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

AQCAC MEMBERS PRESENT

Sania Amr, M.D. Kevin Barnaba - phone Lorne Garrettson, M.D. Sue Garonzik Kip Keenan John Kumm Hon. Leta Mach Cindy Parker, M.D. John Quinn – 11am Ross Salawitch, PhD Lawrence Schoen Sara Tomlinson

AQCAC MEMBERS ABSENT

Andrea Bankoski Donald Moore

VISITORS

Ellen Valentino - MAPDA Markus Hilpert – Johns Hopkins University Erin Faessler - VST David Cramer - NRG Ali Famound – Trinity Consultants Josh Berman – Sierra Club Davis Smedick – Sierra Club Jonathan Kays - UMD Kirk McCauley - WMDA

MDE-ARMA

George (Tad) Aburn Angelo Bianca Diane Franks Randy Mosier Eddie DuRant Carolyn Jones Husain Waheed Kathleen Wehnes Justin Mabrey Duane King

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Scott Thompson Marcia Ways Jed Miller Peggy Courtright Kathleen Field Karl Munder

This is a summary of the December 8, 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

At approximately 8:25 AM, Mr. George Aburn, ARMA Director, opened the meeting with introductions of members and visitors. Mr. Aburn announced that Chairman John Quinn will be joining the meeting later. Mr. Keenan was appointed to serve as the chair in Mr. Quinn's absence. To allow as many members as possible to arrive to the meeting, the order of presentation from the agenda was re-arranged and the meeting started with two briefings.

BRIEFINGS

Low Sulfur Heating Oil

At approximately 8:29 AM, Marcia Ways announced to the Council that a low sulfur heating oil fuel standard has been adopted in 2014 by the Office of the Comptroller, reducing the allowed sulfur content to 500 ppm. This was Phase I and the Comptroller's Office will be proposing Phase II with a lower sulfur in fuel content in 2015. This regional initiative will help meet the regional haze visibility standards required at federal Class I areas.

Control of SO2 Emissions from Coal-Fired Electric Generating Units

At approximately 8:34 AM, Tad Aburn presented the current thinking for control of SO2 emissions from coal-fired power plants in Maryland. Mr. Aburn informed the council of the 2010 EPA SO2 standard and compliance options to meet the EPA area designations. Mr. Aburn explained the role modeling will take to predict the expected concentration rates needed to meet the standard while considering the source data, emissions data, meteorological data and topographic data. Mr. Aburn noted the current controls installed and tons of SO2 emissions produced at plants in Maryland. He presented "current thinking" for emission limits on the coal-fired Ravens Power and NRG units.

The Council asked for more details on the emission rates specific to each unit and MDE replied that data would be supplied during the regulatory development process and when the regulation is proposed. The Council inquired if additional sources would have to be modified to meet this standard and Mr. Aburn indicated that one large papermill plant and another coal-fired power plant are currently under review.

Josh Berman requested to speak to the Council regarding this proposed regulation. Mr. Berman expressed interest on behalf of the Sierra Club for MDE to move as expeditiously as possible to adopt regulations to address health concerns associated with excess SO2 emissions.

ACTION ON REGULATIONS

COMAR 26.11.30 Control of Portland Cement Manufacturing Plants

Ms. Diane Franks presented the amendments for Control of Portland Cement Manufacturing Plants, COMAR 26.11.30; with Continuous Opacity Monitoring Requirements, COMAR 26.11.01.10; and Control of NO_x Emissions for Major Stationary Sources, COMAR 26.11.09.08. The presentation began at approximately 9 AM. (~38 min. into the audio recording).

The amendments presented today focus on the new EPA particulate (PM) measuring and monitoring requirements that are required for PM monitoring and provide an alternative to Continuous Opacity Monitoring (COMs) at Portland cement plants. MDE has previously presented versions of this regulation to the Council and has received approval to move forward and adopt. One aspect of the previous proposed regulations included separating the Natural Gas Compression Station requirements from the Portland Cement Manufacturing Plant requirements and thus having two separate Chapters, COMAR 26.11.29 for Natural Gas Compression and COMAR 26.11.30 for Cement Plants. Proposed limits for NOx were previously presented, are included under Regulation .03 and the companies are in process to comply. Two existing facilities in Maryland will be effected by the regulations.

Maryland is currently meeting the PM2.5 standard. Under the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations, cement plants are required to install and operate a PM continuous process monitoring system (CPMS) for PM monitoring. PM CPMS may also be used as an alternative method to COMs for monitoring visible emissions. Ms. Franks explained that the regulation changes today incorporate EPA's requirements under Regulations .04 and .05 as well as definitions under Regulation .01 for the CPMS.

The Council requested cost figures for the PM monitoring. MDE replied that some draft data has been supplied but additional figures are being compiled. An annual stack test will be required for \$30k but there will be a savings from removal of the COM. Final figures will be quoted in the adoption notice for this regulation in the Maryland Register.

The Council asked for the EPA federal references to the PM CPMS to be noted. MDE explained that the corresponding EPA references are in the regulation under Regulation .04 Particulate Matter and details of methods and requirements would be noted in a TSD when the regulations are proposed in the Maryland Register for adoption. MDE explained the SO2 requirements under Regulation .06 where a house keeping exercise to relocate the existing text to the COMAR 26.11.30 Chapter to keep all cement plant requirements together. The existing plants meet a much better sulfur emission standard than the existing regulation requires. New source review and permit conditions would apply to any new plant to be built in MD. This standard will be reviewed for adjustments at a later date.

Motion to approve this action was made by Dr. Amr and seconded by Mr. Kumm. All members present (11) voted in favor, no members voted against, no members abstained at approximately 9:34 AM(~1 hour and 07 min in the audio recording).

COMAR 26.11.24 Stage II Vapor Recovery at Gasoline Dispensing Facilities

Mr. Aburn presented the proposal to amend existing COMAR 26.11.24 (Stage II) Vapor Recovery at Gasoline Dispensing Facilities. The presentation began at approximately 9:35 AM (~ 1 hour and 8 min. into the audio recording).

Mr. Aburn explained that EPA released a policy called "Widespread Use for Onboard Refueling Vapor Recovery (ORVR) and Stage II Waiver". MDE is proposing a regulation that fazes out the Stage II technology as modern vehicles equipped with ORVR systems have made the Stage II systems redundant and will provide diminishing benefits over the coming years. Mr. Aburn explained the three main points of the regulation: New stations no longer will be required to install stage II after March 6, 2014. Existing stations with Stage II can decommission after January 1, 2017 and stations undergoing major modifications may decommission after the effective date of the regulation. Existing GDFs may also elect to decommission Stage II vapor recovery equipment in a faster timeframe by installing a prescribed number of electric vehicle charging stations. There can be a considerable amount of cost savings from stage II decommissioning. An owner or operator of a GDF that decommissions a Stage II vapor recovery system shall perform the decommission and Testing of Vapor Recovery Systems at Vehicle Refueling Sites" of the Petroleum Equipment Institute, Section 14, 2009 and COMAR 26.10.10.

An owner or operator of a GDF subject to this regulation that does not install and operate or decommissions a Stage II vapor recovery system, and other than those with an approved Electric Vehicle charging station plan, shall install and operate low permeation hoses and dripless nozzles at every pump consistent with the equipment manufacturer's specification by May 1, 2020. These requirements are on the condition if the technology has been certified by CARB and the EPA currently has designated counties in Maryland moderate or above nonattainment for ground-level ozone.

In 2012, MDE contracted an analysis of the potential impacts associated with the elimination of Stage II requirements in Maryland. Maryland's analysis has shown that Stage II systems in Maryland will continue to show diminishing VOC benefits in Maryland until the year 2020 when thereafter incompatibility issues with ORVR systems will result in excess VOC emissions being released. Stage II vapor recovery systems total statewide VOC reductions for all refueling operations in 2014 has been calculated to be 1.7 tons/day of VOC and in 2020 to be 0.17 tons/day of VOC. Additional control measures will be required by EPA to make up any emission shortfall resulting from the decommissioning of Stage II.

The Council inquired if EPA had a mandatory decommission date and MDE explained that EPA does not and that EPA has provided guidance to states on how to determine when widespread use criteria of ORVR systems has been met. EPA's guidance document provides both technical and policy recommendations to states on how to develop and submit an approvable SIP revision seeking to remove or phase-out an existing Stage II program.

The Council expressed some concern of EV chargers at the same location as fueling pumps. The Council also expressed concern that fueling attendants might have more exposure to toxics in gasoline if Stage II systems are decommissioned.

The following speakers spoke before the Council; Mr. Kirk McCauley with WMDA, Ms. Ellen Valentino with MAPDA, Mr. Markus Hilpert with Johns Hopkins University, and Ms. Erin Faessler with VST.

Mr. McCauley supports the regulation to remove the Stage II requirement as soon as possible but any additional requirements would cause a hardship to small stations.

Ms. Valentino disagrees with the proposed regulation and would like more time to discuss the regulation before a final adoption is proposed. She expressed the concern that the proposed technologies in 2020 were not proven and unavailable in Maryland at this time. She expressed concern with the EV charger requirement and felt this was a business decision that did not belong in the regulation.

Mr. Hilpert explained his research with Johns Hopkins University on gasoline vapors and spills and expressed concern of the removal of Stage II systems.

Ms. Faessler explained the products available through VST and various suppliers manufacturing the newer technologies in the eastern United States. She brought a display of the dripless nozzle and low permeation hoses that are currently available and could be installed. She explained that CA, OH and other states have installed similar equipment and continued testing is being conducted. Ms. Faessler gave a list of suppliers with similar technologies.

Preliminary cost figures and emission benefits are available and MDE can provide them.

At approximately11:00 AM (2 hours and 35 min. in the audio recording) Mr. Keenan requested the Council consider a motion. A motion to delay this action, reconvene the Stakeholder process and repropose the regulations to the Council in March was made by Mr. Kumm.

The Council requested the following for the next meeting. MDE should meet with stakeholders to refine the EV charging requirements. MDE should present data on air toxics, data on proposed technologies including present cost figures and emission benefits. Mr. Schoen suggested MDE consider the idea of keeping some Stage II systems in place with postings for fueling of non-ORVR equipment (motorcycles, gas cans, lawn mowers, etc).

At approximately 11:10AM Mr. Keenan confirmed the motion to delay this action until next meeting as was made by Mr. Kumm and a second was made by Dr. Amr. Mr. Schoen abstained from the vote, all others voted in favor (10) at approximately 11:10 AM(~2 hours and 44 min. in the audio recording).

COMAR 11.14.08 Vehicle Emission Inspection Program (VEIP)

Marcia Ways presented this action which involves amendments to update to the existing regulations to current practices and procedures. The existing regulation is jointly signed by the Motor Vehicle Administrator and the Secretary of the Environment. The presentation began at approximately 11:11 AM (~ 2 hours and 45 min. into the audio recording).

Ms. Ways explained that both the Motor Vehicle Administration and MDE have a responsibility in the operation of the VEIP program. The newest MVA Administrator has requested updates to the existing

regulations to have the most up-to-date requirements reflected. These regulations are part of the SIP and thus need to follow the adoption schedule to be submitted to EPA for approval. The following have been addressed: The low speed vehicle exemption has been modified, the test date for a used vehicle has been modified, the repeat failure documentation has been strengthened, the time extension for active military has been extended, the repair facility and technician certification procedures have been updated and some minor editing text changes.

Motion to approve this action was made by Mr. Quinn and seconded by Dr. Amr. All members present (12) voted in favor, no members voted against, no members abstained at approximately 11:20AM(~2 hours and 55 min in the audio recording).

Briefing – OTC Mobile Sources Model Rules

Mr. Karl Munder presented on the new technologies that aftermarket catalytic converters can perform. Mr. Munder noted that the Ozone Transport Commission (OTC) has prepared a model rule and has urged EPA to adopt the rule federally. California has this program and has measured performance results to reduce pollutants HC, CO and NOx. Maryland is looking into formal state regulation amendments. Two other OTC states (NY, ME) have adopted the program.

The council asked the expected cost of the program and Mr. Munder answered that current figures say \$200 - \$300 additional cost for the catalytic converter.

Approval of Minutes from October 6, 2014 meeting:

Mr. Keenan called for a motion on the October meeting minutes.

Motion to approve the October 6, 2014 minutes was made by Dr. Salawitch and seconded by the Hon. Leta Mach. Kevin Barnaba abstained (was no longer present by phone) from voting, all others (11) voted in favor at approximately 11:30 a.m.

Mr. Keenan adjourned the meeting at approximately 11:31 AM. (~3 hours and 5 min. into the audio recording)

Confirmation of Next meeting dates:

March 2, 2015 June 8, 2015 September 21, 2015 December 7, 2015