

**Air Quality Control Advisory Council Meeting Notes
September 9, 2013 @ 8:15 am
MDE Headquarters—Aqua Conference Room
1800 Washington Boulevard
Baltimore MD 21230**

AQCAC MEMBERS PRESENT

Sania Amr
Kevin Barnaba
Lorne Garrettson
Kip Keenan
John Kumm
John Quinn
Ross Salawitch
Lawrence Schoen
Sara Tomlinson
Ronald White

AQCAC MEMBERS ABSENT

Andrea Bankoski
Bill Cunningham
Sue Garonzik
Donald Moore
Vacant

VISITORS

Ed Much – Excelon Power
Ravi Laljani – AKRF
Shelly Leibowitz – Northrop Grumman Corp
Debra Raggio – TPM for Raven Power
Shrina Reauy – Pepco holdings
Dan Rider – DNR Forest Service
Jonathan Kays – UMC – Maryland Wood Energy Coalition

MDE-ARMA

Tad Aburn
Molly Berger
Mario Cora
Eddie DuRant
Matt Hafner
Karen Irons
Carolyn Jones
Justin Mabrey
Randy Mosier

Tim Shepherd
Husain Waheed
Kathy Wehnes

This is a summary of the September 9, 2013 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 Quinn and Tad Aburn opened the meeting with introductions of members and visitors. Mr. Bill Cunningham has resigned from the Council after 6 years of service, and the Department wishes to thank him for his service and extend good wishes.

PRESENTATION, DISCUSSION, AND ACTION ON REGULATIONS

Approval of Minutes from May 13, 2013 meeting:

John Kumm noted there was a spelling error on page 3 of the minutes. Within the first sentence under COMAR 26.09.01- RGGI Amendments the word 'pertaining' should be corrected.

Motion to approve the May 13th, 2013 minutes with the spelling correction was made by Ross Salawitch and seconded by Ron White. All members present voted in favor at approximately 8:40 am.

COMAR 26.11.19.08 Metal Parts and Products

Randy Mosier and Husain Waheed presented this action, which will adopt the EPA's Control Techniques Guidelines (CTG) for metal parts and products. MDE is proposing to adopt the new standards as prescribed by EPA. MDE is also adding application methods and work practice requirements.

Coatings are applied to many types of metal parts and products of which include farm machinery to automotive, to pleasure and recreational vehicles to bicycles and to medical and electronic equipment. The proposed list of standards for baked or air dried products by coating type was presented in a chart.

Several different types of application technology are used to apply liquid coatings, and the selection of the application technology can have a significant effect on the amount of coating used and the resulting VOC emissions from the operation. The CTG requires that coatings be applied by coating applicators such as: air atomized spray coating, electrostatic spray coating, high volume/low pressure (HVLP) spray coating, dip coating, flow coating, roll coating, electrocoating, and autophoretic coating. Powder coatings can be applied through electrostatic spraying or dipping. Application methods do not apply

for repair coatings, touch-up coatings, coatings applied to create a textured finish and the robotic application of heavy-duty engines.

MDE worked with stakeholders to evaluate the emissions from various application processes. In particular, MDE worked with the EPA to assist Volvo by developing a RACT equivalency determination in the proposed regulation. Volvo provided reports to the Department showing the proprietary process did reduce VOC emissions by 30% as compared to high volume low pressure (HVLP). Instead of HVLP, Volvo was able to reduce VOC rate when applying low velocity high pressure (LVHP).

Kip Keenan commented that his business may be affected by these regulations and that Northrop Grumman customers' have cosmetic concerns with the coatings that are applied to products. The proposed regulations may have an impact upon coating finishes. When the VOC content goes from 2.8 to 2.3 lbs/gal the final finish may have a "cracked" look. Many of the products that are produced can last for 30 – 40 or more years. Even if the function of the product is not affected by the cracked look, the customers feel the product is sub-standard.

Ross Salawitch asked, "What created the fine distinction in coating standards between a 2.3 versus 3.0 lb/gal, wouldn't one standard rate be easier for compliance and application?" MDE explained that EPA established the different rates based on stakeholder reports and the coating type without losing viability of the product.

MDE staff reported that this regulation is based upon EPA standards and Maryland is not more stringent, therefore MDE is putting into place what is required by the federal government. John Quinn noted that in the future it would be beneficial to see the EPA rates versus the Maryland proposed rates should there be a difference. Therefore, MDE is proposing this regulation as required by EPA, and with the same emission limits.

Motion to approve this action was made by John Kumm and seconded by Sania Amr. Kip Keenan abstained from a vote. Nine members voted in favor and no members voted against, while one member abstained at approximately 9:16 am.

COMAR 26.11.09 Biomass Fuel-Burning Equipment

Randy Mosier and Husain Waheed presented this action, which introduces a new regulation COMAR 26.11.09.12 for Biomass fuels. There are seven existing medium size wood boilers operating in the state with a permit. Legislation was introduced this year that mandated the Department to propose a regulation by October 2013. The Department worked with many stakeholders and held two public meetings to receive feedback which was incorporated into the proposed regulation.

Husain Waheed explained that EPA recently proposed the final new emission standards for hazardous air pollution (NESHAP) rule for boilers over 10 MMBtu. He further explained the MACT, BACT and GACT process. The federal MACT standards reflect

the average emission limitation achieved by the best performing 12 percent of the existing sources for a particular category.

MDE's existing regulation .04 contains an exemption process for small solid fuel-burning equipment. The proposed regulations remove the exemption process for biomass solid fuel and establish emission limits for NO_x and PM for those units, but leaves coal as a solid fuel to follow the exemption process for smaller units.

MDE staff explained that the definition of biomass copies the EPA format and shows that the fuel material is reviewed to determine if it is a solid waste or can be used as a solid fuel. Biomass fuel may be used in biomass fuel burning equipment, whereas fuels not meeting the EPA criteria may only be burned in an incinerator. Husain Waheed proceeded to explain the details of new regulation .12 and demonstrated where MDE standards are more stringent than the EPA rules. Maryland's proposed regulation goes further than the federal requirements in that it:

- establishes NO_x standards for all size categories of biomass boilers; and
- establishes PM standards for biomass boilers less than 10MMBtu/hr whereas federal requirements for smaller boilers are limited to optimization practices. New biomass fuel-burning equipment under 10 MMBtu/hr will be required to meet emission standards which will necessitate control technology, whereas federal requirements did not establish emission standards for biomass fuel-burning equipment under 10 MMBtu/hr.

Installing biomass fuel-burning equipment is a choice over conventional fuels, such as fuel oil. Exact quantification of air quality benefits depends on the type and number of units installed and cannot be quantified at this time. A farm or a school may choose a small biomass boiler for heating needs. The additional NO_x and PM standards established by the proposed regulation will help to ensure that new biomass boilers installed in the state will have a smaller impact on emissions of pollutants, thus reducing the state's burden in meeting federal ozone and fine particle standards.

Utilizing poultry litter as fuel can possibly remove ammonia emissions that contribute to fine particulate matter formation. The selection of a biomass boiler may also contribute to Maryland's goals of reducing greenhouse gas emissions. In addition, utilizing poultry biomass fuel-burning equipment may benefit water quality through better management of excess nutrients resulting in a reduction in the amount of phosphorus and nitrogen entering the Chesapeake Bay and its tributaries.

Ron White brought up a concern for arsenic levels and other hazardous air pollutants (HAPs) and whether the MACT analysis took these pollutants into consideration? MDE explained that EPA has established PM as a surrogate for HAPs, and that this is the standard EPA practice. Therefore, by limiting the PM emission rate through standards, EPA believes that HAP levels will be maintained below the acceptable threshold. Husain Waheed said that the data and summary of reports from each of the example sources and organizations that had worked with MDE was not included in this presentation. MDE did have a group of slides that provided the range of test result and range of associated costs summarized in a table for the stakeholder meeting in August. MDE will continue to

collect and review data from the poultry and manufacturing industry to further detail arsenic levels in Maryland and the ability of emission control equipment to reduce PM and HAPs. Other council members expressed concern over the arsenic in the feed of Maryland chickens versus the feed to Virginia or Delaware chickens. MDE explained that the PM emission limit set by Maryland will restrict emissions of HAPs including arsenic. MDE staff will further look into the issue of arsenic in chicken feed for the state. MDE also explained that the levels of CO and PM will be maintained through the tune-ups required to be performed every two years. Maintaining the performance of the unit as approved will serve to maintain the level of pollutants removed. The controls and optimization processes for CO and PM will also remove metals, as CO and PM are a surrogate for urban and metallic HAPs.

Ron White asked if opacity was addressed in the proposed regulations? MDE explained that opacity is addressed under existing regulation .05 of Chapter .09.

Ross Salawitch asked what fuels were used in the testing of boilers by EPA for the boiler MACT. MDE provided the answer that MACT test results include all fuel types, though more of the tested boilers were likely using traditional fuels. Ross Salawitch asked how practical would it be to conduct an arsenic analysis in Maryland? MDE stated they can possibly provide the data from the poultry pilot projects conducted in other states and will provide results if and when Maryland data is available.

MDE reviewed performance data from pilot biomass projects and existing biomass boilers in other states. MDE used this data to establish PM standards for small biomass boilers (less than 10 MMBtu) where EPA rules did not set PM emission standards. MDE also established NOx standards for all size biomass boilers. In setting these new standards, MDE conducted a best available control technology (BACT) analysis on the performance of existing biomass units in PA, VT, MA, CT, NJ and RI as well as the review of pilot biomass boilers. DE has applied other regulations for biomass fuel-burning equipment. VA has only a pilot project permit and pollutant levels that would trigger HAPs over the threshold would require a review and major source permit. No PM or NOx limit is specified in VA's regulations that are directly applicable through a fuel specific regulation. Maryland proposed regulations would be one of the most restrictive for this category.

Other council members expressed concern over the arsenic pollutant levels that might be found in poultry litter and perhaps other chemicals that might be found in treated lumber. MDE explained that EPA had an extensive discussion and rule making process to analyze nontraditional fuel components. The Non-Hazardous Secondary Materials (NHSM) rule details that some materials are considered fuel just by including them in a list (such as tree branches), while other nonhomogeneous items such as poultry litter, need to submit fuel source data to EPA for determination of the source material as a non-hazardous fuel rather than a solid waste product. This determination is noted in the definition of Biomass (1-1) under the COMAR 26.11.09.01 proposed amendments, stating the Department may approve a material by following EPA 40 CFR 241. This is the EPA's legitimacy criteria process. This requirement is part of an "and statement" therefore it is applicable to any

material the Department may choose to review on a case-by-case basis. If the source does not pass the EPA legitimacy criteria, it is considered waste and can not be burned under these regulations. MDE noted that any permit to burn poultry litter would be reviewed for fuel legitimacy. MDE commented that treated wood would also have to pass the legitimacy criteria to be allowed as an approved fuel source material.

Ravi Laljani asked “Would a facility that was operating under these regulations be subject to the MDE TAPS (toxic air pollutant) regulation?” MDE replied “No, the MDE toxics regulations would not apply as any proposed unit would be compliant with the EPA MACT standards, and the proposed regulation .12.”

Dan Rider and Jonathan Kays spoke on the benefits of wood biomass development to Maryland and the support of industry groups and surrounding states to utilize this available resource (products from forest sustainability, wood scraps etc) for renewable energy.

A recommendation was made as to whether it would be possible to move forward with just the proposal of a regulation that permitted the burning of wood in biomass boilers. After discussion, the group agreed that it would not be feasible to separate poultry litter biomass from the proposed regulation. Two items of concern remained at the end of the meeting that need be addressed: Arsenic levels in the poultry biomass and pollutant levels if treated wood is used in biomass.

Tad Aburn suggested a course of action as MDE has been mandated by legislation to propose a Biomass amendment. MDE will prepare a NPA and move the regulation through the administrative process understanding that the council still has reservations with the hazardous pollutant determination for arsenic and other items that may be present in poultry litter or treated wood biomass. MDE will gather information to be shared with the Council.

Motion to approve this action according to Tad Aburn direction was made by Ron White and seconded by Kip Keenan. All members present voted in favor at approximately 11:05 am.

COMAR 26.11.34 Low Emission Vehicle Program

Justin Mabrey presented this action, which purpose is to incorporate by reference the changes made to the California regulations since their last update. Maryland follows the California Clean Cars Program per its allowance in the CAA 1990 Amendments Section 177. The California Clean Car Program is also referred to as the California Low Emissions Vehicle Program – CAL LEV. As the CAL LEV program is updated, any state adopting to use this program standard must also reflect and adopt the California updates.

The proposed amendment affects all vehicle types that have a gross vehicle of 14,000 lbs. or less. Two items are updated to meet the California regulations. First there are non-substantive changes to the heavy duty on board diagnostics (HD_OBD) and OBD II standards. These changes will not impact the programs emission's benefits. The second update allows compliance with the National greenhouse gas (GHG) standards to satisfy the requirements of California's GHG standard. This means the National GHG standards would also satisfy the Maryland GHG standards. The program standards will be phased into place from 2017 to 2025.

The National GHG program was designed to minimize differences in programs and ultimately have all vehicles sold in the country emit fewer GHG emissions. Meeting the National program will help realize benefits for Maryland as vehicles travel through the state and enter the fleet through used car sales and resident relocations.

Sara Tomlinson asked if the CA standards would be reduced again soon. Tim Shepherd stated he could not confirm any additional reductions at this time, but the standards are constantly being reviewed.

Motion to approve this action was made by John Kumm and seconded by Ron White. Some members of the council had left the meeting. The remaining 6 members voted in favor of the proposal regulation. All members present voted in favor at approximately 11:20am.

Because of the time, and not enough council members able to stay and continue the meeting, the proposal for Gasoline and VOC Storage and Handling, COMAR 26.11.13, was postponed until next meeting.

Confirmation of Next meeting dates:

The Council's next meeting dates were confirmed for:

December 9, 2013

Meeting dates were to be developed for the year 2014 and submitted to the Council.

The meeting adjourned at 11:24 a.m.