Air Quality Control Advisory Council Meeting Notes
May 19, 2014 @ 8:15 am
MDE Headquarters—Aeris Conference Room
1800 Washington Boulevard
Baltimore MD 21230

AQCAC MEMBERS PRESENT
John Quinn
Kip Keenan
Kevin Barnaba
Lorne Garrettson
Sue Garonzik
Sara Tomlinson

AQCAC MEMBERS ABSENT
John Kumm
Sania Amr
Lawrence Schoen
Ross Salawitch
Andrea Bankoski
Donald Moore

VISITORS
Edwin Much – Exelon Generator
Deron Lovaas – NRDC - Natural Resource Defense Council
Victoria Mock – Holcim (US) Inc.
Tom Weissinger – Raven Power
Walter Stone – NRG Energy
David Cramer – NRG Energy
Joshua Berman – Sierra Club

MDE-ARMA
George (Tad) Aburn
Diane Franks
Randy Mosier
Mario Cora
Eddie DuRant
Karen Irons
Steve Lang
John Artes
Bill Paul
Carolyn Jones
Husain Waheed
Kathleen Wehnes

This is a summary of the May 19, 2014 Air Quality Control Advisory Council Meeting and serves as a record of the Council's vote on regulatory action items. The meeting is recorded and the digital file is maintained by MDE/ARMA. This digital file is considered public information and may be reviewed in its entirety by anyone who is interested in the details of the discussions.

MEETING OPENING/OPENING REMARKS

Chairman John Quinn and Ms. Diane Franks, ARMA Planning Program Manager, opened the meeting with introductions of members and visitors.

ACTION ON REGULATIONS

Approval of Minutes from January 31, 2014 meeting:

Mr. Quinn suggested the members defer action on the minutes from last meeting until a full quorum of members were available. At the end of the meeting Ms. Franks called for a motion on the January meeting minutes.

Motion to approve the January 31, 2014 minutes was made by Dr. Garrettson and seconded by Mr. Barnaba. Ms. Garonzik abstained from voting, all others voted in favor at approximately 10:05 am.

COMAR 26.11.29 Control of NOx Emissions from Natural Gas

Mr. Randy Mosier presented a proposal to amend existing COMAR 26.11.09.08I and 26.11.29. Mr. Mosier explained the primary purpose of this action is to consolidate NOx emission requirements for internal combustion engines located at natural gas pipeline compression stations in a unique chapter. Current NOx emission requirements are maintained and no additional requirements are established at this time.

The NOx RACT requirements currently under COMAR 26.11.09.08I, promulgated under the NOx SIP Call, established maximum hourly NOx emission limits. Natural gas pipeline compression stations will continue to meet these requirements which were re-codified when the requirements were moved to the new COMAR 26.11.29 on May 31, 2010. Actions today separate natural gas compression stations and cement plants into distinct chapters.

Dr. Garrettson asked why these engines were a separate category of internal combustion engines. Mr. Waheed responded the engines are unique because their size is very large at these stations, designed for gas compression purposes. The engines tend to be an older design and in service for a much longer period of time because they cannot be easily replaced. They are adapted and maintained with strict oversight. Mr. Mosier mentioned that the Ozone Transport Commission is looking into this category of engines and may set tighter requirements. The Department is participating in these discussions.

Dr. Garrettson asked what percentage of NOx emissions comes from natural gas compression. MDE replied it is a very small amount compared to NOx emissions from the whole inventory.
There are only two natural gas compression facilities in Maryland.

Motion to approve this action was made by Mr. Keenan and seconded by Dr. Garrettson. Five members voted in favor and no members voted against at approximately 8:46 am.

COMAR 26.11.30 Control of Portland Cement Manufacturing Plants
COMAR 26.11.01.10 Continuous Opacity Monitoring Requirements
COMAR 26.11.09.08 Control of NOx Emissions for Major Stationary Sources

Ms. Franks presented a proposal to amend existing COMAR 26.11.30 Control of Portland Cement Manufacturing plants. Mrs. Franks explained the primary purpose is to combine the existing requirements in COMAR regarding nitrogen oxides (NOx), sulfur oxides (SOx), particulate matter (PM) and opacity that apply to Portland Cement Plants into one chapter.

A previous action was proposed to incorporate earlier SIP requirements and to create a unique chapter containing all requirements for both natural gas compression stations and cement plants. The regulation amendments were presented to AQCQC on January 31, 2011 and were approved by the Council. On August 23, 2013, the proposed regulation was withdrawn due to unresolved comments regarding Continuous Opacity Monitoring (COM) requirements from EPA at the September 12, 2012 public hearing.

The proposal is replacing existing Continuous Opacity Monitoring (COM) requirements, as the 2013 NESHAP for Cement Kilns now requires a PM Continuous Process Monitoring System (CPMS) which is equivalent to SIP opacity requirements. The proposal also revises NOx Reasonably Available Control Technology (RACT) requirements based upon Ozone Transport Commission (OTC) Cement Plant Technical Support Documents (TSD).

COMAR 26.11.01.10 and 26.11.06.02 contain opacity limits and monitoring requirements for cement kilns. COMAR 26.11.06.03 contains specific particulate matter requirements for confined sources. COMAR 26.11.06.05 establishes a concentration standard for SO2 depending on the location of the plant and the date the plant was constructed. COMAR 26.11.09.08 and 26.11.29 contain NOx emission limits. These requirements are combined into a unique chapter for cement kilns.

The action proposes to repeal the NOx RACT requirements in COMAR 26.11.09.08H established prior to 1990 for Portland Cement Manufacturing Plants. The current NOx RACT rates in COMAR 26.11.29.03 are more stringent and are based upon recommended control measures for cement kilns from the 2007 OTC Technical Support Document on Identification and Evaluation of Candidate Control Measures.

Additionally, EPA announced a Clean Air Act settlement with Holcim cement as a result of violations of the Act on July 11, 2013. Holcim will invest over $90 million to upgrade the cement plant installing a pre-heater/pre-calciner on the kiln. It must be in operation by September 6, 2016 and meet a year round NOx limit of 1.8 lbs NOx/ton of clinker on a 30-day rolling average. Holcim will be required to operate the new kiln well below the proposed NOx RACT limit. Cement plants are required to demonstrate compliance with NO_x emission requirements using continuous emission monitoring (CEM) data as outlined in COMAR 26.11.01.11.

Particulate Matter emission limits remain the same and compliance with those standards is measured through stack tests. In addition, cement plants are required to meet visible emission limits. Compliance for these standards have been measured through continuous opacity monitoring (COMs), Method 9 and Method 22. Recent revisions for cement manufacturing under the NESHAP program offer alternatives to

COMs for tracking compliance with opacity standards. NESHAP procedures use stack test data to calibrate a PM CEMS monitor and the PM CEMs monitor is then used as a Continuous Parametric Monitoring System (CPMS) for operation of particulate matter controls at the plant. MD cement kilns have the option to use this new procedure. If the COM is demonstrating compliance under the conditions of the CPMS calibration, the CPMS can then substitute for the COM also. Cement plants will continue to demonstrate compliance with opacity standards using manual methods such as Method 9 and Method 22.

Mr. Keenan asked if we had attained the PM2.5 standard. Ms. Franks responded that we comply with the standards and we expect EPA to approve Maryland's redesignation requests and maintenance plans shortly.

Dr. Garrettson asked about the dispersion pattern of PM2.5 from a cement kiln and whether there was anything in the regulation that takes into account the location of the Portland Cement Plant. Ms. Franks replied all plants have more affect locally than they do long distance. Under certain meteorological conditions they would operate as a tall stack, and emissions would be more dispersed. The standards were set up based on where the cement plant was located: Holcim is in Western Maryland which has slightly less stringent requirements; the Lehigh cement plant is in the Baltimore region which has more stringent limits. Ms. Franks noted that the plant has committed to a 90% reduction in their NOx rate.

Mr. Tom Weissinger with Raven Power asked how long it might it take to actually be able to remove the COM. Ms. Franks replied that our current understanding is until EPA approves this regulation in our SIP the plant would be required to operate the COM. This is an action that has to be approved and there have been some responses from the environmental community that they would like us to have an overlap period to check out how well the new methodology is working compared to the old methodology. The EPA review and approval of SIP amendments may take some time.

Ms. Victoria Mock with Holcim Inc. asked whether this would take years or months. Ms. Franks responded that EPA is supposed to approve SIP submittals within a year and we have been working with them to accomplish this, however some processes have taken longer.

Mr. Keenan asked about the economic impact of the regulation. Ms. Mock replied that Holcim is converting long-dry kilns to pre-calciner kilns driven by federal NESHAP regulations. Holcim's current permit requires a more stringent level of control than this regulation. The conversion will make the plant more efficient.

Motion to approve this action was made by Mr. Keenan and seconded by Dr. Garrettson. Five members voted in favor and no members voted against at approximately 9:18 am.

PRESENTATIONS AND DISCUSSIONS

Distributed Generation Updates

Ms. Carolyn Jones gave a brief updated statement on the Distributed Generation conceptual regulations. MDE had decided to focus new regulations regarding distributed generation on data collection on emergency backup generators and the frequency with which they operate. MDE obtains data on generators utilized for Emergency Demand Response events through curtailment service providers,

however generators may operate many more hours during peak day demands and for energy reduction programs. MDE would like to broaden the data collection and provide a full inventory for research on ozone causing emissions.

111 (b&d) for Power Plants

Ms. Franks presented this briefing on the EPA's proposed CO2 standards for new fossil fuel fired units at power plants. The Environmental Protection Agency (EPA) announced its plan to regulate CO2 for new and existing sources under Clean Air Act Section 111(b and d). Power plants generate about one third of all greenhouse gas pollution in the U.S. The Clean Air Act recognizes the opportunity to build emissions controls into a source's design is greater for new sources than for existing sources, so §111 has different approaches to standards for new and existing sources.

The Clean Air Act lays out distinct approaches for addressing new and existing sources under Section 111: a federal program for new sources and state programs for existing sources. Section 111 (b) is the federal program to address new, modified and reconstructed sources by establishing standards of performance. Section 111 (d) is a state-based program for existing sources. EPA establishes guidelines. States then design programs to fit their particular mix of sources and policies and get the needed reductions.

111(b), already proposed for new power plants, sets a rate-based standard. States are requesting more flexibility under 111(d) and have requested that EPA either set a mass-based standard or create a path to convert rate-based reductions to mass-based reductions. Many states have also asked that EPA include energy efficiency and renewable energy (EE/RE) reductions for greater CO2 reductions than can be accomplished by only considering reductions that can be achieved within the fenceline of the power plant. Maryland and other states have also advocated regional approaches like the Regional Greenhouse Gas Initiative (RGGI) that follow the power system structure and involve trading and credits. The next step will be to comment constructively on the 111(d) proposal when it is proposed to secure the best option for Maryland.

Mr. Walter Stone with NRG Energy asked how to give credit for energy efficiency to people who own and operate power plants. NRG as an example bought a lot of RGGI allowances which funded energy efficiencies. Who owns those reductions, the person who paid for it indirectly by purchasing allowances? Ms. Franks stated that MDE has no opinion at this time. EPA will have to establish methods of calculations to incorporate our existing programs, such as RGGI.

Confirmation of Next meeting dates:

Mr. Mosier informed the council that Mr. Ron White has resigned from the Council. The Department is appreciative of his service. We are now working on filling two open spaces on the council.

The Council's next meeting dates were confirmed for:

September 8, 2014
December 8, 2014

The meeting adjourned at 10:07 a.m.