



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS
STATIONARY SOURCE COMMITTEE

COMMITTEE MEMBERS

JOHN BAUTERS - CHAIR
DAVID CANEPA
CAROLE GROOM
NATE MILEY
JIM SPERING

KAREN MITCHOFF – VICE CHAIR
JOHN GIOIA
TYRONE JUE
MARK ROSS
BRAD WAGENKNECHT

**THIS MEETING WILL BE CONDUCTED UNDER PROCEDURES AUTHORIZED BY
EXECUTIVE ORDER N-29-20 ISSUED BY
GOVERNOR GAVIN NEWSOM**

- **THE PUBLIC MAY OBSERVE THIS MEETING THROUGH THE WEBCAST BY
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WEBPAGE AVAILABLE AT**

www.baaqmd.gov/bodagendas

- **THE PUBLIC MAY PARTICIPATE REMOTELY VIA ZOOM AT THE
FOLLOWING LINK OR BY PHONE**

<https://bayareametro.zoom.us/j/99020760318>

877 853 5247 (Toll Free) or 888 788 0099 (Toll Free)

WEBINAR ID: 990 2076 0318

- **THOSE PARTICIPATING BY PHONE WHO WOULD LIKE TO MAKE A
COMMENT CAN USE THE “RAISE HAND” FEATURE BY DIALING “*9”. IN
ORDER TO RECEIVE THE FULL ZOOM EXPERIENCE, PLEASE MAKE SURE
YOUR APPLICATION IS UP TO DATE**

- **COMMENTS MAY ALSO BE SUBMITTED VIA EMAIL AT**

Comments@baaqmd.gov

**WEDNESDAY
JULY 29, 2020
9:30 A.M.**

AGENDA

1. CALL TO ORDER - ROLL CALL

PUBLIC MEETING PROCEDURE

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

***Comment on Agenda Items:** The public may comment on each item on the agenda. Email Comments for items on the agenda must be submitted to Comments@baaqmd.gov prior to the Committee taking up the particular item and indicate the agenda item to which the comment relates. Emailed comments will be considered as the agenda item is taken up by the Committee. Emailed comments containing 250 words or less will be read aloud by staff. Emailed comments exceeding 250 words may be summarized during the meeting, if feasible. Comments may also be made during the teleconference. Instructions will be provided at the start of the meeting.*

Staff/Phone (415) 749-

2. APPROVAL OF THE MINUTES OF JUNE 17, 2020

Clerk of the Boards/5073

The Committee will consider approving the draft minutes of the Stationary Source Committee meeting of June 17, 2020.

3. UPDATE ON THE DEVELOPMENT OF DRAFT AMENDMENTS TO REGULATION 6, RULE 5 (RULE 6-5): PARTICULATE EMISSIONS FROM PETROLEUM REFINERY FLUIDIZED CATALYTIC CRACKING UNITS

J. Broadbent/5052

jbroadbent@baaqmd.gov

The Committee will receive an update on Rule 6-5, Particulate Emissions (PM) from Petroleum Refinery Fluidized Catalytic Cracking Units, and discuss options relating to rule emissions limits. This update will include an overview of results of dispersion modeling of directly emitted fine PM_{2.5} from the Chevron Richmond Refinery, one of the refineries affected by proposed amendments to Rule 6-5. Modeling results show areas of concentration impacts and allow for estimates of exposures in nearby communities, from all sources at the facility and from the fluidized catalytic cracking unit alone.

4. **PUBLIC COMMENT ON NON-AGENDA MATTERS**

Emailed comments indicating the comment pertains to non-agenda matters will be considered under this item. Emailed comments containing 250 words or less will be read aloud by staff. Emailed comments exceeding 250 words may be summarized during the meeting, if feasible. Comments may also be made during the teleconference. Instructions will be provided at the start of the meeting.

5. **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)

6. **TIME AND PLACE OF NEXT MEETING**

Thursday, October 15, 2020 at 9:30 a.m., via webcast, pursuant to procedures authorized by Executive Order N-29-20 issued by Governor Gavin Newsom.

7. **ADJOURNMENT**

The Committee meeting shall be adjourned by the Committee Chair.

CONTACT:

MANAGER, EXECUTIVE OPERATIONS
375 BEALE STREET, SAN FRANCISCO, CA 94105
vjohnson@baaqmd.gov

(415) 749-4941
FAX: (415) 928-8560
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 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, Rex Sanders, at (415) 749-4951 or by email at rsanders@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

JULY 2020

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Stationary Source Committee	Wednesday	29	9:30 a.m.	Webcast only pursuant to Executive Order N-29-20
Board of Directors Executive Committee	Wednesday	29	12:30 p.m.	Webcast only pursuant to Executive Order N-29-20
Advisory Council Meeting	Friday	31	9:00 a.m.	Webcast only pursuant to Executive Order N-29-20

AUGUST 2020

NO MEETINGS SCHEDULED

SEPTEMBER 2020

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting -CANCELLED	Wednesday	2	9:30 a.m.	Webcast only pursuant to Executive Order N-29-20
Board of Directors Community & Public Health Committee	Thursday	3	9:30 a.m.	Webcast only pursuant to Executive Order N-29-20
Board of Directors Regular Meeting	Wednesday	16	9:30 a.m.	Webcast only pursuant to Executive Order N-29-20
Board of Directors Ad Hoc Committee on Equity, Access, & Inclusion	Thursday	17	10:00 a.m.	Webcast only pursuant to Executive Order N-29-20
Board of Directors Mobile Source Committee	Thursday	24	11:30 a.m.	Webcast only pursuant to Executive Order N-29-20
Board of Directors Climate Protection Committee	Wednesday	30	9:30 a.m.	Webcast only pursuant to Executive Order N-29-20
Board of Directors Legislative Committee	Wednesday	30	11:30 a.m.	Webcast only pursuant to Executive Order N-29-20
Board of Directors Budget & Finance Committee	Wednesday	30	1:30 p.m.	Webcast only pursuant to Executive Order N-29-20

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Bauters and Members
of the Stationary Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: July 23, 2020

Re: Approval of the Minutes of June 17, 2020

RECOMMENDED ACTION

Approve the attached draft minutes of the Stationary Source Committee (Committee) meeting of June 17, 2020.

DISCUSSION

Attached for your review and approval are the draft minutes of the Committee meeting of June 17, 2020.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

Attachment 2A: Draft Minutes of the Committee Meeting of June 17, 2020

AGENDA: 2A – ATTACHMENT

Draft Minutes – Stationary Source Committee Meeting of June 17, 2020

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

DRAFT MINUTES

Summary of Board of Directors
Stationary Source Committee Meeting
Wednesday, June 17, 2020

This meeting was conducted under procedures authorized by executive order N-29-20 issued by Governor Gavin Newsom. Members of the committee participated by teleconference.

1. CALL TO ORDER – ROLL CALL

Stationary Source Committee (Committee) Chairperson John Bauters called the meeting to order at 9:34 a.m.

Present: Committee Chairperson John Bauters; Vice Chairperson Karen Mitchoff; and Directors David Canepa, John Gioia, Carole Groom, Tyrone Jue, Mark Ross, Jim Spering, and Brad Wagenknecht.

Absent: Director Nate Miley.

Also Present: Board Chairperson Rod Sinks.

2. APPROVAL OF THE MINUTES OF APRIL 22, 2020

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Director Wagenknecht made a motion, seconded by Director Groom, to approve the Minutes of April 22, 2020; and the motion carried by the following vote of the Committee:

AYES: Bauters, Canepa, Gioia, Groom, Jue, Mitchoff, Ross, Sinks, Spring, Wagenknecht.
NOES: None.
ABSTAIN: None.
ABSENT: Miley.

3. UPDATE ON THE DEVELOPMENT OF DRAFT AMENDMENTS TO REGULATION 6, RULE 5 (RULE 6-5): PARTICULATE EMISSIONS FROM PETROLEUM REFINERY FLUIDIZED CATALYTIC CRACKING UNITS (FCCU)

Greg Nudd, Deputy Air Pollution Control Officer of Policy, introduced David Joe, Assistant Manager of Rule Development, who gave the staff presentation *Update on the Development of Amendments to Rule 6-5*, including: outline; overview and background; rule development process; Draft Amendments to Rule 6-5; and next steps.

Public Comments

Public comments were given by Tyler Earl, Communities for a Better Environment (CBE); Dan Sakaguchi, CBE; Jed Holtzman; 350 Bay Area; and Richard Gray, 350 Bay Area.

Committee Comments

The Committee and staff discussed the status of the Air District’s expedited Best Available Retrofit Control Technology (BARCT) implementation schedule; types of documents regarding source data that are publicly available and which companies or agencies own them; the 250 tons of Particulate Matter (PM)₁₀ per year (the BARCT amendments are anticipated to achieve), and the percentage of the total PM impact of the Bay Area that this reduction goal represents; whether all FCCUs can be measured by a common standard; implementation costs for the five refineries impacted by the proposed amendments; whether the Air District calculates measurable health improvements/benefits once PM reduction objectives have been achieved; the request that the amendment adoption schedule not be delayed; how the Air District might achieve greater PM reductions than what is proposed in the amendments; and whether the Committee will review this again before it is considered for adoption by the Board.

Committee Action

None; receive and file.

4. UPDATE ON THE IMPLEMENTATION OF REGULATION 11, RULE 18 (RULE 11-18): REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES

Damian Breen, Deputy Air Pollution Control Officer of Technology, introduced Carol Allen, Assistant Engineering Manager, who gave the staff presentation *Regulation 11-18 Implementation Update*, including: outline; Regulation 11-18 requirements; implementation process; early actions and risk reduction projects; step 1: identify facilities; step 2: collect and validate data; step 3: conduct and approve Health Risk Assessments (HRAs); and next steps.

Public Comments

Public comments were given by Tyler Earl, CBE; and Jed Holtzman, 350 Bay Area.

Committee Comments

The Committee and staff discussed whether HRAs will be made available on the Air District’s website; the reason for the duration of the proposed timeline; factors (a facility’s size, amount of throughput, methods of emissions release) that affect the amount of time it may take to conduct an HRA; which Phase I facilities’ HRAs are anticipated to be completed by the end of 2020; the 90-day facility comment period that occurs between the completion of the HRAs and when the HRAs are posted to the Air District’s website; and the request that this item be brought back to the Committee at the end of the third quarter of the year.

Committee Action

None; receive and file.

5. UPDATE ON THE ODOR ATTRIBUTION STUDY IN THE SOUTH BAY

Wayne Kino, Deputy Air Pollution Control Officer of Operations, gave the staff presentation *Update on the Odor Attribution Study in the South Bay*, including: overview; South Bay Odor Stakeholder Group; waste facilities; study questions and goals; project status; and next steps.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed whether the Air District anticipates that the COVID-19 pandemic will impact the study’s proposed timeline; whether sludge will continue to be drawn in open fields in the future; next steps after the study concludes; whether the Air District has any authority or tools to mitigate South Bay odors; the request that the Committee receives a status update before the end of the year; A projected increase in the harvesting of sludge; and the suggestion that this presentation is given to the City of Milpitas (City Council.)

Committee Action

None; receive and file.

6. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3

No requests received.

7. COMMITTEE MEMBER COMMENTS

None.

8. TIME AND PLACE OF NEXT MEETING

The next meeting was tentatively scheduled for Wednesday, July 22, 2020, but after the meeting adjourned, the next meeting was scheduled for Wednesday, July 29, 2020, at 9:30 a.m., via webcast, pursuant to procedures authorized by Executive Order N-29-20 issued by Governor Gavin Newsom.

9. ADJOURNMENT

The meeting adjourned at 11:18 a.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Bauters and Members
of the Stationary Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: July 23, 2020

Re: Update on the Development of Draft Amendments to Regulation 6, Rule 5 (Rule 6-5):
Particulate Emissions from Petroleum Refinery Fluidized Catalytic Cracking Units

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

California Assembly Bill 617 (AB 617) directed local air districts to adopt an expedited schedule for implementation of Best Available Retrofit Control Technology (BARCT) at industrial Cap-and-Trade sources. The AB 617 Expedited BARCT Implementation Schedule was adopted by the Air District Board of Directors in December 2018 and identified several potential rule development efforts to further reduce emissions of criteria pollutants at these sources.

Air District staff is developing amendments to Rule 6-5 to address emissions of particulate matter, including condensable particulate matter, from petroleum refinery fluidized catalytic cracking units. Petroleum refinery fluidized catalytic cracking units (FCCUs) are some of the largest individual sources of particulate matter (PM) emissions in the San Francisco Bay Area, and further reductions of these emissions are needed to ensure progress towards attainment of state and national ambient air quality standards and to achieve further clean air and public health benefits.

To inform discussions about proposed amendments to Rule 6-5, as well as to support development of an emissions reduction plan for Richmond-San Pablo under AB 617, Air District staff is assessing the impacts of large sources of PM through computer dispersion modeling. Staff started with the Chevron Richmond Refinery, simulating emissions of PM from the petroleum refinery's FCCU and other sources at the facility.

DISCUSSION

Air District staff released draft amendments to Rule 6-5 and an Initial Staff Report in May 2020 for public review and comment. The draft amendments include new and modified limits on ammonia and sulfur dioxide, which can contribute to the formation of condensable and secondary particulate matter. The draft amendments also include a limit on total PM₁₀, which includes both filterable and condensable particulate matter. Staff is reviewing comments received on the draft amendment materials and will consider this input in the further development of these amendments. Staff anticipates presenting proposed amendments for the Board of Directors consideration in the fourth quarter of 2020.

Air District staff presented an update on the development of amendments to Rule 6-5 to the Stationary Source Committee on June 17, 2020. Staff will provide further information regarding the potential impacts of the draft amendments, including preliminary estimates of emissions reductions, compliance costs, and other potential impacts. Staff will also provide preliminary estimates and information on impacts associated with potential options for more stringent controls and limits. These estimates will continue to be refined throughout the rule development process.

Air District staff also conducted dispersion modeling of directly emitted (primary) PM_{2.5} from the Chevron Richmond Refinery, one of the Bay Area refineries affected by the proposed amendments to Rule 6-5. Emissions collected under Rule 12-15 (Petroleum Refining Emissions Tracking) provided one key set of modeling inputs. Some other information needed for modeling, such as stack height and stack gas temperature, was collected under Rule 11-18 (Reduction of Risk from Air Toxic Emissions at Existing Facilities). Using these datasets, modeling was applied to track plumes from each of 119 identified unique sources of PM_{2.5} from the refinery, including the FCCU stack. Modeling was conducted using emission estimates for calendar year 2018 and using winds and other meteorological inputs from three years, 2016-2018, to predict three-year-average, annual concentrations of primary PM_{2.5} from the refinery.

Maps of modeling results show areas of concentration impacts and allow for estimates of exposures in nearby communities, from all sources at the refinery and from the FCCU alone. In residential areas, the highest modeled annual-average PM_{2.5} concentrations from the refinery were between 0.5 and 1 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). For reference, in recent years the observed, annual-average PM_{2.5} levels at the Air District's nearby San Pablo regulatory monitoring site is about 10 $\mu\text{g}/\text{m}^3$ (about 9 $\mu\text{g}/\text{m}^3$ if wildfire days are excluded).

The modeled plume of primary PM_{2.5} from the Chevron Richmond Refinery extends for many miles before its concentration falls below 0.1 $\mu\text{g}/\text{m}^3$. Almost half a million people (449,000) reside within that area. Within this modeled plume, statistics were compiled on who—what population, by race/ethnicity—is exposed. Exposures are not distributed equally. Within the area of the identified plume, Hispanic and African American/Black residents are exposed to higher concentrations. Specifically, the share of the exposure borne by Hispanic residents (38%) is larger than their population share (30%). Likewise, the share of the exposure borne by African American/Black residents (20%) is greater than their population share (18%).

The FCCU accounts for nearly half (48%) of total PM_{2.5} emissions from the Chevron Richmond Refinery and contribute about a third (36%) of the modeled residential exposures from Chevron-contributed primary PM_{2.5} concentrations above 0.1 µg/m³. Additional controls limiting FCCU emissions to 0.020 grains/dry standard cubic feet would reduce PM_{2.5} emissions from the Chevron Richmond Refinery by about 16% and reduce the associated exposures by about 12%.

BUDGET CONSIDERATIONS/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Phil Martien and Elizabeth Yura
Reviewed by: Greg Nudd