

**Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109
(415) 771-6000**

APPROVED MINUTES

Summary of Board of Directors
Stationary Source Committee Meeting
9:30 a.m., Thursday, May 13, 2010

Call to Order – Roll Call: Chairperson Gayle Uilkema called the meeting to order at 9:30 a.m.

Present: Gayle B. Uilkema, Chairperson; and Committee Members Susan Garner, John Gioia, Carole Groom, Carol Klatt, Scott Haggerty, David Hudson and Nate Miley

Absent: Vice Chairperson James Spring

Public Comment Period

Bill Almon, Quarry No, opposed operation of the Lehigh Southwest Cement Plant, noted a Notice of Violation was issued, and submitted and read an email into the record which he said was sent to Director Gioia.

Mr. McKay and Mr. Bateman acknowledged the issuance of a Notice of Violation, discussed reasons for deferring of Lehigh's discussion by the Committee, and reviewed the District's work with the EPA.

3. Approval of Minutes of March 5, 2010 and April 12, 2010

Committee Action: Director Haggerty made a motion to approve the Minutes of March 5, 2010 and April 12, 2010; Director Gioia seconded the motion; approved unanimously without objection.

4. Proposed Amendments to Regulation 9, Rule 10: NO_x and CO from Boilers, Steam Generators and Process heaters in Petroleum Refineries

Julian Elliot, Senior Air Quality Engineer, provided a presentation of the Regulation 9, Rule 10's history, stating that Regulation 9, Rule 10 was adopted in 1994 and fully implemented by 2002. He said most heaters were subject to a refinery-wide NO_x limit. Each refinery has a limit and daily emissions for heaters which cannot exceed 0.033 lbs of NO_x per MMBTU heat input. Boilers are limited to 150 ppmv NO_x limit. The result is that NO_x emissions are reduced by 26 tons/day, representing a 65% NO_x reduction.

Mr. Elliot provided an explanation of refinery boilers, steam generators, and process heater operations. He presented current NO_x limits for heaters and boilers and said new (post-1994)

heaters are not subject to Regulation 9, Rule 10 because they are designed to use advance NOx controls and have very low levels. Bay Area refineries operate a total of 179 existing heaters, 11 new heaters, and 6 CO boilers. 2008 NOx emissions total 11.0 tons/day and, because of decreased refinery operations, this level is expected to be reduced for 2009.

Mr. Elliot said staff is proposing to create a new, lower average NOx limit through a dual structure for heaters and boilers and two different levels are proposed for non-cokers and cokers. In addition, there has been activity at refineries which will result in significant reductions. In 2007, a refinery underwent a coker replacement and shutdown of CO boiler and in 2010 a refinery replaced two CO boilers. The cost per ton is estimated at \$2,500 to \$16,000 and even though the range is somewhat uncertain, Mr. Elliot said staff is confident refineries have cost-effective options to meet changes.

Regarding the rule development process, Mr. Elliot reported the following:

- Staff held meetings with each refinery and held a series of meetings with refinery technical consultants to develop a database of refinery heaters, heater emissions and estimated costs for additional NOx control at each heater.
- Cost data was validated using EPA cost estimation tools and discussions with NOx control vendors.
- Staff held a public workshop in February 2010 to solicit comments on proposed CO boiler NOx limits.
- Staff have reviewed comments by refinery operators and WSPA and held additional meetings with both.

Next steps include:

- Preparation of a second draft of proposed rule and solicit comments.
- Preparation of CEQA & socio-economic analyses.
- Public Hearing before Board of Directors in the third quarter of 2010.

Committee Comments/Discussion:

Chairperson Uilkema referred to a newspaper article about an EPA rule and questioned and confirmed that the proposed rule is for boilers; most are natural gas-fired boilers and the standards that EPA is proposing are largely in effect. Mr. Bateman noted that there is a public comment period and the rule will most likely not be finalized for about one year. Staff will review the proposal and determine if it adds any new requirements on top of the District's already stringent rule.

Director Hudson confirmed with Mr. Elliot that cost effective options are within the range that the Board of Directors has accepted in the past.

Public Comments:

Guy Bjerke, WSPA, noted that District staff has been working with the industry and WSPA will respond to the cost effectiveness issue at the time of Board consideration.

Committee Action: None; informational only.

5. Status Report on the Flare Minimization Plans Under Regulation 12, Rule 12: Flares at Petroleum Refineries

Alex Ezersky, Senior Advanced Projects Advisor, gave a presentation on petroleum refinery Flare Minimization Plans (FMPs). He presented a diagram of a typical flare system and noted that each FMP must include basic design and operation of flare gas recovery systems, prevention measures summary, and an additional feasible measures implementation schedule. He noted that Initial FMPs were approved July 16, 2007; the FMP first annual update was approved April 17, 2009 and the second annual update was approved December 29, 2009.

Mr. Ezersky reviewed the first and second FMP updates which focused on capacity and maintenance activities and reported on significant reductions, stating that the FMPs provide for continuous improvement. He reviewed flare emission trends and noted that regulations have been effective. Total hydrocarbon emissions are reduced from 8 tons per day to 0.4 tons per day, there is significant reduction in vent gas volumes to flares, and flare emissions continue to decrease.

Committee Comments:

Director Haggerty questioned progress of Shell Refinery's flares, which he said looks as though they have not made improvement. Mr. Ezersky believed their emissions were lower; however, there are many variations year to year and much depends upon the refinery's maintenance schedules.

Director Gioia said given the need for a downward trend and the difficulty in the information presented, he requested staff return with 5 graphs that date back to 2000 for each facility when flaring was more significant in order to show how rules have made a difference. Mr. Ezersky agreed this could be prepared, but noted that engineering data used in the distant past may be somewhat skewed because it was not monitored.

Chairperson Uilkema concurred that graphs should be developed for each facility and requested information to be presented at the Stationary Source Committee meeting on Friday, July 23, 2010 as a consent or informational item.

Mr. Ezersky then presented methane emissions, non-methane hydrocarbon emissions, sulfur dioxide emissions. Regarding prevention and minimization, he noted that the District focuses on source reduction, vent gas compressor capacity, fuel gas balance, and scrubbing sour gasses to reduce flaring, and he reviewed each of the measures undertaken. He then presented flare regulation violations by refinery, flare minimization metrics using a 5-year rolling average period ending 2008 versus 2009.

Director Haggerty questioned whether or not flaring was reduced down to 76 days between 2008 and 2009. Mr. Ezersky referred to a graph on slide 7; Flare Volume and Non-Methane Hydrocarbon trends, noting that the technical assessments began in 2001. Mr. Broadbent agreed this information could be compiled, but he reiterated that flaring was only monitored by the District back to a certain time in the past and the information may be somewhat skewed. Chairperson Uilkema requested that the information indicate which years include monitored data and which do not.

Director Gioia suggested and confirmed with staff that information would be presented by facility, by type of emission, dating back to 2001 to the present.

Chairperson Uilkema suggested refineries may want to assist in gathering data if they have been accomplishing their goal and improving. She described the many telephone calls she had received years ago regarding flaring episodes, which have diminished. She believed the information builds on the credibility of the District and highlights improvements by refineries.

Mr. Ezersky concluded his presentation by stating that annual FMPs are due October 1 of each year. Reductions were 56% in volume and 69% in emissions, and he noted that this data is also available on the District's website.

Public Comments: None

Committee Action: None; informational only.

6. Committee Member Comments/Other Business:

Chairperson Uilkema announced that Committee members would be polled for upcoming meetings on July 23, 2010 and September 27, 2010.

7. Time and Place of Next Meeting: Friday, July 23, 2010, 9:30 a.m., 939 Ellis Street, San Francisco, CA 94109.

8. Adjournment: The meeting adjourned at 10:20 a.m.

/s/ Lisa Harper

Lisa Harper
Clerk of the Boards