:

Current Active Research Support:
5 Grants or Contracts with Direct Funding totaling $850,000/year

2021 – Present
Adjunct Professor (Recalled), Department of Environmental and Occupational Health, Program in Public Health, University of California Irvine, Co-Director: Air Pollution Health Effects Laboratory and Faculty Member of the UCI Center for Occupational and Environmental Health and the UCI Chao Family Comprehensive Cancer Center.

2011 – Present
Adjunct Professor (Recalled), Department of Medicine, School of Medicine, University of California, Irvine.

1992- 2011
Adjunct Professor, Department of Medicine, School of Medicine, University of California, Irvine. Co-Director: Air Pollution Health Effects Laboratory and Faculty Member of the UCI Center for Occupational and Environmental Health and the UCI Chao Family Comprehensive Cancer Center.

2011- Present:
Adjunct Professor (WOS) UC Irvine Program in Public Health

1989-1992:
Associate Professor in Residence, Department of Community and Environmental Medicine, College of Medicine, University of California, Irvine with a Joint Appointment (WOS) in Program in Social Ecology.

1982-1989:
Associate Adjunct Professor, Department of Community and Environmental Medicine.

1982-1998:
Faculty Associate, Public Policy Research Organization, University of California, Irvine.

1982:
Visiting Professor, Department of Community and Environmental Medicine, College of Medicine, University of California, Irvine.

1981-1982:
Visiting Lecturer, Department of Engineering, University of California, Irvine.

1977-1982:
Director, Aerosol and Analytical Laboratory, Environmental Health Service, Rancho Los Amigos Hospital, Downey, California.

1974-Present:
Environmental and Occupational Health Consultant.

1972-1977:
Associate Research Scientist, Institute of Environmental Medicine, New York University Medical Center.

1966-1972:

Physical Scientist - Environmental Studies Division, U.S. Atomic Energy Commission Health and Safety Laboratory, New York, New York.

1963-1966:
Chemist - Radiochemistry Division, U.S. Atomic Energy Commission Health and Safety Laboratory, New York, New York.

1961-1963:
Chemist, Electroplating Department, Spectranome Plating Company, New York, New York.

MAJOR RESEARCH INTERESTS:

My current focus is to determine the mechanisms by which inhaled toxic chemicals, alone and in mixtures, cause inflammation and neurodegeneration in the brain, interfere with the cardiopulmonary system and with respiratory system defenses, using *in vitro* studies and in vivo exposure studies with laboratory animals and human subjects. These studies examine the role of inflammation and oxidative stress induced by endogenous and exogenous factors in the development and exacerbation of chronic diseases such as Alzheimer's Disease, asthma, cardiopulmonary injury and exacerbation of lung and heart diseases.

An important aspect of this research is the integration of physiological factors that can affect dose with health effects research results from human clinical and laboratory animal experiments to better assess exposures and dose-response relationships. These relationships can be translated into improved assessments of risks to humans exposed to toxic environmental agents. As part of this work, I have developed and validated mathematical models for determining distribution of inhaled toxic agents at respiratory tract target sites following exposures under various levels of exertion and physical stress.

PROFESSIONAL SOCIETY MEMBERSHIPS:

Air and Waste Management Association
American Association for the Advancement of Science
American Association for Aerosol Research
American Chemical Society
New York Academy of Sciences
Sigma Xi
Society of Toxicology
ACGIH (formerly the American Association of Governmental Industrial Hygienists)

PROFESSIONAL ACTIVITIES:

2020-Present:
Member: Clean Air Scientific Advisory Committee (USEPA)-Particulate Matter and Ozone Panels.

2018-Present:
Member: State of California Scientific Review Panel for Toxic Substances.

2015-2018:

Chair: State of California Scientific Review Panel for Toxic Substances.

2016-Present:
Vice-Chair: Bay Area Air Quality Management District Science Advisory Council

2018 to Present:
Member: Board of Scientific Counselors, U.S. Environmental Protection Agency

2011-Present:
Member: ACGIH Threshold Limits Value Committee – Chemical Substances Subcommittee

2014-2015:
Chair: American Chemical Society, Orange County Section.

2011-2014:
Member: Board of Scientific Counselors: Centers for Disease Control and Prevention - ATSDR/NCEH

2010-2011:
Vice-Chair Inhalation and Respiratory Section, Society of Toxicology

2004 to 2007:
Board of Directors: American Association for Aerosol Research

1995 to 2013:
Member: Scientific Review Committee (Ad Hoc)- National Institute of Environmental Health Sciences.

1998 to Present:
Faculty member and Investigator: Southern California Particle Center.

2001 to 2004
National Academy of Sciences/National Research Council – Committee Member: Naval Forces' Defense Capability Against Chemical and Biological Warfare Threats.

1997 to 2000:
National Academy of Sciences/National Research Council Principal Investigator: Strategies to Protect Deployed Forces from Chemical and Biological Weapons.

1987-1992:
Member: Health Effects Review Committee, US EPA. (This study section reviews extramural grant applications).

2007-Present:
Member: Publications Committee - Journal of the Air and Waste Management Association.

1996-1999:
Chair, Effects Division, Air and Waste Management Association (formerly the Air Pollution Control Association.

1991-2010:
Member, Intersociety Committee on Methods of Air Sampling and Analysis. The committee edits and publishes a compendium of analytical and air sampling methods that is well recognized both nationally and internationally.

1981-1991:
Chairman, Trace Metals Subcommittee #6, Intersociety Committee on Manual Methods for Ambient Air Sampling and Analysis. The subcommittee published standard methods for analysis of trace elements in air samples and human tissues using methods such as atomic absorption spectrophotometry, neutron activation analysis and X-ray fluorescence analysis.

1982-1988:
American Public Health Association Committee on Techniques for Biological Monitoring. Chair of Subcommittee on publication of biomonitoring methods. The committee reviewed, compiled and published a volume on biological monitoring techniques and considerations related to quality assurance and accreditation for laboratories performing such analyses.

1981-1990:
Secretary Technical Program Committee for Annual Meeting of the Air Pollution Control Association. This committee oversaw the development of the technical programs to be presented at annual meetings.

1984-1990:
Toxicology Committee, American Industrial Hygiene Association. This committee reviewed and issued health guides for chemicals used in the occupational environment, and planned technical sessions to be presented at annual meetings.

1985-1988:
Member, Advisory Council, South Coast Air Quality Management District, El Monte, California. The committee met monthly in response to requests from the district to provide advice on management, strategies, and health consequences of air pollution in the South Coast Air Basin of Southern California.

1987:
Special Reviewer, Toxicology Study Section, National Institutes of Health, Bethesda, Maryland. Member of an *ad hoc* study section to review a center grant.

1987:
Reviewer, Acid Aerosols Issues, Environmental Protection Agency, Research Triangle Park, North Carolina. Reviewed a draft Criteria Document and presented research data at workshops convened jointly by the U.S. Environmental Protection and the National Institute of Environmental Health Sciences.

1987-1982:
Member, Radiation Safety Committee, Rancho Los Amigos Hospital. Met monthly to review protocols involving human exposure to radiation from external or internal sources and participated in reviews of safe practices related to the use and storage of radioisotopes.

CONSULTANCIES:
I have also served as a consultant to Federal, State and local governments, have consulted for private industries and provided expert testimony on exposure and health effects associated with toxic chemicals and criteria air pollutants.

INTERNATIONAL ACTIVITIES:

Member of the Inhalation Toxicology Advisory Committee to Health and Welfare, Canada (the Canadian agency which has responsibilities similar to those of the U.S. Public Health Service and the U.S. Environmental Protection Agency). This *ad hoc* committee meets annually to plan research strategies, provides workshops on inhalation methods and members provide consultation on an as needed basis. (1989-2002).

Member of the advisory committee for a workshop on developing an Air Quality Index for Delhi, India (2000).

Guest researcher: Inhalation toxicology at the National Institute of Environmental and Public Health, the Netherlands.

TEACHING:

University Courses Taught:

CEM 206 Target Organ Toxicology, 1991-Present.

CEM 201 Environmental Toxicology, 2014-Present.

CEM 207 Design of Toxicological Experiments, 1991-2014.

SE224 Environmental Health Sciences II Spring Quarter 2000.

Engineering 434.32 Atmospheric Pollution in the 1990's: Ozone Acid Toxics and the Greenhouse Effect, Spring 94 (UCLA)

CEM X492.41 Biological Principles of Environmental Management (Spring 1985 to 2012).

Engineering 267 A,B, "Industrial Processes" (Graduate, 3 hr. lecture, 1 quarter per year, 1985).

Engineering 434.1 Environmental Toxicology, Summer 94 (UCLA)

Co-Instructor, Preventive Medicine, (College of Medicine Second Year Curriculum.) Presented lectures on environmental contamination and exposures in the workplace, 1983-1990.

Engineering 266 A,B,C, "Industrial Hygiene" (Graduate, 3 hr. lecture, 3 quarters per year, 1983-1984).

Presented section on Environmental Hazards and Disease: Air Pollution, for 5th Quintile course in Community and Environmental Medicine, July 1983.

Presented lecture on Effects of Air Pollution for CEM X491.2, Work Physiology, Residency Program in Occupational Medicine, November 1982.

Co-Instructor, Engineering 264K, "Fundamentals of Air Pollution Aerosol Technology (Graduate, 3 hr. lecture, one quarter per year, 1979, 1981).

Biological Sciences 199, Undergraduate Research – One to two students per year. Students trained include: David Ligh*, Alan Spilkin, Daniel Gittelson, Theo Luu, Danny Tehary*, Hyon Lee, Bette McMahon, Carmen Domingo, Michael Dam, Shirley Edelman, Joe Daigneault, Huy Nguyen, Chris Bui, Amine Rakab*, Rhoda Peng, Elmer Alma (Hughes Fellow), Loren Launen, Eleanor Kelly, Ahn Do, Jackie Kang, Binh Tran, Sylvia Rivera, Deisy Mendoza, Bhumika Kapadia* , David Herman*, Mariyah Saiduddin*, Jesus Mariscal
(Note: * = awarded Undergraduate Research Fellowships for 199 project).

Graduate Thesis Committees:

Advisor for doctoral Graduate Sharon McCarthy (Social Ecology), "A study of the relationship between indoor residential and community air pollution: The role of building ventilation as it affects human exposures." Ph.D. awarded 1987.

Advisor for doctoral Graduate David Scherer, "Exposure estimation and acute respiratory health effects of airborne particles." Ph.D. awarded 1989.

Doctoral Committee Member for doctoral graduate Tina Leakakos (Environmental Toxicology), "The Impact of toxic insult on DNA maintenance methylation." Ph.D. awarded 1992.

Advisor for Doctoral Graduate William Lambert (Social Ecology), "Carbon Monoxide and Cardiac Health" Ph.D. Awarded 1994.

Advisor for MS Graduate Eric Moline (Environmental Toxicology) "On the Cloud Behavior of Side Stream Tobacco Smoke." MS Awarded 1998.

Advisor for MS Janet Richard (Environmental Engineering, CSU Long Beach) "What Effect will the Proposed Airport at MCAS El Toro have on Ground-Level Ozone Production?" MS Awarded 2000.

Advisor for Doctoral Graduate Michael Oldham (Environmental Toxicology) Ph.D.

awarded 2001.

Advisor for MS Graduate Evan Cohen (Environmental Toxicology) 2002.

Advisor for MS Graduate Christopher Heinrich (Environmental Toxicology) 2004.

Advisor for MS Graduate Wayne Chang (Environmental Toxicology) 2004.

Advisor for Doctoral Graduate Amber Rinderknecht (Social Ecology - Environmental Analysis and Design). Graduated Ph.D. 2005.

Advisor for Doctoral Graduate Patrick Pham (Environmental Health, Science and Policy) Graduated PH.D. 2005.

Advisor for MS Graduate Tack Lam (Environmental Toxicology) 2005.

Advisor for Doctoral Graduate Ali Hamade (Environmental Toxicology). Ph. D. awarded 2006.

Advisor for Doctoral Graduate Loyda Mendez (Environmental Toxicology). Ph.D. awarded 2006.

Advisor for MS Graduate Huihui Li (Environmental Toxicology) 2007.

Advisor for Doctoral Graduate Glenn Gookin (Environmental Toxicology) Advanced to Candidacy, June 2008.

Advisor for MS Graduate Karina Salazar (Environmental Toxicology).

Advisor for MS Graduate Michael MacKinnon (Environmental Toxicology).

Advisor for Ph.D. Graduate Andrew Keebaugh (Environmental Toxicology).

Advisor for Ph.D. David Herman (Environmental Health Sciences) Awarded Ph.D.

Advisor for Ph.D. Rebecca Johnson (Environmental Health Sciences) Awarded Ph.D.

Advisor for Ph.D. Student Bishop Bliss (Environmental Health Sciences)

Advisor for Ph.D. Student Elizabeth Choi

Advisor for Ph.D. Student Jayveeritz Bautista

Advisor for Ph.D. Student Xiangmeng Lin

UNIVERSITY SERVICE:

2018- Present
Environmental Health Sciences Graduate Acceptance Committee

2008-Present
Member: Radiation Safety Committee

2014-2017:
Faculty Search Committee – High Impact Hiring Initiative

2014-Present:
Faculty Search Committee-Occupational and Environmental Medicine

2006-2008:
Faculty Search Committee-Environmental Toxicology

1999 - 2009:
Chair: Executive Committee, University of California Toxic Research and Teaching Program.

2001-2002:
Member: LCME Review Preparation Committee on Academic Programs

1996-1999:
Member: IRB Human Subjects Research Committee. Committee meets monthly to review all requests to perform research involving human subjects and to ascertain the scientific relevance of the research and to assure that the interests of the subjects are adequately safeguarded.

1996-1998:
Member: IBC Biosafety Committee. Committee reviews protocols involving materials that are considered to have bio-safety implications.

1983 - 2001:
Interview Subcommittee of the Admissions committee, California College of Medicine, UC Irvine. (Interviewed approximately 3 medical school admissions candidates per year.)

1991-1993:
Ad-hoc committee to evaluate environmental concerns at Las Lomas Housing. Members met with representatives of Environmental Health and Safety and assisted in developing a sampling strategy and performing and evaluating air monitoring efforts to determine whether or not effluents from a nearby dump site were affecting housing residents.

PUBLICATIONS:

PEER REVIEWED JOURNAL ARTICLES

1. Bogen, D. and Kleinman, M.T. Improved determination of microgram amounts of lead in food with radioactive tracers. Analyst, 92:611, 1967.

2. Volchok, H.L. and Kleinman, M.T. Sr-90 yield of the 1967 Chinese thermonuclear explosion. J. Geophysical Research, 74:1694, 1969.

3. Kleinman, M.T. and Volchok, H.L. Radionuclide concentrations in surface air: direct relationship to global fallout. Science, 166:376, 1969.

4. Volchok, H.L., Knuth, R. and Kleinman, M.T. The respirable fraction of Pu at Rocky Flats. Health Physics, 23:395-396, 1972.

5. Kleinman, M.T., Kneip, T.J. and Eisenbud, M. Seasonal patterns of airborne particulate concentrations in New York City. Atmospheric Environment, 10:9-11, 1976.

6. Bernstein, D.M., Kleinman, M.T., Kneip, T.J., Chan, T.L. and Lippmann, M. A high-volume sampler for the determination of particle size distributions in ambient air. J. Air Pollution Control Association, 26:1069-1072, 1976.

7. Kleinman, M.T., Bernstein, D.M. and Kneip, T.J. An apparent effect of the oil embargo on total suspended particulate matter and vanadium in New York City air. J. Air Pollution Control Assoc., 27:65-67, 1977.

8. Leaderer, B.P., Bernstein, D.M., Daisey, J.M., Kleinman, M.T., Kneip, T.J., Knutson, E.O., Lippmann, M., Lioy, P.J., Rahn, K.A., Sinclair, D., Tanner, R.L. and Wolff, G.T. Summary of the New York Summer Aerosol Study (NYSAS). J. Air Pollution Control Assoc., 28:322-327, 1978.

9. Kleinman, M.T., Leaderer, B., Tomczyk, C. and Tanner, R. Inorganic nitrogen compounds in New York City air. Annals of the New York Academy of Sciences, 322:115-124, 1979.

10. Lippmann, M., Kleinman, M.T., Bernstein, D.M., Wolff, G.T. and Leaderer, B.P. Size-mass distributions of the New York summer aerosol. Annals of the New Academy of Sciences, 322:29-44, 1979.

11. Wolff, G.T., Lioy, P.J., Bernstein, D.M. and Kleinman, M.T. Characterization of aerosols upwind of New York City, I. Transport. Annals of the New York Academy of Sciences, 322:57-71, 1979.

12. Lioy, P.J., Wolff, G.T., Rahn, K.A., Bernstein, D.M. and Kleinman, M.T. Characterization of aerosols upwind of New York City, II. Aerosol characterization. Annals of the New York Academy of Sciences, 322:73-85, 1979.

13. Daisey, J.M., Leyko, M.A., Kleinman, M.T. and Hoffmann, E. The nature of the organic fraction of the New York summer aerosol. Annals of the New York Academy of Sciences, 322:125-141, 1979.

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MICHAEL SCHMELTZ

RECENT EXPERIENCE

ASSISTANT PROFESSOR

CALIFORNIA STATE UNIVERSITY, EAST BAY

AUGUST 2018 – PRESENT

- Dr. Michael Schmeltz is currently an Assistant Professor in the Department of Public Health at California State University, East Bay. He has over a decade of experience working on environmental health and climate change issues at local, state, and federal agencies, where he continues in advisory roles. His research has focused on examining social and structural vulnerabilities communities face due to environmental and climate hazards.

AIR QUALITY SCIENTIST

PUGET SOUND CLEAN AIR AGENCY

MAY 2017 – JULY 2018

- Developed strategies and assessed PSCAA's actions to reduce greenhouse emissions, by 2030, through transportation policies, including the regulation of indirect sources and promotion of electric vehicles.
- Coordinated, and managed project, with regional MPO and EPA partners, to develop sketch model tool for projecting future GHG emissions under various travel efficiency scenarios, including travel demand management and travel pricing.
- Served as a subject matter expert on the impacts of air pollution to public health, participating in public meetings, and community-building events to inform and educate.
- Developed communication material to enhance PSCAA's image as a public health agency with particular focus on how climate change impacts air quality.

EDUCATION

CUNY GRADUATE CENTER AND SCHOOL OF PUBLIC HEALTH

Doctorate – Environmental & Occupational Health

HUNTER COLLEGE

Masters – Environmental & Occupational Health

BOSTON UNIVERSITY

Bachelors – Biomedical Research

INTERVIEW HIGHLIGHTS

- Sits on EPA Advisory Board looking at cumulative impacts of climate stressors on vulnerable populations
- Worked with State of Massachusetts Department of Environmental Protection on project to consider cumulative impacts in permitting decisions
- Experience working directly with community-based organizations on environmental justice issues

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-01 - Advisory Council Member

Contact Information -- Person ID: 52647659

Name:	Michael T. Schmeltz	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California , Class C
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Doctorate

Preferences

Minimum Compensation:

Are you willing to relocate?

Types of positions you will accept:

Types of work you will accept:

Types of shifts you will accept:

Objective

Education

Graduate School
CUNY Graduate Center and School of Public Health
8/2009 - 2/2015
New York City, New York

Did you graduate: Yes
Major/Minor: Environmental & Occupational Health
Degree Received: Doctorate

Graduate School
Hunter College
7/2005 - 1/2008
New York City, New York

Did you graduate: Yes
Major/Minor: Environmental & Occupational Health
Degree Received: Master's

College/University
Boston University
8/1998 - 5/2002
Boston, Massachusetts

Did you graduate: Yes
Major/Minor: Biomedical Research
Degree Received: Bachelor's

Work Experience

Assistant Professor
8/2018 - Present

Hours worked per week: 40
Monthly Salary: $0.00

California State University, East Bay
Hayward, California

May we contact this employer?

Duties
Dr. Michael Schmeltz is currently an Assistant Professor in the Department of Public Health at California State University, East Bay. He has over a decade of experience working on environmental health and climate change issues at local, state, and federal agencies, where he continues in advisory roles. His research has focused on examining social and structural vulnerabilities communities face due to environmental and climate hazards.

Air Quality Scientist
5/2017 - 7/2018

Puget Sound Clean Air Agency
Seattle, Washington

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Developed strategies and assessed PSCAA's actions to reduce greenhouse emissions, by 2030, through transportation policies, including the regulation of indirect sources and promotion of electric vehicles. Coordinated, and managed project, with regional MPO and EPA partners, to develop sketch model tool for projecting future GHG emissions under various travel efficiency scenarios, including travel demand management and travel pricing.
Served as a subject matter expert on the impacts of air pollution to public health, participating in public meetings, and community-building events to inform and educate. Developed communication material to enhance PSCAA's image as a public health agency with particular focus on how climate change impacts air quality.

Postdoc
8/2015 - 5/2017

U.S. Environmental Protection Agency/Association of Schools and Programs of Public Health
Washington, District of Columbia

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Coordinated, planned, and managed, with US EPA staff, scientific research projects to assess and improve adaptive capacity and resilience among vulnerable populations and areas. Developed, wrote, and reviewed technical assessments for healthcare, sustainability, energy, and water infrastructure and examine risk communication material of climate hazards. Performed epidemiological-based investigations, statistical analyses and spatial analyses to assess, identify and evaluate health outcomes among vulnerable populations due to the impacts of climate change using large hospitalization data sets. Specific projects: vulnerability mapping and indicators; analyses of heat morbidity/mortality among sensitive populations; multisectoral urban resilience indicators; research and surveillance of environmental/climate justice issues among under-served communities. Member of U.S. Global Change Research Program (USGCRP) Interagency Group on Climate Change and Human Health, providing subject matter expertise and partnering in interagency cooperative work.

Adjunct Assistant Professor
1/2013 - 8/2015

CUNY School of Professional Studies - Murphy Institute for Labor Studies
New York City, New York

Hours worked per week: 15
Monthly Salary: $0.00
May we contact this employer?

Duties
Instructor for college courses in occupational health

Graduate Fellow
9/2010 - 12/2012

Asian Americans for Equality (AAFE
New York, New York

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Developed environmental coordination plan for AAFE to assess Asian community needs and environmental issues to maintain environmental conservation and sustainability within the Chinatown/Lower East Side community.
Engaged and negotiated with city officials on environmental impacts to advocate for Chinatown/Lower East Side community. Engaged with community, designed surveys, conducted research and analyzed data on how tobacco advertising affects Asian youth near schools to educate regulatory agencies and policy makers to promote a smoke- free city.

Environmental Health Scientist
5/2006 - 8/2010

New York City Department of Health & Mental Hygiene
New York City, New York

Hours worked per week: 40
Monthly Salary: $0.00
May we contact this employer?

Duties
Developed and assessed risk communication material and protocols for dissemination to public during incidents (natural and human-emergency) related to environmental health. Subjects included heat related illnesses, air/water contaminants and other chemical exposures. Informed and discussed public and environmental health policy with high-level decision makers to respond to and address emergency incidents and natural disasters.
Program manager for environmental data system development used to aggregate and disseminate information during emergencies. Utilized disaster risk reduction (DRR) techniques in large urban areas based on data collection, analysis and community profiling to target vulnerable populations. Assessed and determined contaminants of potential concern associated with environmental and occupational health risks to be used in NYC including analyzing and interpreting environmental sampling data to determine health risks.

Certificates and Licenses

Skills

Office Skills

Typing:
Data Entry:

Additional Information

Professional Associations

PROFESSIONAL AFFILIATIONS & SERVICE
U.S. Environmental Protection Agency
Board of Scientific Councilors (BOSC) 2022 – 2025
Member: Subcommittee on Climate Change & Subcommittee on Air, Climate & Energy (ACE) Strategic Research Action Plan
Scientific Advisory Board (SAB) 2022 – 2024

Member: EJScreen Review Panel
Alameda County, California - Parks, Recreation & Historical Commission
District 5 Commissioner
American Geophysical Union (AGU)
Member
American Public Health Association (APHA)
Chair: Climate Change & Health Topic Committee (2017-2019) ; Member: Education Board; Member (2018 – 2021): Governing Councilor (2016-2018)
International Society of Environmental Epidemiology (ISEE)
Member

References

Resume

Text Resume

Attachments

Agency-Wide Questions

1. Q: How did you find out about this position?
   A: Other

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2. Q: If other, please tell us where.
   A: Twitter

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3. Q: Are you currently legally authorized to work in the United States on a full-time basis?
   A: Yes

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4. Q: Are you related to any District employee or Board member?
   A: No

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5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?
   A: No

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6. Q: If related to a District employee or Board member, what is their name and their relationship to you?
   A: N/A

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to air quality, climate change, or health impacts of air pollution, with a focus on particulate matter exposure reduction. Please describe how you think your experience (professional and lived) can be valuable to the Air District and provide any relevant references. Include any relevant leadership positions, accomplishments, publications or awards. Note, we recognize individuals may not have experience in all the categories listed here – please include information in your areas of expertise.
   A: I have both a Masters and Doctoral degree in Environmental and Occupational Health which has provided me with extensive topical knowledge on air pollution, climate change,

and the public health impacts associated with these hazards. As noted in my CV I have published widely on these topics, particularly the public health impacts of our changing climate. My research and work has also focused mostly on urban areas and environmental issues associated with urban populations which are of particular relevance to the Air District. In my position at Cal State East Bay, I regularly teach courses in Environmental Health, Climate Change & Equity, Public Health Policy, and lead our capstone courses working with community partners. I have also initiated pilot projects including installing low-cost air sensors on campus and creating the Cal State East Bay website for air quality (https://www.csueastbay.edu/airquality/).

Outside of my current academic position, I have over a decade of experience working with local, state, and federal government agencies to address environmental hazards like air pollution. In New York, I was an environmental health specialist engaged in assessing exposure to air pollutants, both in ambient and occupational settings, and communicating risk to the public. In Washington State, I was an air quality scientist with the regional air quality management district (Puget Sound Clean Air Agency) and performed similar duties to those of air quality scientists at the Bay Area Air Quality Management District. In this role, I was also the lead climate policy analyst and spearheaded projects to develop and recommend policies that reduce both transportation-related greenhouse gas emissions and air pollutants. At the U.S. Environmental Protection Agency (EPA) I helped to develop guidance documents and provided subject matter expertise to our state and regional partners. These projects focused on using geospatial techniques to assess environmental hazards and vulnerable populations in order to target specific policies and programs that would build resilience and reduce exposure to environmental and climate-related hazards.

As a result of my extensive experience, I have been appointed to two U.S. EPA advisory roles, one on the Bureau of Scientific Counselors (BOSC) and another on the Scientific Advisor Board (SAB) centered on climate change and environmental justice, respectively. I have also been invited to various panels and talks, including California's 5th Climate Change Assessment Roundtable on Human Health, Culture, & Wellbeing.

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2. Q: Please describe any environmental justice (EJ) and/or other public health, equity, or social justice work you have been a part of and how it relates to EJ issues in the Bay Area. If you have not been a part of such work, please include your understanding of the topic and of the work required by local governments, like the Air District.

   A: During my time in on the east coast, I worked with the Asian American community in New York City on environmental issues within the Chinatown/Lower East Side community – particularly on sanitation and air pollution from vehicles in these densely populated neighborhoods. I worked with disadvantaged communities in Brooklyn, NY that were significantly impacted by climate hazards (Hurricane Sandy) and that experienced the exacerbation of underlying social determinants (housing inequity, health inequity, and transportation isolation, among others) during these events. In Washington State, I did community outreach as part of my work with the Puget Sound Clean Air Agency and was a liaison to the city of Auburn working with those impacted by winter wood smoke exposure and the 2018 wildfire smoke events. These disadvantaged populations and environmental exposures are all similar to those in the Bay Area. I also currently volunteer, through the American Geophysical Union's Thriving Earth Exchange program, as a subject matter expert for a community in Duck Hill, MS which is experiencing high exposures of lead in their housing, water, and soil. My role has been as a community volunteer, a researcher, and as a government employee so I am familiar with and understand the need for open and clear communication between all stakeholders involved with environmental justice issues. In these roles, I have developed and advocated for policies and programs that reduce burdens on these communities but understand a lot of work still needs to be done.

My academic work now focuses on helping disadvantaged communities build resilience to climate change. This work is performed in collaboration with Cal State East Bay students and local community groups engaged in or wanting to address climate hazards that impact their communities through small projects in our Capstone course. In addition, I am currently engaged in a project (Home Electrification Equity Project - HEEP) piloted by Habitat for Humanity, Cal State East Bay, and the Cities of Hayward, Berkeley, Fremont, and Oakland to provide low-income homeowners with electrification upgrades. This work is centered on California's commitment to a just and equitable transition through decarbonization and electrification.

As a member of the LGBTQ+ community, I believe the representation of historically marginalized populations matter in making informed decisions to better understand the benefits and consequences of those decisions, particularly when it comes to environmental justice issues. Through experiences in environmental justice work, I am always learning and hope to use my position as an advisor and subject matter expert to better inform policy that alleviates environmental burdens among the most vulnerable.

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3. Q: The Air District may soon begin the process of developing an attainment plan for particulate matter for inclusion in the State Implementation Plan (SIP). Please explain your experience that would be useful for working with and implementing the Clean Air Act, particularly around the development of plans to attain the National Ambient Air Quality Standards. If you can, please include examples of innovative strategies to use discretionary authorities to develop an approvable plan that also considers cumulative impacts and reduces air quality disparities in overburdened communities and advances environmental justice.

   A: My time working for the US EPA and the Puget Sound Clean Air Agency (PSCAA) has given me technical and practical knowledge of the National Ambient Air Quality Standards and the Clean Air Act. While I did not regularly perform field investigations I worked with our inspectors and engineers at PSCAA to better understand our regulatory and enforcement process and procedures. I did this to supplement my technical knowledge on these topics with practical work in the field and how regulations and enforcement are applied.

   As noted in question #1, I was the lead on the report 'Candidate Actions to Reduce Transportation Greenhouse Gas Emissions' (https://pscleanair.gov/DocumentCenter/View/3314/Evaluation-Report_Transportation-Actions_June2018?bidId). While this report focused on the reduction of greenhouse gas (GHG) emission, it had secondary benefits of reducing air pollutants. Through this assessment, I helped to develop and propose innovative policy actions such as: (i) differential financial incentives (and taxes) on vehicles, fuel economy, and fossil fuels (diesel and gasoline); (ii) regulating methane emissions from renewable natural gas production; and (iii) development of indirect source rules for major activity centers (e.g. goods distributions; airports, train yards). A key focus of this project was to also get community input on how these policies could be implemented equitably without additional burdens, whether it be financial or other, on communities.

   Similarly, as mentioned in question #2, the projects I am currently working on for an equitable transition aim to reduce disparities associated with air pollutants from fossil fuel use through electrification. This will allow local and state governments to target communities already overturned by environmental pollutants, such as air pollution.

   Lastly, I recently completed a consulting project with the Massachusetts Department of Environmental Protection on incorporating cumulative impact analyses into their air permitting process. The focus of the project was to account for EJ communities bearing an unfair or inequitable environmental burden based on cumulative effects of environmental pollutants and how the assessment of cumulative effects could impact

how air permits and likely other permits would be granted in the future. I provided my expertise in geospatial analysis and indicator variables that would help to better assess cumulative hazards among EJ communities.

I believe these experiences and my knowledge can be beneficial to the Bay Area Air Quality Management District Advisory Council during the development of an attainment plan and considerations of cumulative impacts on overburdened communities.

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4. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

PHIL MARTIEN

RECENT EXPERIENCE

DIVISION DIRECTOR, AIM DIVISION
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
JUNE 2018 – AUGUST 2023

- Directed 17 staff with a total budget of about $5 million. Programs included the Community Air Risk Evaluation (CARE) program, emissions inventory reporting programs, and air quality modeling programs.
- With community groups, co-developed detailed community-scale emissions inventories, modeling, and exposure assessments to support strategy prioritization for Community Emission Reduction Plans required by California Assembly Bill (AB) 617.
- Lead regional PM2.5 and toxics modeling to support rule development efforts. Directed development of annual emissions inventories of criteria pollutants, toxic air contaminants, and greenhouse gases to meet state reporting requirements and internal modeling, planning, and reporting needs. Presented findings to the public and to the BAAQMD Board of Directors.

SECTION MANAGER, AIM
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
JULY 2012 – JUNE 2018

- Managed eight staff and a total budget of about $2 million in the Exposure Assessment and Emissions Inventory Section, which included the CARE program and emissions inventory reporting programs.
- Oversaw two technical staff in the Climate Protection Section. Lead efforts to analyze the State's disadvantaged communities screening tool, CalEnviroScreen, which informed improvements to the tool in identifying Bay Area's disadvantaged communities.

EDUCATION

UC BERKELEY
Doctorate – Civil and Environmental Engineering
UC BERKELEY
Masters – Mechanical Engineering
HUMBOLDT STATE UNIVERSITY
Bachelors – Environmental Engineering
UC SANTA CRUZ
Bachelors – Physics

INTERVIEW HIGHLIGHTS

- Led development of the CARE program, the Air District's pioneering environmental justice program that was a precursor to AB 617
- Extensive experience in working with Bay Area community members on air quality concerns
- Deep knowledge of air quality regulatory framework

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **highly qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-04 - Advisory Council

Contact Information -- Person ID: 11143145

Name:	Philip T Martien	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	
Email:	[redacted]	Notification Preference:	Email
Former Last Name:			

Personal Information

Driver's License:	Yes, California , Class C
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Doctorate

Preferences

Minimum Compensation:	$0.00 per hour; $0.00 per year
Are you willing to relocate?	N/A
Types of positions you will accept:	Regular , Temporary
Types of work you will accept:	Part Time , Per Diem
Types of shifts you will accept:	Day , On Call (as needed)

Objective

Assist the Bay Area Air Quality Management District in developing technical approaches and policy responses to reduce cumulative impacts in Bay Area communities. Build collaborative solutions with community and agency partners to achieve the Air District's environmental justice, air quality, and climate protection goals.

Education

Graduate School
UC Berkeley
8/1999 - 6/2004
Berkeley, California

Did you graduate: Yes
Major/Minor: Civil & Env. Engr./Minors in Math and Mech. Engr.
Degree Received: Doctorate

Graduate School
UC Berkeley
8/1987 - 6/1990
Berkeley, California

Did you graduate: Yes
Major/Minor: Mechanical Engineering
Degree Received: Master's

College/University
Humboldt State University

Did you graduate: Yes
Major/Minor: Environmental

8/1984 - 5/1987
Arcata, California

Engineering
Degree Received: Bachelor's

College/University
UC Santa Cruz
9/1978 - 6/1982
Santa Cruz, California

Did you graduate: Yes
Major/Minor: Physics
Degree Received: Bachelor's

Work Experience

Division Director, AIM Division
6/2018 - 8/2023

Bay Area Air Quality Management District
baaqmd.gov
[redacted]

Hours worked per week: 40
Monthly Salary: $19,150.00
# of Employees Supervised: 17
Name of Supervisor: Greg Nudd - Deputy Executive Officer
May we contact this employer? Yes

Duties
Directed a 17 staff with a total budget of about $5 million. Programs included the Community Air Risk Evaluation (CARE) program, emissions inventory reporting programs, and air quality modeling programs. With community groups, co-developed detailed community-scale emissions inventories, modeling, and exposure assessments to support strategy prioritization for Community Emission Reduction Plans required by California Assembly Bill (AB) 617. Leads regional PM2.5 and toxics modeling to support rule development efforts. Directed development of annual emissions inventories of criteria pollutants, toxic air contaminants, and greenhouse gases to meet state reporting requirements and internal modeling, planning, and reporting needs. Presented findings to the public and to the BAAQMD Board of Directors. With Section managers and senior staff, developed Division program budgets.

Reason for Leaving
Retired

Section Manager
7/2012 - 6/2018

Bay Area Air Quality Management District
baaqmd.gov
[redacted]

Hours worked per week: 40
Monthly Salary: $11,500.00
# of Employees Supervised: 8
Name of Supervisor: Henry Hilken - Division Director
May we contact this employer? Yes

Duties
Managed eight staff and a total budget of about $2 million in the Exposure Assessment and Emissions Inventory Section, which included the CARE program and emissions inventory reporting programs. Oversaw two technical staff in the Climate Protection Section. Lead efforts to analyze the State's disadvantaged communities screening tool, CalEnviroScreen, which informed improvements to the tool in identifying Bay Area's disadvantaged communities. Through the CARE program, developed methods of community identification and risk reduction that informed California's Community AB 617; assisted in developing strategic plans for implementing AB 617, developing program goals and budget forecasts.

Reason for Leaving
Promotion

Sr. Advanced Projects Advisor
7/2006 - 6/2012

BAAQMD
www.baaqmd.gov/CARE/
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
# of Employees Supervised: 0
Name of Supervisor: Henry Hilken - Division Director
May we contact this employer? Yes

Duties
Led the newly formed Community Risk Evaluation (CARE) program; oversaw the CARE Task Force. Led advanced research projects to identify impacted communities, evaluate pollutant sources, map air contaminants and human health impacts. Led the West Oakland Monitoring Study, the metals monitoring study near Custom Alloy Scrap Sales (CASS), and the West Oakland Truck Survey. Developed CARE program goals, research objectives, and budget; met with community members; designed and implemented modeling and measurement studies to help prioritize mitigation measures.

Reason for Leaving
Promotion

Sr. Atmospheric Modeler
7/2003 - 6/2006

BAAQMD
baaqmd.gov
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
# of Employees Supervised: 0
Name of Supervisor: Saffet Tanrikulu - Research and Modeling Manager
May we contact this employer? Yes

Duties
Set research objectives for meteorological and photochemical air quality modeling studies for State and federal air quality plans; establish research priorities; train and provide leadership to junior modelers; develop and install analysis and advanced visualization tools and libraries; purchase and maintain modeling computer clusters.

Reason for Leaving
Promotion

Atmospheric Modeler
4/1990 - 6/2003

BAAQMD
baaqmd.gov
[redacted]

Hours worked per week: 40
Monthly Salary: $0.00
# of Employees Supervised: 0
Name of Supervisor: Robin DeMandel - Research and Modeling Manager
May we contact this employer? Yes

Duties
Develop advanced meteorological and photochemical air quality modeling systems for air quality plans; design and maintain modeling computer systems.

Reason for Leaving
Promotion

Certificates and Licenses

Skills

Office Skills

Typing:
Data Entry:

Other Skills

Programming: Perl, FORTRAN, C, C++, R, MATLAB Expert
- 25 years and 0 months

Additional Information

References

Professional
Hilken, Henry
Planning Division Manager
BAAQMD
[redacted]

Professional
Harley, Robert
Professor, UC Berkeley
UC Berkeley
Berkeley, California
[redacted]

Professional
Kirchstetter, Thomas
Division Director of the Energy Analysis & Environmental
Impacts Div., LBNL
Lawrence Berkeley National Laboratory
[redacted]

Professional
Nudd, Greg
Deputy Executive Officer
[redacted]

Resume

Text Resume

Attachments

Attachment	File Name	File Type	Created By

Martien Curriculum Vitae - 2023.pdf	Martien Curriculum Vitae - 2023.pdf	Resume	Job Seeker

Agency-Wide Questions

1. Q: How did you find out about this position?

   A: District Employee
   District Website

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2. Q: If other, please tell us where.

   A: N/A

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3. Q: Are you currently legally authorized to work in the United States on a full-time basis?

   A: Yes

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4. Q: Are you related to any District employee or Board member?

   A: No

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5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?

   A: No

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6. Q: If related to a District employee or Board member, what is their name and their relationship to you?

   A: N/A

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to the cumulative impacts of pollution, systemic racism, and socioeconomic factors on the health of people living and/or working in overburdened communities.

   A: • Over three decades of experience applying air quality models and developing technical assessments to inform local and regional air quality planning and to evaluate the impacts of air pollution and the benefits emissions controls.
   • Starting in 2006, led BAAQMD's Community Air Risk Evaluation (CARE) Program to identify the Bay Area's overburdened communities based on measured and modeled air pollution levels and adverse health outcomes that may be caused by air pollution (CARE areas).
   • Starting in 2006, chaired the Air District's CARE Task Force, which began to unite community organizations, business groups, and local and regional agencies to address areas of concentrated air pollution, including toxics and PM2.5, and related health effects in the CARE areas.
   • In 2010, served as a member of the California Environmental Protection Agency's Cumulative Impacts and Precautionary Approaches Work Group, which reviewed development of the first version of CalEnviroScreen, a mapping tool to identify the most overburdened communities in the California.
   • In 2013, first partnered with the City and County of San Francisco's Public Health and Planning Departments to develop mapping tools to identify Air Pollution Exposure Zones now used to inform residential development requirements, including requirements for indoor filtration in new multi-family housing.
   • In 2017, was an invited speaker and Work Group participant at the Environmental

Justice and Climate Policy Solutions Dialogue convened by University of California President Janet Napolitano to identify strategies to achieve California's greenhouse gas reduction goals, while addressing environmental justice concerns. This dialogue informed the State Legislature's development of California Assembly Bill 617 that requires air districts to identify disadvantaged communities and adopt community emissions reduction programs.
• In 2022, was invited to participate in the Air & Waste Management Association's Opening Keynote Plenary: The Role of Science in Environmental Justice.
• Over 15 years of experience at the Bay Area Air District developing community task forces, forming community co-led partnerships, and actively listening to diverse perspectives to strengthen technical assessments and to help drive policy changes.
• Key strength: a proven track record of bridging agency policies and traditional air pollution management structures to address community lived concerns.
• Recent focus: evaluating health impacts from air pollution in support of AB 617 and conducting equity-based assessments to examine how air pollution exposures are distributed by race and ethnicity in Bay Area communities.
• Passionate about: rethinking traditional air quality management practices to more effectively improve health in overburdened communities, typically low-income communities of color.
• MS in Mechanical Engineering, PhD in Civil & Environmental Engineering from UC Berkeley. BS in Environmental Resources Engineering from Humboldt State University. BA in Physics from UC Santa Cruz.

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2. Q: Please describe any experience or education which directly relates to the statutory and regulatory tools that air pollution control districts or other regulatory agencies can use to address the cumulative impacts described above.

A: I bring decades of experience at the Bay Area Air Quality Management District supporting the development of new or modified regulations or statues many of which address cumulative impacts, directly or indirectly, including the following:
1) Developed, or helped develop, tools and methods to identify areas with the greatest impacts from air pollution:
a. Early work in the Community Air Risk Evaluation (CARE) program led to the identification of CARE areas. Early modifications of BAAQMD Rule 2-5, New Source Review of Toxic Air Contaminants, required tracking of emissions in these areas. In 2010, I worked with rule developers to craft language on this rule amendment.
b. In 2013, work with the City and County of San Francisco on their Air Pollution Exposure Zones led to modifications and refinements to SF Health Code Article 38 to help protect residents from the effects of living in a poor air quality zone by requiring enhanced ventilation in new and renovated residential buildings.
2) Helped develop tools and methods to identify and quantify emissions sources contributing to impacts.
a. Oversaw a study (published in 2020) that quantified emissions from multiple Bay Area sources and identified venting at refinery hydrogen plants as an important contributor to Bay Area methane. This aided the development of amendments to Air District Rule 13-5, Industrial Hydrogen Plants (adopted 2022) to reduce emissions of methane and other organic hydrocarbons.
b. In 2023, as part of the AB 617 technical assessment for the Richmond-North Richmond-San Pablo community, oversaw an assessment of flaring at the Chevron Richmond Refinery, that showed the potential for health impacts from the release of sulfur compounds. This assessment may aid efforts to further regulate refinery flaring.
c. Contributed to the (ongoing) development of a methodology to quantify the health impacts of PM2.5 from local sources, a pollutant of key concern for many community members. This methodology may inform future rule development efforts to control PM2.5 emissions.
3) Helped develop methods to quantify benefits of emissions reductions, including equity assessments showing who, by race/ethnicity, would most benefit from proposed

emissions reductions.
a. Contributed to a 2021 assessment of the exposure and health equity benefits of PM reductions from amendments to Air District Rule 6-5, Particulate Emissions from Petroleum Refinery Fluidized Catalytic Cracking Units. This assessment summarized the exposures, by race and ethnicity, to fine particulate matter from two Bay Area refineries subject to the rule amendments (adopted 2021).
b. Contributed to a 2022 assessment of the exposure and health exposure and health equity benefits of PM reductions from amendments to Air District Rules 9-4 and 9-6 to reduce nitrogen oxides from natural gas-fired building furnaces, boilers, and water heaters. This assessment summarized the exposures, by race and ethnicity, to fine particulate matter from natural gas-fired building appliances subject to the rule amendments (adopted 2023).
Throughout these efforts, I worked closely with rule developers to support statutory or regulatory efforts to reduce cumulative impacts in overburdened communities and/or to reduce impacts to non-white Bay Area residents.

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3. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

Philip T. Martien

[redacted]

Biography

Dr. Phil Martien (retired August 2023) was Director of the Assessment, Inventory, and Modeling Division at the Bay Area Air Quality Management District. At BAAQMD, he oversaw compilation and evaluation emissions of greenhouse gases, criteria air pollutants, and toxic air contaminants. His team conducted regional-scale and community-scale modeling assessments to estimate toxic and criteria air pollution exposures and impacts and support the development of air pollution reduction measures. Dr. Martien has over three decades of experience applying and evaluating regional meteorological and photochemical models to inform local and regional air quality planning. He implemented the first adjoint sensitivity analysis method in a three-dimensional photochemical model and used this and other advanced methods to evaluate the efficacy of emissions control alternatives.

Starting in 2006, he led BAAQMD's Community Air Risk Evaluation (CARE) Program and chaired its CARE Task Force, beginning to unite community organizations, business groups, and local and regional agencies to address areas of concentrated air pollution, including toxics and $PM_{2.5}$, and related health effects in the Bay Area's most overburdened communities. A key strength he brings is a proven track record of bridging agency policies and traditional air pollution management structures to address community lived concerns. He is passionate about rethinking traditional air quality management practices to more effectively improve health in the most impacted, typically low-income and minority, communities. He has over 15 years of experience developing forming community co-led partnerships and actively listening to diverse perspectives to strengthen technical assessments and to help drive policy changes.

Dr. Martien served as a member of the California Environmental Protection Agency's Cumulative Impacts and Precautionary Approaches Work Group, which reviewed development of CalEnviroScreen, a mapping tool to identify the most overburdened communities in the California. He partnered with the City and County of San Francisco's Public Health and Planning Departments to develop mapping tools to identify Air Pollution Exposure Zones now used to inform residential development requirements, including requirements for indoor filtration in new multi-family housing.

Dr. Martien was an invited speaker and Work Group participant at the Environmental Justice and Climate Policy Solutions Dialogue convened by University of California (UC) President Janet Napolitano to identify strategies to achieve California's greenhouse gas reduction goals, while addressing environmental justice concerns. This dialogue informed the State Legislature's development of California Assembly Bill (AB) 617 that requires air districts to identify disadvantaged communities and adopt community emissions reduction programs. A recent focus of his work has been evaluating health impacts from air pollution in support of AB 617 and conducting equity-based assessments to examine how air pollution exposures are distributed by race and ethnicity in Bay Area communities.

He earned an MS in Mechanical Engineering and a PhD in Civil and Environmental Engineering at UC Berkeley. He holds a BS in Environmental Resources Engineering from Humboldt State University and a BA in Physics from UC Santa Cruz.

Education

- Ph.D., Civil & Environmental Engineering, University of California at Berkeley, 2000-2004
- M.S., Mechanical Engineering, University of California at Berkeley, 1987-1990
- B.S., Environmental Resources Engineering, Humboldt State University, 1995-1987
- B.A., Physics, University of California at Santa Cruz, 1978-1982

Research Interests

- Community-scale and regional-scale air pollution modeling of criteria air pollutants and toxic air contaminants
- Health effects and cumulative impacts of air pollutants
- Equity assessments of air pollution exposures and impacts
- Community co-leadership in air pollution management
- Bottom-up and top-down emissions estimates for greenhouse gases, criteria air pollutants, and toxic air contaminants
- Adjoint and direct sensitivity analysis methods in air pollution models
- Computer modeling and numerical methods

Professional Experience

Bay Area Air Quality Management District

Director: Assessment, Inventory, & Modeling (AIM) Division 2018 – 2023

Directs 16 staff with a total budget of about $5 million. Programs include the Community Air Risk Evaluation (CARE) program, emissions inventory reporting programs, and air quality modeling programs. With community groups, co-develops detailed community-scale emissions inventories, modeling, and exposure assessments to support strategy prioritization for Community Emission Reduction Plans required by California Assembly Bill (AB) 617. Leads regional $PM_{2.5}$ and toxics modeling to support rule development efforts. Directs development of annual emissions inventories of criteria pollutants, toxic air contaminants, and greenhouse gases to meet state reporting requirements and internal modeling, planning, and reporting needs. Presents findings to the public and to the BAAQMD Board of Directors. With Section managers and senior staff, develops Division program budgets.

Air Quality Engineering Manager 2012 – 2018

Managed eight staff and a total budget of about $2 million in the Exposure Assessment and Emissions Inventory Section, which included the CARE program and emissions inventory reporting programs. Oversaw two technical staff in the Climate Protection Section. Lead efforts to analyze the State's disadvantaged communities screening tool, CalEnviroScreen, which informed improvements to the tool in identifying Bay Area's disadvantaged communities. Through the CARE program, developed methods of community identification and risk reduction that informed California's Community AB 617; assisted in developing strategic plans for implementing AB 617, developing program goals and budget forecasts.

Senior Advanced Projects Advisor 2006 – 2012

Led the CARE program; formed and chaired the CARE Task Force. Led advanced research projects to identify impacted communities, evaluated pollutant sources, mapped air contaminants and human health impacts. Led the West Oakland Monitoring Study, a metals monitoring study near a metal melting facility, and the West Oakland Truck Traffic Survey. Developed CARE program goals, research objectives, and budget; met with community members; designed and implemented modeling and measurement studies to help prioritize mitigation measures.

Senior Atmospheric Modeler 2003 – 2006

Set research objectives for air quality modeling studies for air quality plans; establish research priorities; collaborated with academic researchers to improve air quality modeling performance and develop advanced sensitivity analysis tools; train and provide leadership to junior modelers.

Atmospheric Modeler 1990 – 2003

Quantified fate and transport of Bay Area air pollution sources; evaluated impacts of air pollution to develop informed mitigation strategies. Developed and modernized BAAQMD's regional modeling systems.

Lawrence Berkeley National Laboratory, Heat Island Group

Assistant Researcher 1987 – 1990

Applied regional meteorological models to evaluate heat island reduction strategies, such as tree planting and measures to lighten urban surfaces.

North Coast Air Quality Management District

Air Quality Engineer 1985 – 1987

Conducted and reported on-site inspections, source tests, field and laboratory work.

Honors

- Engineer of the Year Award, Humboldt State University (1987)
- Roscoe-Schenler Award for outstanding potential in Environmental Resources Engineering, Humboldt State University (1985)
- Crown College, UC Santa Cruz, College Honors (1982)
- Senior Thesis Honors, Physics Department, UC Santa Cruz (1982)

Professional Memberships

- Air & Waste Management Association
- American Geophysical Union
- American Association for the Advancement of Science
- American Chemical Society

Journal Articles

1. Reid, S., P. Martien, D. Holstius, B. Koo, Y. Jia, J. Cordova, V. Lau, A. Seagram, Y. Du, and M. Nguyen, Assessing air quality impacts at the community scale: A West Oakland case study, *EM Magazine*, January 2021.
2. Law, K., D. Alrick, H. Hilken, W. Goodfriend, S. Reid, C. Riviere, E. Yura, K. Hoag, R. Chiang, and P. Martien, Co-leading with community: The future of air quality planning, *EM Magazine*, January 2021.
3. Guha, A., S. Newman, D. Fairley, T. M. Dinh, L. Duca, S. C. Conley, M. L. Smith, A. K. Thorpe, R. M. Duren, D. H. Cusworth, K. T. Foster, M. L. Fischer, S. Jeong, N. Yesiller, J. L. Hanson, and P. T. Martien, Assessment of regional methane emission inventories through airborne quantification in the San Francisco Bay Area. *Environ. Sci. Technol*. 54, 2020.
4. Jeong, S., X. Cui, D. R. Blake, B. Miller, S. A. Montzka, A. Andrews, A. Guha, P.T. Martien, R.P. Bambha, B. LaPranch, H.A. Michelsen, C.B. Clements, P. Glaize, and M. L. Fischer, Estimating methane emissions from biological and fossil-fuel sources in the San Francisco Bay Area: Methane emissions in the SF Bay Area. *Geophys. Res, Letters* 44(1), 2016.
5. Tang, N.W., J.S. Apte, P.T. Martien, and T. Kirchstetter, Measurement of black carbon emissions from in-use diesel-electric passenger locomotives in California. *Atmos. Environ*. 115, 2015.
6. Fujita, E.M., D.E. Campbell, W. P. Arnott, V. Lau, and P.T. Martien, Spatial variations of particulate matter and air toxics in communities adjacent to the Port of Oakland. *J. Air & Waste Mgmt. Assoc.* 63(12), 2013.
7. Mollner, A.K., S. Valluvadasan, L. Feng, M.K. Sprague, M. Okumura, D.B. Milligan, W.J. Bloss, S.P. Sander, P.T. Martien, R.A. Harley, A.B. McCoy, and W.P. Carter, Rate of gas phase association of hydroxyl radical and nitrogen dioxide. *Science* 330 (6004), 2010.
8. Martien, P.T. and R.A. Harley, Adjoint sensitivity analysis for a three-dimensional photochemical model: Application to southern California. *Environ. Sci. Technol*. 40, 2006.
9. Martien, P.T., R.A. Harley, and D.G. Cacuci, Adjoint sensitivity analysis for a three-dimensional photochemical model: Implementation and method comparison. *Environ. Sci. Technol*. 40, 2006.
10. Martien, P.T., R.A. Harley, J.B. Milford, and A.G. Russell, Evaluation of Incremental Reactivity and Its Uncertainty in Southern California, *Environ. Sci. Technol*. 37, 2003.
11. Umeda, T. and P.T. Martien, Evaluation of a data assimilation technique for a mesoscale meteorological model Used for air quality modeling, *J. Appl. Meteor*. 41, 2002.
12. Martien, P., S.C. Pope, P.L. Scott, and R.S. Shaw, The chaotic behavior of the leaky faucet, *Physics Letters A,* 110(7-8), 1985.

Selected Reports

1. *Owning our air: The West Oakland Community Action Plan*, Final Plan, Volume I, Bay Area Air Quality Management District, West Oakland Environmental Indicators Project. October 2019.
2. *Owning our air: The West Oakland Community Action Plan*, Final Plan, Volume II, Bay Area Air Quality Management District, West Oakland Environmental Indicators Project. October 2019.
3. *Spare the air • Cool the climate: A blueprint for clean air and climate protection in the Bay Area. Final 2017 Clean Air Plan,* Bay Area Air Quality Management District, April 2017.

4. *Greenhouse gas emission estimates and draft forecasts, v2017-Q1*. Bay Area Air Quality Management District, March 2017.
5. *Improving air quality and health in Bay Area communities: CARE program retrospective and path forward*. Bay Area Air Quality Management District, March 2014.
6. *Identifying areas with cumulative impacts from air pollution in the San Francisco Bay Area.* Bay Area Air Quality Management District, March 2014.

Selected Presentations

1. Rubenstein, R., C. Chavez, P.M. Fine, A.J. Meszaros, and P. Martien, *Opening Keynote Plenary: The Role of Science in Environmental Justice*, Air & Waste Management Association Annual Conference, June 2022.
2. Martien, P., *Assessing Air Pollution in Overburdened Bay Area Communities*, #1166571. Air & Waste Management Association Annual Conference, June 2022.
3. Reid, S., B. Koo, Y. Jia, J. Cordova, V. Lau, A. Seagram, Y. Du, M. Nguyen, D. Holstius, and P. Martien, *Hybrid air quality modeling in West Oakland, California, to support the development of an emissions reduction program*, #794731. Air & Waste Management Association Annual Conference, June 2020.
4. Du, Y., S. Reid, A. Seagram, V. Lau, D. Holstius, S. Bai, and P. Martien, *A fine-scale roadway emissions onventory for the West Oakland community using telematics-based data*, #809880. Air & Waste Management Association Annual Conference, June 2020.
5. Holstius, D., P. Martien, V. Lau, S. Reid, A. Seagram, Y. Du, B. Koo, Y. Jia, M. Nguyen, J. Cordova, S. Bai, Ms. M. Gordon, and B. Beveridge*, Block by block: linking hyperlocal modeling with equity-based targets for exposure reduction*. #808011. Air & Waste Management Association Annual Conference, June 2020.
6. Newman, S., A. Guha, T. Dinh, D. Fairley, L. Cackette, D. Cusworth, K. Foster, A. Thorpe, R. Duren, and P. Martien, *Methane emissions inventory of major sources in the San Francisco Bay Area of California using a tiered measurement system*, #807470. Air & Waste Management Association Annual Conference, June 2020.
7. Newman, S. A. Guha, L. Cackette, B. Butler, I. Zamora, A. Young, H. Hilken, and P.T. Martien, *Methane emissions inventory and controls of landfills in the San Francisco Bay Area of California using a tiered measurement strategy*. American Geophysical Union, Fall Meeting, December 2019.
8. P. Martien, *Diesel free by '33: Health burden and climate impacts of diesel particulate matter*, Panel #600596, Air & Waste Management Association Annual Conference, June 2019.
9. Guha, A., P.T. Martien, S. Newman, T. Dinh, D. Fairley, A. Young, I. Zamora, I. C. Faloona, S.A. Conley, *Airborne quantification of methane (CH_4) emissions in the San Francisco Bay Area of California*. American Geophysical Union, Fall Meeting, December 2018.
10. Martien, P. T., A. Guha, J. Bower, I. Perkins, S. Randall, A. Young, H. Hilken, and E. Stevenson, *Ambient greenhouse gas (GHG) observations in the San Francisco Bay Area of California using a fixed-site monitoring network*, American Geophysical Union, Fall Meeting, December 2016.
11. Martien, P.T., Tanrikulu, S., Tran, C., Fairley, D., Jia, Y., Fanai, A., Reid, S., Yarwood, G., Emery, C., *Regional air toxics modeling in California's San Francisco Bay Area*. American Geophysical Union, Fall Meeting, December 2011.

12. Martien, P. T. and R. Harley. *Changes in ozone due to reductions in precursor emissions: Application of the adjoint sensitivity analysis procedure*. American Geophysical Union, Fall Meeting, December 2004.
13. Soong, S.-T. Soong, S. Tanrikulu, J. M. Wilczak, J. W. Bao, P. Martien, and S. A. Michelson, *Simulations of an ozone episode during the Central California Ozone Study, Part II: CAMx air quality model simulations*. 13th Conference on the Applications of Air Pollution Meteorology with the Air and Waste Management Assoc. August 2004.

STEPHANIE HOLM

RECENT EXPERIENCE

ASSISTANT CLINICAL PROFESSOR
UNIVERSITY OF CALIFORNIA SAN FRANCISCO
JULY 2018 – PRESENT

- Co-Director and then Director of the Western States Pediatric Environmental Health Specialty Unit:
    - Supervise resident physicians during their rotations with the Western States PEHSU
    - Develop curriculum guidance for the rotation and manage resident schedules
    - Provide clinical expertise and consultations on pediatric environmental health topics and cases for clinicians and members of the public
    - Give regional and national presentations on children's environmental health and wildfire smoke
    - Supervise the community engagement coordinator who runs the educational programs for predoctoral trainees, develops content about pediatric environmental health for a variety of stakeholders and engages with impacted communities
- Recent Outreach and Education Projects have included:
    - Leading a major revision of the Pediatric Environmental Health Toolkit
    - Leading the revision of the continuing education course on environmental exposures and asthma, as part of our award-winning A Story of Health series
    - Primary authorship of a white paper on the health effects of wildfire smoke in children and approaches to the public health response, including the use of respirators and masks for respiratory protection in children

EDUCATION

UC BERKELEY
Doctorate – Public Health - Epidemiology
UC BERKELEY
Masters – Public Health - Epidemiology
UNIVERSITY OF PITTSBURGH
Professional – Doctor of Medicine
SWARTHMORE COLLEGE
Bachelors – Chemistry/Psychology

INTERVIEW HIGHLIGHTS

- Expert on the communication of complex health and science information to community members especially regarding asthma and other air quality impacts on child health
- Experience conducting in-depth field studies on cumulative impacts
- Extensive experience working collaboratively with community members on projects to improve health and address environmental injustice
- Excellent understanding of the limits of the current regulatory approach and ideas on how to address them

RECOMMENDATION OF THE INTERVIEW PANEL

The interview panel has identified this candidate as a **highly qualified** selection to the 2024-2026 Air District Advisory Council.

JY 2023-04 - Advisory Council

Contact Information -- Person ID: 55013214

Name:	Stephanie Megan Holm	Address:	[redacted]
Home Phone:	[redacted]	Alternate Phone:	
Email:	[redacted]	Notification Preference:	Email
Former Last Name:	Koskowich		

Personal Information

Driver's License:	Yes, California , Class D
Can you, after employment, submit proof of your legal right to work in the United States?	Yes
What is your highest level of education?	Doctorate

Preferences

Minimum Compensation:

Are you willing to relocate?

Types of positions you will accept:

Types of work you will accept:

Types of shifts you will accept:

Objective

Education

Graduate School
University of California, Berkeley
8/2018 - 6/2021
Berkeley, California

Did you graduate: Yes
Major/Minor: Public Health-Epidemiology
Degree Received: Doctorate

Graduate School
University of California, Berkeley
7/2016 - 6/2017
Berkeley, California

Did you graduate: Yes
Major/Minor: Public Health-Epidemiology
Degree Received: Master's

Professional
University of Pittsburgh School of Medicine
8/2007 - 5/2011
Pittsburgh, Pennsylvania

Did you graduate: Yes
Major/Minor: Doctor of Medicine
Degree Received: Professional

College/University
Swarthmore College
9/2003 - 6/2007
Swarthmore, Pennsylvania

Did you graduate: Yes
Major/Minor: Chemistry/Psychology
Degree Received: Bachelor's

Work Experience

Assistant Clinical Professor
7/2018 - Present

University of California San Francisco
Richmond, California 94804

Hours worked per week: 40
Monthly Salary: $0.00
Name of Supervisor: Paul Blanc - Chair of the Division of Occupational, Environmental and Climate Medicine
May we contact this employer? Yes

Duties
As Co-Director and then Director of the Western States Pediatric Environmental Health Specialty Unit:
• Supervise resident physicians during their rotations with the Western States PEHSU
• Develop curriculum guidance for the rotation and manage resident schedules
• Provide clinical expertise and consultations on pediatric environmental health topics and cases for clinicians and members of the public
• Give regional and national presentations on children's environmental health and wildfire smoke
• Supervise the community engagement coordinator who runs the educational programs for pre-doctoral trainees, develops content about pediatric environmental health for a variety of stakeholders and engages with impacted communities
• Supervise the coordinator who organizes the daily functioning of the unit including scheduling of physicians and staff, and compiles quarterly reports to our funders
• Recent outreach and education projects have included:
o Leading a major revision of the Pediatric Environmental Health Toolkit
o Leading the revision of the continuing education course on environmental exposures and asthma, as part of our award-winning A Story of Health series
o Primary authorship of a white paper on the health effects of wildfire smoke in children and approaches to the public health response, including the use of respirators and masks for respiratory protection in children
o Led the creation of a continuing education course on wildfire smoke for health care providers, in the A Story of Health series
o Collaborating with stakeholders at many levels on public health responses to wildfire smoke; PEHSU representative to EPA's Wildfire Guide working group
o Developing social-media ready infographics and companion fact sheets regarding the safer use of disinfectants during the coronavirus pandemic, as well as wildfire smoke exposures

As Assistant Professor:
• Run the Occupational/Environmental Medicine Residency Mentorship Program
• Member of the Residency Advisory Committee and Program Evaluation Committee
• Assist the division with other projects as needed, including engaging with the residency program. During the COVID-19 pandemic, served as a subject matter expert for the development of a case management/medical record tool for the management of employee exposures and cases.
• My research interests include how environmental exposures contribute to children's health, with a particular interest in airborne exposures and their contribution to pediatric lung diseases. Airborne pollutants have a variety of health effects for children, including neurodevelopmental, metabolic, and respiratory health effects. As a pervasive exposure, studies quantifying the health impacts and investigating interventions are critical for the health of the next generation. My long-term goals have been to explore how indoor air pollution affects children's health in the US, and communicate both my findings and other environmental health findings to the public and health care providers. There is a substantial gap between the understanding among scientists and among the public for a variety of medicine and public health issues, and I aim to narrow that gap for pediatric environmental health, to protect children from exposures that we know are problematic.

Public Health Medical Officer
6/2020 - 6/2023

Hours worked per week: 20
Monthly Salary: $0.00

Name of Supervisor: Mark Miller
May we contact this employer? Yes

California Environmental Protection Agency, Office of Environmental Health Hazard Assessment
Oakland, California 94612

Duties
• Member of the team in the Children's Environmental Health Center, collaborating within the agency on children's health related issues
• Limited-term appointment June 2020-June 2022, permanent position starting Sept 2022
• Convened and led a CalEPA working group on children's environmental health protection
• Planned a bi-monthly lunch forum series and annual children's health symposium
• Conducted outreach to healthcare professionals and the public on issues surrounding children's environmental health and wildfires
• Compiled the biennial Children's Environmental Health Center's Report to the Governor and Legislature

Reason for Leaving
Got moved to full time at UCSF, so I left the part time position at CalEPA

Graduate Student Instructor and Researcher
8/2018 - 6/2021

Hours worked per week: 20
Monthly Salary: $0.00
May we contact this employer? Yes

University of California Berkeley
Berkeley, California

Duties
I served as both a graduate student instructor for multiple courses as well as a Graduate student Researcher.

Reason for Leaving
graduated from PhD program

Pediatric Pulmonary Fellow
9/2014 - 9/2015

Hours worked per week: 80
Monthly Salary: $0.00
Name of Supervisor: Karen Hardy
May we contact this employer? Yes

Bay Area Pediatric Pulmonary Group-Children's Hospital and Research Center Oakland
Oakland, California

Duties
I was the first year fellow, serving as the primary clinical care provider for hospitalized pulmonary patients, one afternoon a week I also had outpatient pulmonary clinic.

Served as Principal investigator on a collaboration between multiple institutions studying the relationship between indoor air quality and pediatric asthma, including the relationship to cigarette smoke exposure

Reason for Leaving
Program closed due to hospital merger with UCSF, and pulmonary department went to Stanford

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Resident Physician
7/2011 - 9/2014

Hours worked per week: 80
Monthly Salary: $0.00
May we contact this employer? Yes

Children's Hospital and Research Center Oakland
Oakland, California

Duties
Trained in clinical pediatrics.

Reason for Leaving
This was a three year pediatrics residency program.

Certificates and Licenses

Type: California Medical License

Number: [redacted]

Issued by: California Board of Physicians and Surgeons

Date Issued: 10 /2012 Date Expires: 6 /2024

Type: Board Certification in Occupational and Environmental Medicine

Number:

Issued by: Board of Preventive Medicine

Date Issued: 1 /2019 Date Expires: 1 /2029

Type: Board Certification in Pediatrics

Number:

Issued by: American Board of Pediatrics

Date Issued: 10 /2014 Date Expires: 10 /2024

Skills

Office Skills

Typing:
Data Entry:

Additional Information

References

Professional
Balmes, John
Professor Emeritus
[redacted]

Professional
Singer, Brett
Staff Scientist, Leader of the Indoor Environment Group
[redacted]

Resume

Text Resume

Attachments

Agency-Wide Questions

1. Q: How did you find out about this position?

   A: District Employee
   Other

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2. Q: If other, please tell us where.

   A: From colleagues

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3. Q: Are you currently legally authorized to work in the United States on a full-time basis?

   A: Yes

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4. Q: Are you related to any District employee or Board member?

   A: No

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5. Q: Do you now, or will you in the future, require sponsorship for employment visa status (e.g., H-1B visa status)?

   A: No

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6. Q: If related to a District employee or Board member, what is their name and their relationship to you?

   A: NA

Supplemental Questions

1. Q: Please describe any experience or education which directly relates to the cumulative impacts of pollution, systemic racism, and socioeconomic factors on the health of people living and/or working in overburdened communities.

   A: I am a pediatrician, occupational environmental medicine physician, and epidemiologist. I am professionally based out of UCSF, and I have been a Bay Area resident for the majority of my adult life. I have led and contributed to multiple community-engaged research projects assessing the health effects of air pollution (indoor and outdoor) in California children (especially those in environmental justice communities), and I am the Director of the Western States Pediatric Environmental Health Specialty Unit (WSPEHSU)—a group that focuses on education and outreach regarding children's environmental health.

   I have substantial experience in the communication of complicated scientific topics. For example, in 2021, I led the development of A Story of Health: Sofia's story, which is an interactive web course for health professionals, offering continuing education credits from the CDC. As with all our work, Sofia's story includes considerations of socioeconomic factors and toxic stress, and how these overlay with wildfire smoke exposure. Because children breathe more air relative to their size, they are uniquely vulnerable to air pollution, and thus our district needs to especially protect them. I would leverage my

unique expertise on the role that air pollution plays among the cumulative health impacts of the environment on children.

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2. Q: Please describe any experience or education which directly relates to the statutory and regulatory tools that air pollution control districts or other regulatory agencies can use to address the cumulative impacts described above.

   A: I have substantial experience utilizing the data that are collected by BAAQMD and other air districts in California to assess air pollution exposures at children's residential locations. For three years, I worked in the California EPA's Children's Environmental Health Center at the Office of Environmental Health Hazard Assessment, so I am also familiar with risk assessment and the programs and policies already in place in California—particularly those affecting children's health. I have also utilized publicly available mapping tools (e.g. CalEnviroscreen 4.0) to assess exposure to a wide range of environmental toxicants.
   I am currently a co-Principal Investigator on two state funded research projects, both of which were responsive to state research needs in order to improve the scientific basis for statutes and regulations. My colleagues and I are funded by the California Energy Commission to assess the health effects of cooking electrification on children with asthma in the San Joaquin Valley. Also in the Fresno area, we will be assessing neurocognitive outcomes associated with ambient air pollution exposure funded by the Air Resources Board. Thus, I am familiar with air pollution regulatory frameworks within our state and will bring that perspective to the district's advisory board.

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3. Q: Due to the changing meeting requirements for bodies subject to the Brown Act, Advisory Council members will likely be required to meet in-person in the San Francisco Bay Area, most likely at the Air District's headquarters, located at 375 Beale Street in San Francisco, or other Air District offices within the jurisdiction of the Air District. Would you be available to attend 4-6 meetings in person per year?

   A: Yes

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson John J. Bauters and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: December 6, 2023

Re: Recommend Authorization of Fiscal Year Ending 2024 Mid-year Budget and Staffing Adjustments

RECOMMENDED ACTION

This is an action item for the Finance and Administration Committee to consider recommending the Board of Directors approve the FYE 2024 mid-year budget and staffing adjustments to: 1) Authorize use of Community Air Protection Program grant for six (6) new Full Time Equivalents (FTEs) and seven (7) new Limited-Term Contract Employees (LTCEs) to support AB 617 initiatives; 2) Authorize one (1) new FTE for executive operations and reclassify vacant positions to support organizational operations, and 3) transfer $100,000 from the Legal Division's professional services budget to the salaries budget specifically designated to hire one (1) temporary staff attorney. This item will be presented by Dr. Philip Fine, Executive Officer/Air Pollution Control Officer.

BACKGROUND

The staff periodically reviews the operational and programmatic needs of the Air District and requests reclassifications and staffing adjustments for strategic planning and organizational structure. These recommendations reflect the changes in the current staffing needs for the AB 617 program and reclassification of vacant positions to support other operational needs of the Air District.

DISCUSSION

I: Recommendation to Support AB 617 Program

The AB 617 program is one of the Air District's most important efforts to address environmental justice in the San Francisco Bay Area air basin. Through the program, Air District staff works in partnership with communities that have been historically impacted by harmful local land use decisions that placed major industrial sources in low-income communities of color, creating numerous environmental and health impacts for residents. The AB 617 Program is an opportunity to partner with communities most impacted by local air pollution, largely resulting from these historical environmental injustices, to identify and address

local air pollution concerns. However, the program has long been under-resourced.

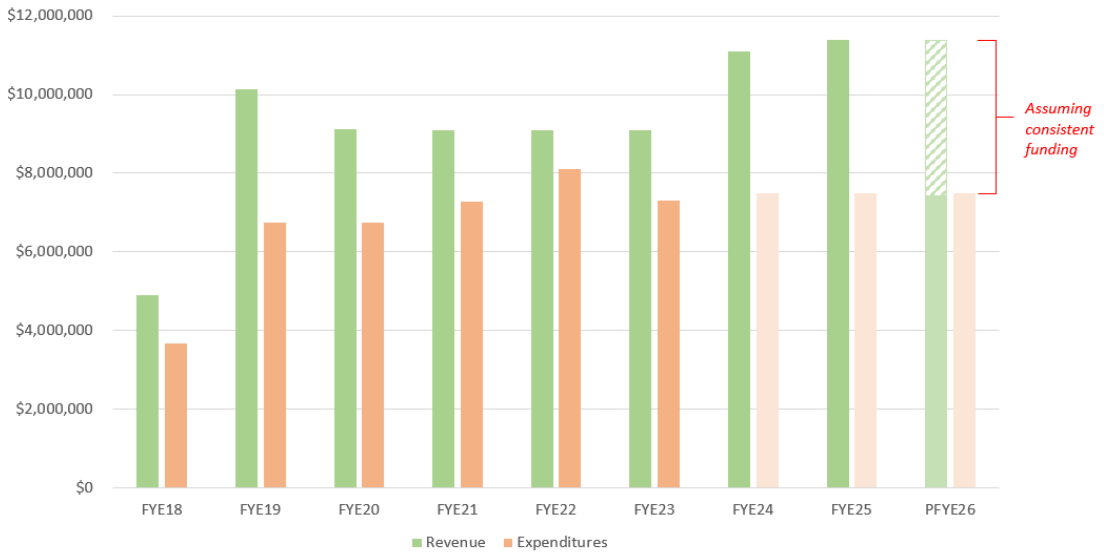
Throughout the AB 617 program, state funding has been consistent, but it has not been guaranteed. Consequently, the Air District has been reluctant to add additional, permanent staff resources to support the program. Current resources have been stretched thin, with many staff performing AB 617 implementation work, while also maintaining their traditional full-time workload. Annual state CAPP grants can support approximately 30 full time-equivalents (FTEs) to work on the AB 617 Program, yet the Air District, due to competing work priorities and limited staff bandwidth, has historically understaffed the program by five to ten FTEs. As a result of sufficient state funding, yet limited staff to work on the program, the Air District has traditionally underspent the state CAPP grants each year. The Air District has spent the annual CAPP grants, on average, in 15 months, with one grant taking up to 18 months to spend.

While all program areas have experienced the impacts of resource shortages in implementing AB 617, the effects have been particularly acute in several key divisions, including Community Engagement, Planning & Climate Protection, Compliance & Enforcement, Meteorology & Measurement, Engineering and Rules. Community Engagement and Planning lead the work in partnership with the community to develop community emission reduction plans and coordinate implementation. As we add more communities to the program, additional staff will be needed for simultaneous development of community emission reduction plans in East Oakland and Bayview Hunters Point-Eastern San Francisco. Community Engagement limited-term staff could also provide logistical support for Community Steering Committees, freeing up permanent staff for more robust community engagement.

Also impacted are the Air District's Compliance & Enforcement, Meteorology & Measurement, Engineering, and Rules and Strategic Policy Divisions. Each of these divisions have had no additional staff resources for AB 617 work since the program's inception yet carry much of the workload to implement community emission reduction and/or monitoring plans. Current staff meet program needs, while balancing full workloads in non-617 areas. Each of these divisions also has no dedicated staff for the AB 617 program. New staff in these divisions would be dedicated to work with community steering committees in East Oakland and Bayview Hunters Point-Eastern San Francisco to develop strategies to reduce emissions and exposure. They will also be dedicated to coordination of strategy implementation. In Rules, new staff would also be responsible for technical support to accelerate the rulemaking timeline to bring emissions reductions sooner and on rule development strategies from completed community emissions reduction plans.

To meet immediate programmatic needs, staff recommends that the Air District hire six full-time equivalent employees to support the Executive Office, Planning & Climate Protection, Compliance & Enforcement, Meteorology & Measurement, Strategic Incentives, and Engineering divisions. Staff also recommend that the Air District hire seven limited-term employees to support the Community Engagement, Planning & Climate Protection, Strategic Incentives, and the Rules and Strategic Policy divisions.

Figure 1. AB 617 Program Actual & Projected Revenue vs Expenditures



II. Recommendation to support Organizational Operations

In addition to the AB 617 staffing recommendations, staff is requesting reclassification of positions to support organizational operations. The proposed changes are mostly cost neutral and are listed below:

Compliance and Enforcement Division

(1) New FTE Principal Air Quality Specialist

Engineering Division

(1) New FTE Principal Air Quality Engineer

Reclassify one vacant Senior Air Quality Technician position into an Air Quality Specialist I/II position to support data management, data analytics, general permitting, document management, training, and other support.

Meteorology & Measurement:

(1) New FTE Principal Air Quality Specialist

Reclassify one vacant Air Quality Specialist I/II position into one Assistant Air Quality Specialist I/II to enable training entry-level station operators.

Planning & Climate

(1) New FTE Principal Environment Planner

Strategic Incentives

(1) New FTE Principal Staff Specialist

Reclassify two vacant Staff Specialist I/II into two Assistant Staff Specialist I/II that would provide resources to increase efficiency by reassigning routine work currently performed by Staff Specialists.

Diversity, Equity, and Inclusion

Transfer one Director/Officer from Executive Office to Diversity, Equity, and Inclusion Office.

Reclassify one vacant Manager from the Executive Office into one Senior Staff Specialist in DEI that would drive numerous initiatives in the DEI office.

Information Services

Reclassify one vacant System Analyst into one Principal System Analyst (Confidential) that would serve as the lead technical resource for cybersecurity at the agency.

Transfer one Supervising Staff Specialist from Finance Office to Information Services Division.

Transfer one System Analyst from Finance to Information Services division.

Executive Office

(1) New FTE Senior Advanced Project Advisor

(1) New FTE Senior Executive Assistant

Reclassify one vacant Director/Officer into one Manager to provide board operations support.

Reclassify one vacant Air Quality Technician I/II into one Assistant Staff Specialist I/II to align to the right classification of the position.

The introduction of a Senior Executive Assistant position in the executive office is essential for optimizing operational efficiency and strategic management. As the executive team expands, this role offers critical administrative support, encompassing schedule management, project coordination, and streamlined communication with internal and external stakeholders. Additionally, the complexity of managing remote meeting locations, including technology logistics and communication coordination, requires a dedicated professional.

Finance

Transfer one Principal Human Resources Analyst from Human Resource Office to Finance Office.

Administration Services

Correction of two (2) Supervising Staff Specialist to one Senior Staff Specialist and one Staff Specialist II to reflect the accurate count.

Table 2 summarizes the cost impacts for the FTEs and reclassifications requested in each division.

Table 1
Cost by Division AB 617

Department	Annual Cost
Compliance & Enforcement	$213,441
Engineering	$224,113
Executive Office	$247,085
Meteorology & Measurement	$213,441
Planning & Climate	$213,441
Strategic Incentives	$213,441
Annual Total	**$1,324,962**

Table 2
Cost by DivisionReclassification/Transfer/Add

Department	Annual Cost
Administration Services	-
Diversity, Equity, and Inclusion	$(60,900)
Engineering	$16,325
Executive Office	$122,795
Finance	-
Information Services	$18,443
Meteorology & Measurement	$(31,133)
Strategic Incentives	$(62,266)
Annual Net Cost	**$3,264**

*One FTE (Full Time Equivalent) to support executive office operations

Since fiscal year ending 2023, the Air District's staffing roster has been published in Appendix G of the Annual Budget. The changes to Appendix G of the budget required for this recommendation are included in Attachment 1. The reclassifications under this recommended action and their corresponding cost impacts are detailed in Attachment 2.

Under authorization from the Air Pollution Control Officer/Executive Officer and the updated terms in the Memorandum of Understanding, the Air District has the capability to hire a number of limited term contract employees (LTCE) to perform work necessitated by grant programs, including AB 617 initiatives.

Limited Term Contract Employees (LTCE)

Community Engagement
(2) New LTCE Staff Specialist I/II

Planning & Climate
(1) New LTCE Environment Planner I/II
(1) New LTCE Senior Environment Planner

Rules & Development
(2) New LTCE Air Quality Specialist I/II

Strategic Incentives
(1) New LTCE Principal Staff Specialist

Table 3 summarizes cost impacts for the LTCEs in each division.

Table 3
Cost Impacts for LTCEs by Division

Department	Annual Cost
Community Engagement	$351,196
Planning & Climate	$369,195
Rules	$368,756
Strategic Incentives	$213,441
Annual Total	**$1,302,588**

III. Recommendation to Support the Legal Division Budget Transfer

Staff seek authorization to transfer $100,000 from the Legal Division's professional services budget to its salaries budget to hire one temporary staff attorney. The Legal Division's current budget includes funds to hire temporary attorney help, because recent staff turnover and persistent understaffing in this division over the past several years has led to a backlog of work, which the division is in the process of addressing. These funds were included in the Legal Division's professional services budget because it was assumed that a temporary attorney would be hired through an outside temporary staffing agency. It is more cost-effective to hire a junior attorney directly to perform the required work on a temporary basis, as temporary staffing agencies charge a significant mark-up on attorney time. To hire a temporary staff attorney directly, these funds will need to be transferred from the Legal Division's professional services budget to its salaries budget. (This transfer is cost-neutral, and all funds will stay within the same budget program, Program 201 (Legal Counsel). Staff therefore seek authorization to transfer $100,000 to pay for one temporary staff attorney position for up to six months, instead of hiring a temporary staff attorney through an outside staffing agency.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The total annual cost for the recommended actions is approximately $2.6 million. The detail fiscal impact for each recommended action is as follows:

1. Funding Impact for AB 617 Recommendation: It is expected that implementation grants will continue to be distributed to local air districts through the duration of the Community Air Protection program at the current funding level of $9 million per year. If approved, AB 617 staffing recommendations would be funding by the CAPP Grant as follows:

A. Approximately $1.3M annually to support the six FTE would be covered by the annual $9 million CAPP Implementation grants.
B. Approximately $1.3M annually for a 2-year term to support seven LTEs would be covered by the $2M one-time CAPP funds awarded to the Air District in FYE24 and an additional $2.3M one-time anticipated for FYE25.

In the event the State reduces or discontinues future CAPP implementation grants, staff recommends using the $7.7 million AB 617 Staffing Contingency to support the program, while staff develops a long-term funding strategy.

2. Funding Impact for Organizational Operations Recommendation:

a. The net cost to support the 1 new FTE in Executive and position classification changes to Appendix G is mostly cost neutral at approximately $3,000 annually.

3. Funding Impact to support Legal Division Budget Transfer Recommendation:

a. If approved, this budget transfer is cost neutral and would shift $100,000 from the professional service budget line item to the salaries budget line item within Program 201 (Legal Counsel)

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Hyacinth G. Hinojosa

ATTACHMENTS:

1. Changes to the Staff Appendix G Highlights and Cost Breakdown
2. Appendix G

Committee Cost Impacts Attachment 2

NEW + ADD FTE VACANCY POSITION (AB617: 6 FTE)

Compliance & Enforcement:

New Position Title	Cost impact
Principal Air Quality Specialist	$213,441

Engineering:

New Position Title	Cost impact
Principal Air Quality Engineer	$224,113

Executive Office:

New Position Title	Cost impact
Sr. Advance Project Advisor	$247,085

Meteorology & Measurement:

New Position Title	Cost impact
Principal Air Quality Specialist	$213,441

Planning & Climate:

New Position Title	Cost impact
Principal Environmental Planner	$213,441

Strategic Incentives:

New Position Title	Cost impact
Principal Staff Specialist	$213,441

Limited Term Employees (AB617: 7 LTE)

Community Engagement:

New Position Title	Cost impact
Staff Specialist I/II	$175,598
Staff Specialist I/II	$175,598

Planning & Climate

New Position Title	Cost impact
Environmental Planner	$175,598
Senior Environmental Planner	$193,597

Rules

New Position Title	Cost impact
(Engineering) Air Quality Specialist	$184,378
(Engineering) Air Quality Specialist	$184,378

Strategic Incentives

New Position Title	Cost impact
Principal Staff Specialist	$213,441

ADD/DELETE VACANCY POSITION

Meteorology & Measurement:

Old Position Title	New Position Title	Cost impact
Air Quality Specialist I/II	Assistant Air Quality Specialist I/II	$(31,133)

Total: $(31,133)

Engineering

Old Position Title	New Position Title	Cost impact
Senior Air Quality Technician	Air Quality Specialist I/II	$16,325

Total: $16,325

Strategic Incentives

Old Position Title	New Position Title	Cost impact
Staff Specialist I/II	Assistant Staff Specialist I/II	$(31,133)
Staff Specialist I/II	Assistant Staff Specialist I/II	$(31,133)

Total: $(62,266)

Diversity, Equity, and Inclusion

Old Position Title	New Position Title	Cost impact
Exec - Manager	DEI - Senior Staff Specialist	$(60,900)

Total: $(60,900)

Information Services

Old Position Title	New Position Title	Cost impact
System Analyst	Principal System Analyst (Confidential)	$18,443

Total: $18,443

EXEC:

Old Position Title	New Position Title	Cost impact
Air Quality Technician I/II	Assistant Staff Specialist I/II	No impact same salary grade
Director/Officer	Manager	($52,803)
	Sr. Executive Assistant	$175,598

Total: $122,795

Admin Service:

Old Position Title	Correction Position Title	Cost impact
2 Supervising Staff Specialist	(1) Staff Specialist (1) Senior Staff Specialist	No impact same salary grade

Total: 0

TRANSFERS FROM DEPARTMENT

HRO transfer to Finance:

Old Department	New Department	Cost impact
HRO – Principal Human Resources Analyst	FIN – Principal Human Resources Analyst	No impact same salary grade

Finance transfer to Information Services:

Old Department	New Department	Cost impact
FIN – Supervising Staff Specialist	ISS – Supervising Staff Specialist	No impact same salary grade

Finance transfer to Information Services:

Old Department	New Department	Cost impact
FIN – System Analyst	IS – System Analyst	No impact same salary grade

Exec Admin transfer to DEI: Open Vacancy to Exec ADM from DEI

Old Department	New Department	Cost impact
Exec Admin – Director / Officer	DEI – Director / Officer	No impact same salary grade

AB617 + 6 FTE

Compliance & Enforcement	$213,441
Engineering	$224,113
Executive Office	$247,085
Meteorology & Measurement	$213,441
Planning & Climate	$213,441
Strategic Incentives	$213,441
Total	**$1,324,962**

Add & delete + 1 FTE

Meteorology & Measurement:	$(31,133)
Engineering	$16,325
Strategic Incentives	$(62,266)
Diversity, Equity, and Inclusion	$(60,900)
Information Services	$18,443
Executive Office	$122,795
Total	**$3,264**

FYE 2024 Authorized Staffing

Table 1: The positions listed in Table 1, below, constitute the entirety of authorized permanent full-time positions and division assignments at the designated classifications for Fiscal Year Ending (FYE) 2023 as shown in the first column. **The FYE 2023 authorized staffing as presented below includes the staffing changes approved by the Board at its April 19, 2023, meeting.** The (FYE) 2024 column represents proposed changes to the designated classifications and/or division assignments (if any) which is reflected in the "difference" column. An additional 7 positions are being proposed to the Board at its December 6, 2023, meeting. The total authorized staffing is 472 FTEs in FYE 2024.

Division	Position Classification	Salary Range ID	FYE 23	FYE 24	Difference
Administrative Resources					
	Director/Officer	156	1	1	0
	Facilities Maintenance Worker	108	1	1	0
	Manager	148	2	2	0
	Senior Advanced Projects Advisor	148	0	0	0
	Senior Executive Assistant	134	1	1	0
	Senior Staff Specialist	138	0	~~0~~1	~~0~~1
	Staff Specialist I/II	130/134	6	~~6~~7	~~0~~1
	Supervising Staff Specialist	142	3	~~3~~1	~~0~~-2
	Principal Staff Specialist	142	0	0	0
Administrative Resources Total			**14**	**14**	**0**
Assessment, Inventory & Modeling					
	Advanced Projects Advisor	144	2	2	0
	Air Quality Engineer I/II	132/136	2	2	0
	Air Quality Meteorologist I/II	131/135	1	1	0
	Atmospheric Modeler	140	1	1	0
	Director/Officer	156	1	1	0
	Manager	148	2	2	0
	Principal Air Quality Engineer	144	3	3	0
	Research Analyst	130	1	1	0
	Senior Advanced Projects Advisor	148	2	2	0
	Senior Air Quality Engineer	140	1	1	0
	Senior Atmospheric Modeler	144	1	1	0
	Statistician	137	1	1	0
Assessment, Inventory & Modeling Total			**18**	**18**	**0**
Communications					
	Assistant Staff Specialist I/II	122/126	2	2	0
	Director/Officer	156	1	1	0
	Manager	148	1	1	0
	Public Information Officer I/II	130/134	5	5	0
	Senior Public Information Officer	138	1	1	0
Communications Total			**10**	**10**	**0**
Community Engagement					
	Administrative Assistant I/II	114/118	1	1	0
	Assistant Manager	147	1	1	0
	Assistant Staff Specialist I/II	122/126	1	1	0
	Director/Officer	156	1	1	0
	Manager	148	2	2	0
	Public Information Officer I/II	130/134	1	1	0
	Senior Air Quality Engineer	140	1	1	0
	Senior Staff Specialist	138	5	5	0

Division	Position Classification	Salary Range ID	FYE 23	FYE 24	Difference
	Staff Specialist I/II	130/134	4	4	0
Community Engagement Total			**17**	**17**	**0**
Compliance & Enforcement					
	Administrative Assistant I/II	114/118	2	2	0
	Air Quality Engineer I/II	132/136	1	1	0
	Air Quality Specialist I/II	130/134	44	44	0
	Air Quality Technician I/II	122/126	6	6	0
	Assistant Air Quality Specialist I/II	122/126	2	2	0
	Director/Officer	156	1	1	0
	Manager	148	5	5	0
	Principal Air Quality Specialist	142	1	~~1~~2	~~0~~1
	Radio/Telephone Operator	113	4	4	0
	Radio/Telephone Operator Supervisor	119	0	0	0
	Senior Advanced Projects Advisor	148	1	1	0
	Senior Air Quality Engineer	140	3	3	0
	Senior Air Quality Specialist	138	11	11	0
	Senior Air Quality Technician	130	2	2	0
	Supervising Air Quality Specialist	142	10	10	0
Compliance & Enforcement Total			**93**	**9~~4~~3**	**~~0~~1**
Diversity, Equity & Inclusion					
	Director/Officer	156	0	1	1
	Senior Staff Specialist	138	0	1	1
	Manager	148	1	1	0
	Staff Specialist I/II	130/134	1	1	0
Diversity, Equity & Inclusion Total			**2**	**~~2~~4**	**~~0~~2**
Engineering					
	Administrative Assistant I/II	114/118	4	4	0
	Air Quality Engineer I/II	132/136	21	21	0
	Air Quality Permit Technician I/II	122/126	2	2	0
	Air Quality Specialist I/II	130/134	3	~~3~~4	~~0~~1
	Air Quality Technician I/II	122/126	5	5	0
	Assistant Manager	147	1	1	0
	Director/Officer	156	1	1	0
	Manager	148	5	5	0
	Principal Air Quality Engineer	144	4	~~4~~5	~~0~~1
	Senior Advanced Projects Advisor	148	1	1	0
	Senior Air Quality Engineer	140	9	9	0
	Senior Air Quality Technician	130	2	~~2~~1	~~0~~-1
	Supervising Air Quality Engineer	144	12	12	0
	Supervising Air Quality Specialist	142	1	1	0
	Supervising Systems Analyst	139	1	1	0
	Toxicologist	144	1	1	0
Engineering Total			**73**	**7~~4~~3**	**~~0~~1**
Executive					
	Administrative Assistant I/II	114/118	1	1	0
	Air Quality Technician I/II	122/126	1	~~1~~0	~~0~~-1
	Assistant Manager	147	1	1	0
	Clerk of the Boards	132	1	1	0
	Deputy Air Pollution Control Officer	160	2	2	0
	Deputy Executive Officer	169	5	5	0
	Director/Officer	156	4	~~4~~2	~~0~~-2
	Executive Assistant I/II	128/132	2	2	0
	Executive Officer/Air Pollution Control Offi	Contract	1	1	0

Division	Position Classification	Salary Range ID	FYE 23	FYE 24	Difference
	Manager	296	3	3	0
	Principal Environmental Planner	142	1	1	0
	Senior Advanced Projects Advisor	148	2	~~2~~3	~~0~~1
	Senior Executive Assistant	134	3	~~3~~4	~~0~~1
	Assistant Staff Specialist I/II	122/126	0	1	1
Executive Total			**27**	**27**	**0**
Finance Office					
	Accountant I/II	130/134	6	6	0
	Accounting Assistant I/II	122/126	3	3	0
	Assistant Manager	147	0	0	0
	Director/Officer	156	1	1	0
	Fiscal Services Supervisor	142	1	1	0
	Manager	148	3	3	0
	Senior Accountant	138	0	0	0
	Senior Payroll Analyst	138	1	1	0
	Senior Staff Specialist	138	1	1	0
	Staff Specialist I/II	130/134	1	1	0
	Supervising Staff Specialist	142	1	~~1~~0	~~0~~-1
	Systems Analyst	135	1	~~1~~0	~~0~~-1
	Principal Human Resources Analyst	142	0	1	1
Finance Office Total			**19**	**1~~8~~9**	**~~0~~-1**
Human Resources Office					
	Assistant Manager	147	0	0	0
	Director/Officer	156	1	1	0
	Human Resources Analyst I/II	130/134	1	1	0
	Manager	148	2	2	0
	Principal Human Resources Analyst	142	1	~~1~~0	~~0~~-1
	Senior Human Resources Analyst	138	5	5	0
Human Resources Office Total			**10**	**~~9~~10**	**~~0~~-1**
Information Services					
	Air Quality Specialist I/II	130/134	1	1	0
	Assistant Air Quality Specialist I/II	122/126	1	1	0
	Assistant Manager	147	1	1	0
	Director/Officer	156	1	1	0
	Manager	148	3	3	0
	Programmer Analyst I/II	127/131	1	1	0
	Staff Specialist I/II	130/134	0	0	0
	Supervising Systems Analyst	139	2	2	0
	Supervising Staff Specialist	142	0	1	1
	*Principal Systems Analyst		0	1	1
	Systems Analyst	135	3	3	0
Information Services Total			**13**	**1~~5~~3**	**~~0~~2**
Legal Services					
	Assistant Counsel I/II	149/153	8	8	0
	Counsel	0	1	1	0
	Legal Office Services Specialist	124	1	1	0
	Senior Assistant Counsel	157	2	2	0
	Staff Specialist I/II	130/134	4	4	0
Legal Services Total			**16**	**16**	**0**
Legislative					
	Director/Officer	156	1	1	0
	Staff Specialist I	130/134	1	1	0
Legislative Total			**2**	**2**	**0**

Division	Position Classification	Salary Range ID	FYE 23	FYE 24	Difference
Meteorology & Measurement					
	Administrative Assistant I/II	114/118	0	0	0
	Advanced Projects Advisor	144	1	1	0
	Air Quality Engineer I/II	132/136	3	3	0
	Air Quality Laboratory Technician I/II	122/126	1	1	0
	Air Quality Meteorologist I/II	131/135	2	2	0
	Air Quality Specialist I/II	130/134	15	~~15~~14	~~0~~-1
	Air Quality Technical Assistant	118	0	0	0
	Assistant Air Quality Specialist I/II	122/126	4	~~4~~5	~~0~~1
	Assistant Manager	147	2	2	0
	Assistant Staff Specialist I/II	122/126	3	3	0
	Director/Officer	156	1	1	0
	Manager	148	5	5	0
	Principal Air and Meteorological Monitoring	143	1	1	0
	Principal Air Quality Chemist	142	3	3	0
	Principal Air Quality Engineer	144	1	1	0
	Principal Air Quality Meteorologist	143	1	1	0
	Principal Air Quality Specialist	142	5	~~5~~6	~~0~~1
	Senior Air Quality Chemist	138	2	2	0
	Senior Air Quality Engineer	140	2	2	0
	Senior Air Quality Specialist	138	10	10	0
	Staff Specialist I/II	130/134	1	1	0
	Supervising Air Quality Engineer	144	1	1	0
	Supervising Air Quality Specialist	142	4	4	0
	Systems Analyst	135	2	2	0
Meteorology & Measurement Total			**70**	**7~~0~~1**	**~~0~~1**
My Air Online					
	Assistant Manager	147	4	4	0
	Director/Officer	156	1	1	0
	Supervising Systems Analyst	139	1	1	0
	Systems Analyst	135	1	1	0
	Web Master	135	1	1	0
My Air Online Total			**8**	**8**	**0**
Planning & Climate Protection					
	Administrative Assistant I/II	114/118	0	0	0
	Advanced Projects Advisor	144	1	1	0
	Assistant Manager	147	2	2	0
	Assistant Staff Specialist	126	1	1	0
	Director/Officer	156	1	1	0
	Environmental Planner I/II	130/134	3	3	0
	Manager	148	2	2	0
	Principal Environmental Planner	142	2	~~2~~3	~~0~~1
	Senior Advanced Projects Advisor	148	1	1	0
	Senior Air Quality Engineer	140	1	1	0
	Senior Air Quality Specialist	138	1	1	0
	Senior Environmental Planner	138	4	4	0
	Senior Policy Advisor	148	1	1	0
Planning & Climate Protection Total			**20**	**2~~0~~1**	**~~0~~1**
Rules					
	Assistant Manager	147	1	1	0
	Director/Officer	156	1	1	0
	Manager	148	1	1	0
	Senior Air Quality Engineer	140	5	5	0

Division	Position Classification	Salary Range ID	FYE 23	FYE 24	Difference
	Senior Air Quality Specialist	138	3	3	0
Rules Total			**11**	**11**	**0**
Strategic Incentives					
	Administrative Assistant I/II	114/118	1	1	0
	Assistant Staff Specialist I/II	122/126	4	4~~2~~6	~~0~~2
	Director/Officer	156	1	1	0
	Manager	148	4	4	0
	Senior Staff Specialist	138	5	5	0
	Staff Specialist I/II	130/134	12	1~~4~~2	~~0~~-2
	Supervising Staff Specialist	142	4	4	0
	Principal Staff Specialist	142	0	1	1
Strategic Incentives Total			**31**	**3~~2~~1**	**~~0~~1**
Technology Implementation					
	Assistant Staff Specialist I/II	122/126	2	2	0
	Director/Officer	156	1	1	0
	Manager	148	1	1	0
	Senior Staff Specialist	138	2	2	0
	Staff Specialist I/II	130/134	4	4	0
	Supervising Staff Specialist	142	1	1	0
Technology Implementation Total			**11**	**11**	**0**
Grand Total			**465**	**4~~65~~72**	**~~0~~7**

*New classification pending

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson John J. Bauters and Members of the Finance and Administration Committee

From: Philip M. Fine
Executive Officer/APCO

Date: December 6, 2023

Re: Air District Preliminary Annual Financial Report for the Fiscal Year Ending June 30, 2023, and the Fiscal Year 2023-2024 Financial Report for the First Quarter ending September 30, 2023

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

Staff provides an update on the Air District's General Fund financial activities on a quarterly basis. The financial update includes a report on revenues recognized and expenditures incurred during the reporting period. It also includes a summary of cash and investments and the Procurement Report required for certain procurements.

DISCUSSION

At the Finance and Administration Committee meeting, Staff will present a financial update on the preliminary financial results for the fiscal year ending June 30, 2023 (FYE 2023) as shown in Attachment A. The FYE 2023 financial audit is underway and the final audited financial results will be presented by the Air District's independent financial auditor, Simpson & Simpson LLP, to the Committee upon completion. Staff will also present a financial update on the first quarter of the fiscal year ending June 30, 2024 (FYE 2024) as shown in Attachment B.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Stephanie Osaze
Reviewed by: Hyacinth Hinojosa

ATTACHMENTS:

1. Attachment A- FYE 2023 Preliminary Annual Financial Report
2. Attachment B -FYE 2024 First Quarter Financial Report

Attachment A: Preliminary Annual Financial Summary FYE 2023

Staff will present an update on the Air District's preliminary annual financial results for the 2022-2023 fiscal year. The following information summarizes those results.

GENERAL FUND: STATEMENT OF REVENUES – Comparison of Prior Year Quarter Actual and Current Year Budget to Actual

REVENUE TYPE	4th QTR FY 2022	4th QTR FY 2023	FY 2023 - % of BUDGETED REVENUES
Property Tax	$41,502,972	$45,219,313	107%
Permit Fees	$57,138,039	$65,340,213	103%
Grants (includes AB617)	$13,583,882	$13,145,141	89%
Other Revenues	$8,459,286	$6,896,395	110%
Total Revenues	**$120,684,179**	**$130,601,062**	**103%**

GENERAL FUND: STATEMENT OF EXPENDITURES - Comparison of Prior Year Quarter Actual and Current Year Budget to Actual

EXPENDITURE TYPE	4th QTR FY 2022	4th QTR FY 2023	FY 2023 - % of AMENDED BUDGETED EXPENDITURES
Personnel - Salaries	$50,974,556	$54,606,535	95%
Personnel - Benefits	$26,797,145	$34,030,046	99%
Operational Services and Supplies	$27,168,403	$26,901,294	48%
Capital Outlay	$3,367,283	$3,635,921	40%
Total Expenditures	**$108,307,386**	**$119,173,795**	**76%**

CASH INVESTMENTS IN COUNTY TREASURY – Account Balances as of the Fourth Quarter

CASH/INVESTMENTS	4th QTR FY 2022	4th QTR FY 2023
General Fund	$102,053,412	$110,032,408
TFCA	$123,411,783	$135,236,530
MSIF	$58,878,326	$66,977,139
Carl Moyer	$70,304,482	$83,962,315
CA Goods Movement	$21,041,228	$22,582,106
AQ Projects	$3,249,005	$2,622,352
Vehicles Mitigation	$24,500,089	$24,278,999
Total	**$403,438,325**	**$445,691,850**

VENDOR PAYMENTS

In accordance with provisions of the Administrative Code, Division II Fiscal Policies and Procedures - Section 4 Purchasing Procedures: 4.3 Contract Limitations, the staff is required to present recurring payments for routine business needs such as utilities, licenses, office supplies and the like, more than, or accumulating to more than $100,000 for the fiscal year. In addition,

this report includes all of the vendors receiving payments in excess of $100,000 under contracts that have not been previously reviewed by the Board. In addition, staff will report on vendors that undertook work for the Air District on several projects that individuals were less than $100,000, but cumulatively exceed $100,000.

Below is a list of vendors with cumulative payments made through the Fourth quarter of 2022-2023 fiscal year that exceeded $100,000 and meets the reporting criteria noted above. All expenditures have been appropriately budgeted as a part of the overall Air District budget for The fiscal Year 2022-2023.

	VENDOR NAME	AMOUNT PAID (July 2022 - June 2023)	Explanation
1	AAA Business Supplies	$140,778	Janitorial, Stationary, Office Supplies
2	Alliant Insurance Services	$803,393	Various Business Insurance Policies
3	Bay Area Headquarters Authority	$3,397,456	Shared Services & Common Areas
4	Benefits Coordinators Corp.	$2,020,553	Life Insurance Plan & LTD Insurance
5	CA Public Employee Retirement System (Heath)	$9,426,211	Health Insurance Plan
6	CA Public Employee Retirement System (Retirement)	$7,864,582	Retirement Benefits & 457 Supplemental Plan
7	CAL-CARD Program	$158,260	District credit card purchases
8	California Vision Service Plan	$107,843	Health insurance - Vision Plan
9	Ceridian Corp	$251,912	Payroll Services
10	Comcast Cable	$182,003	Communication Internet
11	Cubic Transportation Systems	$398,278	Clipper Transit Subsidy
12	Denovo Ventures, LLC	$176,715	Financial System Cloud Hosting Services
13	Enterprise Fleet Services	$504,712	Fleet Leasing and Maintenance services
14	P & A Administrative Services	$301,140	Flexible Spending & Cobra Benefit Services
15	PG & E	$240,625	Utiltiies
16	Picarro, Inc.	$134,093	Equipment purchase for Lab
17	Robert Half	$683,164	Temporary Staffing Services
18	Sloan Sakai Yeung & Wong LLP	$138,217	Professional Services
19	Verizon Wireless	$261,730	Cell Phone Services
20	Wang Brothers Investment	$534,126	Richmond Site Lease
21	Wex Fleet	$176,328	Fleet Fuel Purchase

Attachment B: Financial Summary for the First Quarter (FYE 2024)

The finance staff will present an update on the Air District's financial results for the Fourth quarter of the 2022-2023 fiscal year. The following information summarizes those results.

GENERAL FUND: STATEMENT OF REVENUES – Comparison of Prior Year Quarter Actual and Current Year Budget to Actual

REVENUE TYPE	1st QTR FY 2023	1st QTR FY 2024	FY 2024 - % of BUDGETED REVENUES
Property Tax	$381,997	$406,780	1%
Permit Fees*	$21,205,593	$23,190,260	37%
Grants (includes AB617)	$0	$16,264	0%
Other Revenues	$762,929	$1,936,959	27%
Total Revenues (exclude transfers)	**$22,350,519**	**$25,550,264**	**19%**

GENERAL FUND: STATEMENT OF EXPENDITURES - Comparison of Prior Year Quarter Actual and Current Year Budget to Actual

EXPENDITURE TYPE	1st QTR FY 2023	1st QTR FY 2024	FY 2024 - % of BUDGETED EXPENDITURES
Personnel - Salaries	$12,633,083	$12,495,612	21%
Personnel - Benefits	$6,005,125	$6,230,891	22%
Operational Services and Supplies	$4,533,571	$4,182,132	7%
Capital Outlay	$773,006	$905,984	9%
Total Expenditures (General Fund)	**$23,944,784**	**$23,814,619**	**15%**

CASH INVESTMENTS IN COUNTY TREASURY – Account Balances as of the First Quarter

CASH/INVESTMENTS	1st QTR FY 2023	1st QTR FY 2024
General Fund	$80,790,520	$96,059,568
TFCA	$125,780,267	$133,240,341
MSIF	$60,750,535	$69,003,297
Carl Moyer	$63,773,663	$78,904,282
CA Goods Movement	$23,367,888	$22,645,959
AQ Projects	$3,232,536	$2,491,036
Vehicles Mitigation	$25,537,718	$24,945,111
Total	**$383,233,127**	**$427,289,594**

VENDOR PAYMENTS

In August 2023, the Air District implemented an Interim Procurement Policy to address insufficient guidance in the Administrative Code on Purchasing Procedures. The interim policy is in place until a more comprehensive policy is implemented.

Pursuant to Section 3.2.1.2 of the Interim Procurement Policy, quarterly reporting in lieu of Board Authorization is permissible for renewal of procurements/contracts that exceed $100,000. The $100,000 threshold shall be determined by adding the amount of the procurement to the sum of all previous procurements from the same for the preceding 36-month period.

The quarterly reporting procurements are limited to only the following categories of goods or services:
1) Utilities
2) Software Licenses
3) Software as a Service
4) Computer/Cloud Hosting Services
5) OEM Equipment Warranties
6) OEM Equipment Maintenance/Service
7) Legal Services
8) Equipment Leases

Below is a list of eligible categories of goods and services payments made in the 36-month period as noted above. In addition, recurring benefit payments made by the Air District on behalf of its employees are included in the quarterly report to ensure transparency. These benefit payments include pension, health, dental and vision expenditures incurred in the first quarter of the 2023-2024 fiscal year and have been appropriately budgeted as a part of the overall Air District budget.

Thirty-Six Month Payment by Categories

Payment Categories	AMOUNT PAID (Oct 2020 - Sept 2023)
UTILITIES	
AT & T CALNET	157,670
COGENT COMMUNICATIONS, INC.	174,600
COMCAST CABLE COMMUNICATIONS	525,985
PACIFIC GAS & ELECTRIC COMPANY	684,295
VERIZON WIRELESS	708,128
SOFTWARE LICENSES	
EPLUS TECHNOLOGY, INC.	428,188
ORACLE AMERICA, INC.	142,146
SOFTWARE AS A SERVICE	
CERIDIAN CORP	554,159
MICROSOFT CORPORATION	193,639
OEM EQUIPMENT MAINTENANCE/SERVICE	
AGILENT TECHNOLOGIES	123,219
CDW GOVERNMENT	706,294
IDEAL COMPUTER SERVICES INC.	140,221
LEGAL SERVICES	
ALLISON & PARTNERS LLC	3,581,389
FARELLA BRAUN + MARTELL LLP	337,612
RENNE PUBLIC LAW GROUP, LLP	475,639
SLOAN SAKAI YEUNG & WONG LLP	511,594
EQUIPMENT LEASES	
CANON FINANCIAL SERVICES, INC.	175,226
ENTERPRISE HOLDINGS, INC	139,276
KEY GOVERNMENT FINANCE, INC.	403,373
WEX FLEET UNIVERSAL-ENTERPRISE	478,305
OTHER	
CAL-CARD PROGRAM	446,298

The first quarter of FYE 2024 Health and Benefits Payments

Payment Categories	AMOUNT PAID (July 2023 - Sept 2023)
HEALTH & BENEFITS	
CA PUBLIC EMP RET SYSTEM- PENSION	$3,116,156
CA PUBLIC EMP RET SYSTEM- HEALTH	$2,436,751
CALIFORNIA VISION SERVICE PLAN	$27,044
P & A ADMINISTRATIVE SERVICES	$58,726
SEDGWICK CLAIMS MANAGEMENT SERVICE	$1,000