



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS
STATIONARY SOURCE COMMITTEE MEETING

COMMITTEE MEMBERS

JOHN GIOIA - CHAIRPERSON
TOM BATES
SCOTT HAGGERTY
NATE MILEY
JIM SPERING

JOHN AVALOS - VICE CHAIRPERSON
CAROLE GROOM
ERIC MAR
MARY PIEPHO

MONDAY
OCTOBER 21, 2013
10:30 A.M.

7th FLOOR BOARD ROOM
939 ELLIS STREET
SAN FRANCISCO, CA 94109

AGENDA

1. **CALL TO ORDER - ROLL CALL**
2. **PUBLIC COMMENT PERIOD** (*Public Comment on Non-Agenda Items Pursuant to Government Code § 54954.3*) Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at Air District headquarters, 939 Ellis Street, San Francisco, CA, and on the Air District's website www.baaqmd.gov at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Board's authority. Speakers will be limited to three (3) minutes each.

3. **APPROVAL OF MINUTES OF SEPTEMBER 16, 2013**

4. **RULE EFFECTIVENESS STUDY**

Staff will provide an overview of the Compliance and Enforcement Division's Compliance Assurance Program highlighting two recent Rule Effectiveness Studies.

W. Kino/4789

wkino@baaqmd.gov

5. **UPDATE ON NEPTUNE CREMATORIUM**

The Committee will receive a report on the Authority to Construct issued to the Neptune Society of Northern California for the construction of two crematories to be located in Oakland, CA.

J. Karas/4742

jkaras@baaqmd.gov

6. **REPORT ON FORMALDEHYDE EMISSIONS FROM WOOD COATINGS**

The Committee will receive a report on staff's research on potential formaldehyde emissions from wood coatings regulated under Regulation 8, Rule 32.

H. Hilken/4642

hhilken@baaqmd.gov

7. COMMITTEE MEMBER COMMENTS/OTHER BUSINESS

Any member of the Board, 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).

8. TIME AND PLACE OF NEXT MEETING - Monday, November 18, 2013, Bay Area Air Quality Management District Office, 939 Ellis Street, San Francisco, California 94109 at 10:30 a.m.

9. ADJOURNMENT

CONTACT THE CLERK OF THE BOARDS
939 ELLIS STREET SF, CA 94109

(415) 749-5073
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov

- To submit written comments on an agenda item in advance of the meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- To request special accommodations for those persons with disabilities notification to the Executive Office should be given at least 3 working days prior to the date of the meeting, so that arrangements can be made accordingly.

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 headquarters at 939 Ellis Street, San Francisco, CA 94109, at the time such writing is made available to all, or a majority of all, members of that body.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109
FOR QUESTIONS PLEASE CALL (415) 749-5016 or (415) 749-4941

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

OCTOBER 2013

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	16	9:45 a.m.	Board Room
Board of Directors Executive Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	21	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Stationary Source Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	21	10:30 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets on the 4th Wednesday of each Month) - CANCELLED</i>	Wednesday	23	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Climate Protection Committee <i>(Meets on the 3rd Thursday of every other month)</i>	Wednesday	23	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee <i>(Meets on the 4th Thursday of each Month)</i>	Thursday	24	9:30 a.m.	Board Room
Board of Directors Public Outreach Committee <i>(At the Call of the Chair)</i>	Thursday	31	9:30 a.m.	4 th Floor Conf. Room

NOVEMBER 2013

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	6	9:45 a.m.	Board Room
Advisory Council Regular Meeting <i>(Meets on the 2nd Wednesday of each Month)</i>	Wednesday	13	9:00 a.m.	Board Room
Board of Directors Executive Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	18	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Stationary Source Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	18	10:30 a.m.	Board Room

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NOVEMBER 2013

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	20	9:45 a.m.	Board Room
Board of Directors Climate Protection Committee <i>(Meets 3rd Thursday of every other month)</i>	Thursday	21	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Budget & Finance Committee <i>(Meets on the 4th Wednesday of each Month)</i>	Wednesday	27	9:30 a.m.	4 th Floor Conf. Room
				<u>And via videoconference at</u> Santa Rosa Junior College Doyle Library, Room 4243 1501 Mendocino Avenue Santa Rosa, CA
Board of Directors Mobile Source Committee <i>(Meets on the 4th Thursday of each Month)</i>	Thursday	28	9:30 a.m.	Board Room

DECEMBER 2013

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	4	9:45 a.m.	Board Room
Board of Directors Executive Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	16	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Stationary Source Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	16	10:30 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	18	9:45 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets on the 4th Wednesday of each Month)</i>	Wednesday	25	9:30 a.m.	4 th Floor Conf. Room
				<u>And via videoconference at</u> Santa Rosa Junior College Doyle Library, Room 4243 1501 Mendocino Avenue Santa Rosa, CA
Board of Directors Mobile Source Committee <i>(Meets on the 4th Thursday of each Month)</i>	Thursday	26	9:30 a.m.	Board Room

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

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

From: Jack P. Broadbent
Executive Officer/Air Pollution Control Officer

Date: September 26, 2013

Re: Approval of the Minutes of September 16, 2013

RECOMMENDED ACTION

Approve attached draft minutes of the Stationary Source Committee meeting of September 16, 2013.

DISCUSSION

Attached for your review and approval are the draft minutes of the Stationary Source Committee meeting on September 16, 2013.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Sean Gallagher
Reviewed by: Rex Sanders

Attachment

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109
(415) 749-5073

DRAFT MINUTES

Summary of Board of Directors
Stationary Source Committee Meeting
Monday, September 16, 2013

1. Call to Order – Roll Call

Chairperson Gioia called the meeting to order at 10:30 a.m.

Present: Chairperson John Gioia; Vice Chairperson John Avalos; and Directors Tom Bates, Scott Haggerty, Eric Mar, Nate Miley, Mary Piepho and James Spring.

Absent: Director Carole Groom.

Also Present: None.

2. Public Comment Period:

Matthew Buell, Golden Eagle Refinery – Tesoro Corporation, addressed the Committee regarding a compliance advisory notice received from the Air District. Chairperson Gioia invited staff to explain the nature of compliance advisory notices. Jack Broadbent, Executive Officer/Air Pollution Control Officer (APCO), and Wayne Kino, Director of Compliance and Enforcement, addressed the Committee to explain the same. Director Spring asked whether a discussion between the parties is a component of the process, which question was answered by Mr. Broadbent. Director Piepho asked whether there is something more that staff can do to address the comments and concerns expressed, which question was answered by Mr. Broadbent. Director Piepho asked that a written update be provided to the Committee members after the process is complete.

3. Approval of Minutes of May 20, 2013

Committee Comments: None.

Public Comments: None.

Committee Action: Director Spring made a motion to approve the Minutes of May 20, 2013; Director Piepho seconded; and the motion carried unanimously.

4. Proposed Amendments to Regulation 9, Rule 10: Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Boilers, Steam Generators and Process Heaters in Petroleum Refineries

Mr. Broadbent introduced the topic and Henry Hilken, Director of Planning, Rules and Research, who introduced Julian Elliot, Senior Air Quality Engineer of Planning, Rules and Research, who gave the staff presentation Regulation 9 Rule 10 NO_x and CO from Boilers, Steam Generators and Process Heaters in Petroleum Refineries, including background on refinery heaters and Regulation 9, Rule 10, objectives of the proposed amendments, detailed reviews of the proposed amendments relative to an alternative NO_x standard for pre-1994 heaters, a proposed continuous emissions monitoring requirement and refinery heater reporting requirement, followed by an overview of the rule development process and next steps.

NOTED PRESENT: Director Haggerty was noted present at 10:40 a.m.

Chairperson Gioia asked, regarding slide 3, Refinery Heaters & Regulation 9-10, for clarification regarding the applicability of Regulation 9-10 to pre- and post-1994 heaters, which was provided by Mr. Elliot.

NOTED PRESENT: Director Mar was noted present at 10:43 a.m.

Mr. Elliot concluded the presentation.

NOTED PRESENT: Director Miley was noted present at 10:47 a.m.

Mr. Broadbent made closing remarks regarding the rulemaking process and the goal of providing flexibility for refineries and emissions reductions for the public.

Committee Comments: None.

Public Comments:

Chris McDowell, Golden Eagle Refinery – Tesoro Corporation, addressed the Committee in opposition to the Continuous Emissions Monitoring System (CEMS) requirement and noted the effectiveness of barometric monitoring. Mr. Broadbent disagreed with the assessment of the effectiveness of CEMS and barometric monitoring.

Committee Action: None; informational only.

5. Comprehensive Local Energy Picture

Brian Bateman, Health and Science Officer, gave the staff presentation Overview of Energy Issues, including fuel types used, end-use sectors, and trends and projections in the use and production of energy and energy-related carbon dioxide emissions at the global, national, state and regional perspectives.

Director Avalos asked, regarding slide 3, World Energy Consumption and Related [Carbon Dioxide] CO₂ Emissions by Fuel Type, where the growth in coal consumption is occurring, which question was answered by Mr. Bateman.

Mr. Bateman continued the presentation.

Chairperson Gioia asked, regarding slide 4, Worldwide Delivered Energy Consumption by Sector and Fuel, for more information about the cited “International Energy Outlook 2013,” which was provided by Mr. Bateman.

Mr. Bateman continued the presentation.

Chairperson Gioia asked, regarding slide 5, World Energy Consumption and Related CO₂ Emissions, for the inclusion of a slide showing various economic growth possibilities.

Mr. Bateman continued the presentation.

Chairperson Gioia asked, regarding slide 9, Petroleum and Other Liquid Fuels: U.S. Consumption, about vehicle miles traveled, which question was answered by Mr. Bateman. Chairperson Gioia asked how to reconcile “Motor gasoline” in the graph on the right and “Transportation” in the graph on the left, which question was answered by Mr. Bateman.

Director Bates asked how hybrid cars and similar technology factor into or affect the graphs, which question was answered by Mr. Bateman.

Mr. Bateman continued the presentation.

Chairperson Gioia asked, regarding slide 11, U.S. Crude Oil Production, whether “producing” in this presentation means pumping out of wells or refining, which question was answered by Mr. Bateman.

Mr. Bateman continued the presentation.

Chairperson Gioia asked, regarding slide 12, Trends and Projections in U.S. Crude Oil Supplies, about the quality of domestic and imported crude oils, the percentage of each that is refined in the U.S., and about the net result in terms of refinery emissions, which questions were answered by Mr. Bateman.

Mr. Bateman continued the presentation.

Director Bates asked, regarding slide 13, U.S. Natural Gas Production, whether the increase can be attributed to hydraulic fracturing, which question was answered by Mr. Bateman.

Mr. Bateman continued the presentation.

Director Bates asked, regarding slide 14, U.S. Per Capita Energy Use and Energy-Related CO₂ Emissions, what alternative energy sources are available, which question was answered by Mr. Bateman.

Mr. Bateman continued the presentation.

Chairperson Gioia asked, regarding slide 21, Bay Area Energy-Related CO₂ Emissions (2012), what “residential” is comprised of if not electricity, which question was answered by Mr. Bateman.

Mr. Bateman continued the presentation.

Chairperson Gioia asked, regarding slide 22, Bay Area Energy Production, what comprises the Contra Costa production, which question was answered by Mr. Bateman.

Mr. Bateman concluded the presentation.

Committee Comments:

Director Sperring suggested that hydraulic fracturing technology is advancing quickly and that this information, as well as an enhanced concern for the economic prosperity of Bay Area residents, should be included in future discussions about these matters.

Director Piepho echoed Director Sperring and emphasized the enhanced concern for the economic prosperity of Bay Area residents.

Director Avalos commended all of the viewpoints relative to hydraulic fracturing and suggested the time is right for a national dialogue about the same.

Chairperson Gioia suggested posting the staff presentation on the Air District website, with the addition of the reports cited therein, and requested the delivery of the same reports to the Committee members in follow up.

Public Comments: None.

Committee Action: None; informational only.

6. Rule Effectiveness Study

After calling for public comment, the matter was deferred due to the late hour.

Committee Comments: None.

Public Comments: None.

Committee Action: None.

7. Committee Member Comments/Other Business:

Director Sperring requested a Board discussion about attendance by members at Committee meetings. The Committee discussed today's unique start time. Director Sperring clarified his request for a broader discussion about attendance as not being relative to uniquely timed meetings. The Committee discussed the ideal start time for future Committee meetings.

8. Time and Place of Next Meeting: Monday, October 21, 2013, Bay Area Air Quality Management District Headquarters, 939 Ellis Street, San Francisco, California, 94109 at 10:30 a.m.

9. **Adjournment:** The meeting adjourned at 12:26 p.m.

Sean Gallagher
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

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

From: Jack P. Broadbent
Executive Officer/APCO

Date: September 16, 2013

Re: Report on the Compliance Assurance Rule Effectiveness Efforts

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

Staff routinely conducts site inspections to ensure that the rules adopted by the Bay Area Air Quality Management District (Air District) are complied with. However, new rules may affect previously unaffected sources. Operators of the sources may not be aware of the new requirements. Outreach and education are essential to provide needed information to the regulated community.

To ensure compliance, staff regularly conducts rule effectiveness efforts. These efforts assess the targeted emission reductions achieved by the Air District's regulations. The desired outcome of a rule effectiveness study is to ascertain the compliance rate of subject sources and to identify corrective actions to improve compliance.

DISCUSSION

In this report, staff will highlight two recent Rule Effectiveness Efforts.

BUDGET CONSIDERATIONS/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Wayne Kino
Reviewed by: Jeff McKay

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

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

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 16, 2013

Re: Update on Neptune Crematorium

RECOMMENDED ACTION

None; receive and file

BACKGROUND

On November 8, 2011, the Air District issued Sentinel Cremation Societies, Inc. (parent company to Neptune Society of Northern California) an Authority to Construct to move their operation from Emeryville, CA to Oakland, CA. The Authority to Construct permits construction of two crematory units at 9850 Kitty Lane, Oakland, CA.

DISCUSSION

The proposed project complies with all air quality laws. The Air District completed a health risk analysis for the proposed project which showed levels below significance.

The Authority to Construct contains permit conditions that limit throughput to 3000 cremations per year and one cremation per hour. A Permit to Operate will be issued when the project is built and only after compliance is demonstrated. The Permit to Operate will require an annual renewal.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jim Karas
Reviewed by: Jeff McKay

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

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

From: Jack P. Broadbent
Executive Officer / APCO

Date: October 10, 2013

Re: Report on Formaldehyde Emissions from Wood Product Coatings

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

On August 5, 2009 the Board of Directors adopted amendments to Regulation 8, Rule 32: Wood Products Coatings. Wood products coatings are used to enhance and protect wood furniture, kitchen cabinets, picture frames, etc. The amendments reduced volatile organic compound emissions. During the workshop phase of the rule amendment process, concerns were raised about formaldehyde emissions from wood coatings. Section 8-32-408: Formaldehyde Emissions Information Requirement was developed to respond to those concerns. Section 408 requires each wood coating manufacturer with 1000 gallons of wood coatings sold or distributed into the District to submit formaldehyde emissions estimates for each of their coatings based on 2011 sales.

DISCUSSION

Formaldehyde is a toxic air contaminant that can be emitted from some wood coatings during the curing process. Wood coatings contain very little formaldehyde directly, but can emit formaldehyde during the curing/polymerization processes if formaldehyde based polymer resins are used. Very little quantitative information was readily available about formaldehyde emissions from wood coatings, so the District committed to work with resin manufacturers and wood coating suppliers to develop reasonable estimates of formaldehyde emissions from their products, and to determine if these emissions are significant.

Conversion varnishes are coatings commonly used on wood kitchen cabinets. Pre-catalyzed lacquers are coatings commonly used on furniture. During the curing processes, formaldehyde based polymer resins emit alcohols as reaction products, but can also react with humidity in the air to form formaldehyde. District staff conducted an extensive literature search, as well as e-mail and telephone research with wood coating suppliers and with formaldehyde based polymer resin manufacturers. All acknowledged that emissions are influenced by the type of formaldehyde resin, the amount of excess resin in the coating mixtures, and curing temperature and humidity. However, specific information on formaldehyde emissions is scarce.

Given the lack of quantitative information available, staff conducted pilot testing of wood coatings with a Bay Area laboratory to measure formaldehyde emissions. The data from these tests was used to develop emission factors and to estimate formaldehyde emissions from wood coatings.

Staff will provide the Committee with the following information:

- Background on the 2009 amendments to Regulation 8, Rule 32: Wood Product Coatings;
- Information on formaldehyde;
- A description of wood coating testing program and emissions factor developed;
- Formaldehyde emissions estimates; and
- Comparison of these formaldehyde emissions to formaldehyde emissions from all sources, and recommendations for next steps.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Guy Gimlen
Reviewed by: Henry Hilken