

## **The USDA Agricultural Air Quality Task Force (AAQTF)**

### **AAQTF Meeting Notes – Beltsville, MD (Log Lodge) – Wednesday, December 4, 2013 AM**

*(Note: Q=Question; R=Response; C=Comment)*

The meeting was called to order by **Dr. Greg Johnson, AAQTF Designated Federal Official (DFO), at 8:15 am ET.**

Dr. Johnson opened the meeting with a welcome and logistics information.

**NRCS Chief Jason Weller** then provided opening remarks and thanked the AAQTF members for their participation and time.

**USDA Deputy Under Secretary Ann Mills** also provided a welcome to the group and stressed the importance of the AAQTF's work to USDA and the Secretary.

**Dr. Steve Shafer, Director of the ARS Beltsville Agricultural Research Center (BARC),** welcomed the group to BARC and provided an overview of BARC and ARS.

**EPA Agricultural Counselor Sarah Bittleman** - provided an EPA perspective and overview. The Renewable Fuels Standard (RFS), climate, animal issues were mentioned. Allison Davis will provide the EPA update later today. EPA is trying to engage the agricultural community in air quality and climate change issues.

RFS – public hearing tomorrow morning in Crystal City, VA. EPA welcomes input into the RFS and now is the time to do it.

Climate Action Plan – setting carbon standards for new power plants. EPA conducted listening sessions in all 10 EPA regions and in Washington DC. Proposing emission guidelines for new power plants no later than 6/1/14. Also looking to reduce methane emissions – mainly from oil and gas, but also from livestock.

Animal feeding operations – methane, NAEMS. Overview of NAEMS status.

Encourages creative thinking from group and welcomes input.

Comment (C) – Bill Angstadt – Political consensus evolving that agriculture needs to reduce air emissions. Need to learn lessons from water quality approach (i.e., top-down approach) to do things better than we have in water quality. Encourages EPA and USDA to use the AAQTF to help better shape the approach because of their expertise.

Response (R) – Bittleman – Agrees. Office of Water has also engaged a separate informal livestock working group. Needs to also have bottom-up participation. There needs to be a “safe place” to have frank and candid conversations without causing additional issues.

C – Bob Avant – Lots of work in the areas Bittleman mentioned and lots of expertise. Offers AAQTF as a resource for EPA. Invited and encouraged Bittleman to continue to attend AAQTF meetings.

Question (Q) – Brock Faulkner – Can EPA provide clarity on timeline on NAEMS?

R – Bittleman – Will leave details to other EPA folks. Engaged in scientific approach, so sometimes it just takes longer to get it right.

C – Brock Faulkner – Would be helpful to have more clarity on what EPA's interaction with the scientific community will be on NAEMS, especially with the SAB panel.

C – Rick McVaigh – Previous AAQTF enjoyed having Janet McCabe's participation, and look forward to working with Janet or someone else.

R – Bittleman – Since Janet isn't here, Bittleman can offer her up for help.

C – Bill Norman – Still interested in a joint meeting with EPA FRRCC to help with overlapping issues.

R – Bittleman – Great suggestion. Will try to coordinate such a meeting.

**R – Chief Weller –Fully supports a joint meeting with EPA FRRCC.**

C – Sally Shaver – Make sure Air Office (and maybe the AAQTF) are involved in the Water office livestock working group. Both groups need to converse with each other.

R – Bittleman – Gina McCarthy is set on breaking down communication silos within EPA.

C – Bill Angstadt – Need right science and on-the-ground people involved in building blocks from the beginning. Need to have less lawyers and lobbyists involved.

C – Kevin Abernathy – Thought USDA was going to start using “climate variability” instead of “climate change”. Points out difference in terminology and starting points.

R – Bittleman – Agrees that climate variability is a good term, but EPA has made a call to not hide from the difficult conversations, so they will still talk about climate change. Recognizes that farmers and ranchers are the first line of battle against climate change.

9:10 am **Introductions of Task Force Members**

9:35 am **Chief Weller sums up the introductions and asks USDA employees to introduce themselves**

**Break**

**Chief Weller welcomed the group back from the break at 9:55.**

**Dr. Johnson led a brief review of Federal Advisory Committee Act (FACA) rules.**

C – Bob Avant – Last time, there was a lot of discussion of whether the members are representatives vs. special government employees. Good thing members are currently considered representatives.

R – Johnson – OGC has not made an official call on this, but for now, all members except for ARS employees are considered representatives.

Q – Michael Abazinge – Are there term limits?

R – Johnson – term goes through April 2015, but you can reapply.

Chief Weller began the discussion of AAQTF purpose, function, and focus for the coming two years. What does the AAQTF want to get out of the next two years? What are the scientific and technical challenges that American agriculture faces in relation to air quality? What are the emerging regulatory trends/challenges? How can/has agriculture focus(ed) good investment in air quality conservation (Identify top-notch test cases of how agriculture has helped with nonattainment issues and rural air quality issues)? Where can focused agricultural action impact air quality and address regulatory issues (where are they and what actions can help?)? Chief Weller would like to know what are the emerging issues of the next six months? He would like to showcase successes.

C – Bob Avant – Lots of previous discussion on cross-media approach. Can't work in a vacuum on air issues if there are created water or soil issues. Also need to look at food security, bringing food and protein to the needs of a growing population. These all go into the fourth item the Chief mentioned. Also need to look at the carbon impacts. An example was presented, rice production in Texas is being shut down because the producers are not allowed to pull water out of the Colorado River.

R – Chief – Agree. Efforts to address soil erosion can impact or exacerbate water infiltration. Resources are all interconnected within the ecosystem, this can be a challenge.

Dr. Johnson walked the Task Force through the previously-circulated topics that could potentially be addressed by the AAQTF this term. Also mentioned the upcoming presentations from the previous AAQTF subcommittee chairs.

Reactive N – Sally Shaver will discuss more.

Fire/smoke policy – EPA will discuss more. Lots of history on this one.

GHGs and biofuels – Bob Avant and EPA will discuss more. Relatively new issue for the group.

NAEMS – Four members of SAB panel are on AAQTF, so should be lots of good discussion on an issue the AAQTF has previously been quite involved in.

NAAQS – On-going issue. EPA will discuss more on PM and Ozone, and Brock Faulkner and Bob Vanderpool will co-present on PM monitoring issues.

SIP creditability – presentation later today about this issue and how agriculture can help with the regulatory process.

C – Kevin Abernathy – Concern about spin from external groups on air quality success stories. In some cases, groups don't care about science, they want to work off of emotions. AAQTF needs to provide talking points for all on how to convey those successes.

R – Chief – Agree. Need talking points not just for the Secretary.

Q – Bob Avant – How does AAQTF stand on budget issues - with regard to Sequester and USDA's budget? These meetings are important to consolidate thought. How about staff support?

R – Chief – NRCS has committed to support the AAQTF. Budget constraints might not allow us to meet as much as we'd like, but NRCS has budgeted for this. Count on 2/year, hopefully more.

C – Sally Shaver – Need to think about what can be done and what can't be done, especially in relation to production and food security. There seems to be a disconnect between what the regulatory community thinks agriculture can do and how they operate. There are also social and economic implications that need to be considered.

R – Chief – One of the hallmarks of agriculture is innovation and adaptation. There are always going to be emissions of some sort. Need to figure out how to have scientific, non-emotional discussions with regulators. Also need to drive a cross-media approach.

### **AAQTF History and Recent Work**

#### **Sally Shaver presentation – Emissions Quantification, Mitigation, and Validation Subcommittee**

Emissions estimating methodologies (EEMs) – publication of previous AAQTF white papers, tracking of NAEMS and EPA's development of EEMs, information briefings. What is AAQTF's role in EEMs development?

Integrated N report – developed comments for transmission to EPA; approved by AAQTF for submittal, but not yet submitted. Are comments still valid for transmittal?

Other issues:

NAAQS – continue focus on these? Ozone under review now – likely lots of issues for agriculture here. NOx standard is also under review – may also connect back to the Integrated N study.

Q – Bob Avant – Implications of the secondary standard are that it is more economic than health impacts?

R – Sally Shaver – Secondary standards protect environment, rather than health, but don't take economics into consideration.

R – Bob Avant – Can still have greater economic impacts than primary standard because of alternative stringency.

C – Bill Norman – Secondary ozone standard has been a big issue. Looked at implications of alternative secondary standards on agriculture.

R – Sally Shaver – Data on secondary standard is based on studies in the 1980s, so is it still relevant for setting a current ozone standard?

### **Biomass accounting for CO2**

Exceptional events – EPA posted guidance in May

RICE and boiler rules – compliance date on RICE has already passed, so farmers need to be in compliance. EPA is developing guidance and outreach to farmers on both rules.

Q – Bob Avant – Would tractors fall under the RICE rule?

R – Sally Shaver – No, the RICE rule only applies to stationary engines.

Regulation of GHGs for smaller sources – Tailoring rule exempts smaller sources for a time period, but not forever.

Diesel exhaust – EPA funded study to review health effects and petition to regulate as a toxic pollutant

Q – Bob Avant – Is this related to the black smoke issue, or is it separate?

R – Sally Shaver – think it is separate, but not sure. Maybe EPA will have more info this afternoon.

Sustainability – new emphasis on sustainability in EPA strategic plans for 2014-18. EPA and USDA engaged in external groups on voluntary standards related to the supply chain

C – Bob Avant – Bill Norman has given updates on Field-to-Market in the past, and it's probably a good time for another update on Field-to-Market. Even though standards are voluntary, farmers may not be able to sell their grain to larger consumers/companies if they don't meet them.

Validation of BMPs for regulatory purposes – how and who?

Modeling of ag emissions and BMPs

Estimation of emissions from ag sources – how much and who is defining?

Bob Avant presentation – Climate Variability and Bioenergy Subcommittee

Comments on GHG documents and EPA SAB Biogenic Carbon Emissions panel

C – Bryan Shaw – Concerned about expiration of the GHG Tailoring Rule. Could really bring in many sources under GHG permitting and also cause those sources to become PSD major sources for all

pollutants. For renewable energy, also need to look at unintended consequences for changing from feed to fuel or fiber to fuel.

C – Bill Norman – Concerned about removal of exemption for biogenic CO<sub>2</sub>. Puts renewable energy/biofuel production/bioenergy production in a unique and difficult position.

#### **Cynthia Cory presentation – Emerging Issues Subcommittee**

Reviewed current approach to air quality planning for ozone and PM standards and introduced health based risk assessment approach. Put effort/money toward the emissions that have the greatest impact on improving air quality.

#### **D’Ann Williams continued Emerging Issues presentation**

Discussed health impacts of health-based approach and of agriculture. Definite need for more health impact data from agriculture.

C – Chief – USDA will never have enough money to fund all of the research and people necessary. Need to figure out how to prioritize.

C – Kevin Abernathy – Agrees we need to look at health risks, but also need to use common sense in our approach to conservation. Example of planning in CA.

C – Bryan Shaw – Need some committee to react to issues that come up quickly, especially new regulations.

R – D’Ann Williams – Not saying we need to tackle public health, but we do need to inform/request other groups to look at that.

C – Lisa Greene – Previous discussion about establishing an interagency work group to look at rural monitoring.

R – D’Ann Williams – Doesn’t sound like any progress has been made.

Q – Nichole Embertson – Is there another group that already deals with health effects that the AAQTF could work with?

R – Sally Shaver – EPA does have a separate advisory group to look at health impacts.

C – Chris Petersen – On Emerging Issues subcommittee and recommends we look closer at conducting more monitoring.

C – Chief – Married to epidemiologist, so thinks there is merit to at least pursuing work with EPA groups looking at health impacts. Health benefits are an additional benefit that may be good to explore.

C – Lingjuan Wang – Also need to look at fate and transport and how those impact health.

C – Kerry Drake – Also raise the health impact issue with Allison Davis from EPA this afternoon. She may be able to serve as a nexus between these issues.

### **Brock Faulkner presentation – Air Quality Standards Subcommittee**

#### Topics

PM – sampling and NAAQS for PM10-2.5

Exceptional Events Policy

Use of modeling for determining NAAQS compliance

Comprehensive fire and smoke policy

Continuing Issues:

PM Sampling

Characterization of agricultural PM

PM mitigation

Fire/smoke policy

NAEMS study

Application of emissions protocols from NAEMS study

Ammonia/reactive N – recommends NRCS re-add ammonia as a separate air quality resource concern

Credit for agricultural emissions reductions

Greenhouse gases

C – Sally Shaver – Recent court decision on implementation of PM2.5 standard means EPA may have to regulate ammonia as a precursor to PM2.5. Need to look at the implications of this, including definitions for permitting agricultural sources. Impact of Clean Water Act implementation on Clean Air Act implementation for ammonia.

Q – Bill Angstadt – What is the “farm” definition issue?

R – Sally Shaver – Definition under Clean Water Act is different, but definition under Clean Air Act isn’t defined. Has been resolved for industrial sources, but do those definitions make sense for farms.

R – Bill Angstadt – What about rented ground? MD is about 70% rented acreage.

Q – Bill Angstadt – If NRCS makes ammonia a separate resource concern, what does that mean? Will it become a priority for the agency? What will need to be done differently?

R – Brock Faulkner – It helps to prioritize efforts in areas where ammonia has been shown to be an issue, especially on the deposition side.

R – Greg Johnson – Went from 12 AQ resource concerns to 4 AQ resource concerns recently. Debating adding ammonia back in.

R – Bill Angstadt – Good template with GHG CIGs. Maybe have that same kind of dedication and focus may be beneficial for ammonia.

Break for lunch at 12:10 pm ET.

Resume at 1:10 pm ET.

### **Marlen Eve – USDA GHG and Climate Change Update**

Overview of USDA Climate Change Program Office

Adaptation Plan

Climate Hub update – site selection announcement forthcoming

Science-Based Methods and Tech Guidelines for Quantifying GHG Sources and Sinks in the Forest and Ag Sectors

Q – Kevin Abernathy – Comments submitted to AAQTF from CA, but don't seem to have been incorporated yet. How will this document/methodology set mesh with more mature programs, like those in CA? What about the Climate Hubs and how they are to interact with local groups?

R – Marlen Eve – Hubs are intended to look on a local/regional scale and provide guidance, research, and extension on that local/regional scale. Intended as a networking agent to try to bring actions locally.

R – Kevin Abernathy – Needs to be a direct tie-in with agricultural representatives, not just state departments of agriculture.

R – Marlen Eve – A lot of that will be determined by the leadership of the local Hub.

Q – Bob Avant – Is there really no funding for the funds?

R – Marlen Eve – I believe you are correct. There are conversations about possibly having limited resources available after FY14.

Q – Bob Avant – Does the quantification fit in with certification activities?

R – Marlen Eve – Not right now. Haven't looked into how they might fit. This document is intended to serve as a scientific basis for quantification that can be used by others in tool development.

Q – Bob Avant – Why were croplands and grazing lands combined?

R – Marlen Eve – Went around and around on this. Lots of comments about how grazing lands didn't receive the same level of detail/rigor as the croplands. Mainly looking at soil processes.

Q – Bob Avant – How are USDA and EPA working out on GHG issues?

R – Marlen Eve – Had 4 EPA folks involved in scientific review. Bill Hohenstein would need to answer about the higher-level view.

R – Chief Weller – No funds associated with hubs. Can still help agencies focus efforts. EPA-USDA engagement – good scientific/technical interaction. Can also use Robert Bonnie on policy level.

C – Cynthia Cory – Glad to see there will be a "back-end" to the GHG quantification tool to complement the COMET front end. Will ask Chief to find out where the Hub will be in CA.

R – Chief Weller – 7 Hubs, don't focus on physical location, but on collaboration and collaborating entities.

C – Sally Shaver – Couple of concerns about estimating methodologies and general statements. Seemed to overestimate impacts of agriculture on total GHG inventory. Document reads more like an emission factor document instead of a voluntary conservation document and could be used for regulation instead of its intended purpose. Maybe add language about its use for regulation.

R – Marlen Eve – Not intended to drive any regulation. It will be there and available, though.

Chief Weller – SIP creditability is a good example of regulatory credit. Regulatory certainty is becoming an important issue. Sustainability is also an important aspect. Provide food security with ecosystem services/benefits. Market is moving toward sustainability certification in face of lack of approved method. NRCS does intend to focus on soil, water, and air resources and provide a sustainability certification with regulatory certainty.

### **Rick McVaigh – SIP Creditability presentation**

2008 SIP submittal by CA for 1997 8-hour ozone included 5-10 tons/day reduction in NOx

Voluntary incentive programs have been very effective

Q – Bob Avant – Has there been a public attitude shift in relation to the creditability of voluntary reductions?

R – Rick McVaigh – Still getting folks wanting command and control instead, but he doesn't understand the argument, although he understands the value of command and control. For enforcement, they won't take credit for reductions that are unenforceable.

C – Bill Norman – This is a perfect example of thinking outside of the box in the regulatory arena. There are different issues that require different tools. The overall goal is the end results – lower emissions.

R – Rick McVaigh – Command and control have achieved certain reductions. There are downsides in some cases. Can't pass down the cost in agriculture.

R – Chief – Really proud of our partnership with the SJVAPCD. Would love for this to be a model for other areas in the country.

Break at 2:35 pm ET.

Resume at 2:45 pm ET.

Reviewed logistics for the evening.

### **Alison Davis – EPA update presentation**

Many topics – see presentation

Q – Bryan Shaw – Is EPA considering policy or guidance on emissions from prescribed fire?

R – Alison Davis – Considering it, but no decision yet.

R – Bryan Shaw – Also need to consider safety effects to be sure that changes for emissions don't cause danger for the fire applicators.

C – Bryan Shaw – NAEMS – Be cautious in interpreting the raw data and how to apply the data beyond the farms on which they were collected.

R – Alison Davis – Will take that back to Robin.

C – Rick McVaigh – SJVAPCD is pleased with language in recent ozone proposals advocating regulatory flexibility (i.e., health-based risk approach).

C – April Leytem – Very concerned about counting biogenic CO<sub>2</sub> as regular CO<sub>2</sub> for permitting purposes.

R – Alison Davis – Can't answer that one – it's for Robin.

Q – Bob Avant – In biomass deferral rule, does that apply to any specific crop?

R – Kerry Drake – Applies to PSD major sources for GHGs.

C – Bob Avant – Concerned about carbon standards on power plants and the impacts on agricultural energy use and prices.

R – Alison Davis – For existing plants, the impact won't be as great. The rule is also only in proposal right now.

R – Bryan Shaw – The NSPS for new coal-fired plants would be based on carbon capture and storage, and based on the language in the rule and preamble, EPA doesn't expect that any new coal-fired plants will be built.

Q – Sally Shaver – Will the secondary ozone NAAQS be on a different timeline than the primary ozone NAAQS?

R – Alison Davis – No.

Q – Cynthia Cory – What was the deal with the date on the ozone workshop (August?)?

R – Alison Davis – That date is for a PM NAAQS kickoff in 2014, not ozone NAAQS. There were listening sessions on Exceptional Events in August 2013.

Q – Sally Shaver – Was that a public meeting?

Q – Cynthia Cory – What was the outcome from that meeting?

R – Alison Davis and Kerry Drake – Don't know.

#### **Bob Vanderpool and Brock Faulkner – PM Sampler - see presentations**

C – Lingjuan Wang – Offered suggestions for ways to double-check samplers for larger particles.

R – Bob Vanderpool – Data suggest that the sampler performance is the same in all cases in the wind tunnel.

C – Bob Avant – Need to use a specific solution in the Coulter Counter. Assuming that we're not using a non-aqueous solution.

R – Brock Faulkner – Yes, it's lithium chloride, so it's not supposed to cause particle changes.

Q – Bob Avant – Is there some other methodology for determining particle size and whether there is penetration?

R – Brock Faulkner – The question is does that really matter if a particle penetrates.

R – Bob Vanderpool – The portrayal of "ideal" sampler doesn't meet the definition of EPA's PM10 measurement sampler. Haven't seen anything that would change the design of the FRM.

Q – D'Ann Williams – Can you use other filter media to get a better idea of what's happening?

R – Bob Vanderpool – Yes, you can use any filter media as long as you can prove that it is following the FRM values.

C – Bill Norman – Have the right people doing this work now after a long time of looking at this issue. Bob mentioned 3 problems in his presentation, one of which was related to showing a particle size distribution using a Coulter Counter.

R – Bob Vanderpool – The Coulter Counter isn't really the issue with the PM10 studies that are going on now. The analytical techniques being used now are appropriate ones.

Q – Bill Norman – Brock's slides are still showing some oversampling. Is that correct?

R – Brock Faulkner – Yes. The oversampling is not to the degree that Buser reported, but there is oversampling. Dr. Vanderpool doesn't agree that there is any oversampling.

C – Bryan Shaw – Offered suggestions for further research.

R – Bob Vanderpool – In looking at historical studies, saw some disagreement. Now have new techniques for re-checking those historical studies.

Q – D'Ann Williams – Has the low-volume TSP sampler been tested in an urban environment, maybe collocated with a PM10 sampler?

R – Bob Vanderpool – No. You would also have to then take a sample and somehow split it up to see how they differed.

Q – Bob Avant – In Phoenix, is there any difference at all in the data between days when you have normal conditions and when you have a dust storm?

R – Bob Vanderpool – That would take a specific size speciation study, but it hasn't been done.

C – Sally Shaver – Maybe it's time to move beyond a mass-based standard and look at composition instead.

**Dr. Wayne Honeycutt adjourned the meeting at 5:06 pm ET**

**AAQTF, Beltsville MD (Log Lodge), Day Two**

**Thursday, December 5, 2013**

**Dr. Wayne Honeycutt began the meeting at 8:00 am ET**

Greg Johnson, DFO, opened with logistics and provided information on travel regulations and reimbursements.

**Nichole Embertson presentation – Yakima Dairy Air Quality Issue Overview**

Yakima Regional Clean Air Agency developed Air Quality Management Plan policy for dairies in July 2010

Pilot project approved in February 2011 to gather information and develop and implement the plans

Score sheet to provide observational assessment

Precedent setting process for developing air quality plans

C – D’Ann Williams – Study she did was just an exposure assessment, not a health effects study.

Q – Annette Sharp – It sounds like this was a complaint-based issue, which sets the stage for lawsuits. Did you train the inspectors at the air agency? Who will continue to train the inspectors? How many inspections have been made. Is there a fee associated with the program?

R – Nichole Embertson – Yes. Nichole did the initial trainings. A well-trained agency person will likely do future trainings. 12 dairies participated and each were inspected twice so far. There is a fee.

Q – Kevin Rogers – Why was this program started? Has there been any scientific-based exceedances or other air quality issues that helped drive this? Is this a mandatory policy?

R – Nichole Embertson – It was complaint-based. The Yakima Clean Air Agency received a handful of complaints and focused on dairies, but may expand it to more agricultural operations. The agency recently made this policy mandatory for all dairies in the Yakima area.

R – Nichole Embertson – Willing to give training to AAQTF members on the tool and BMPs. C – Kevin Rogers – Concerned about this being a complaint-driven issue and also about inspectors making a subjective decision.

C – Kevin Abernathy – This process is likely to be fought out in the courtroom. There is a group of individuals who want manure designated as a hazardous waste under RCRA. This lawsuit has also spread to California and could set a major precedent. Plaintiffs lambasted NRCS practice standards and their integrity for water quality.

Q – D’Ann Williams – Kevin is correct. The plaintiffs have successfully sued under the Clean Water Act, and the next step is under the Clean Air Act. Has Nichole compared the BMPs in this program with monitoring data?

R – Nichole Embertson – No actual testing done – BMPs researched in literature instead. Nichole is the calibrator for the inspectors right now. Want the inspection and validation done consistently across facilities.

Q – D’Ann Williams – Likes cross-media approach by combining nutrient management with air issues. Does a complaint start an inspection process?

R – Nichole Embertson – Not completely sure, but believes that an inspector does have to investigate each complaint.

C – D’Ann Williams – Monitors in the area are actually upwind of the dairies.

C – Chris Petersen – Complaint-driven issues are part of the process and the only way things get done sometimes. Concerned about only having one or two inspectors. Needs to be more fairness.

C – Kevin Abernathy – Contrast this with the successful voluntary tractor replacement program. This issue could be devastating for the dairy industry.

C – Nichole Embertson – Kevin is referencing a groundwater issue.

C – April Leytem – Be careful about developing tools. EPA has made arbitrary decisions about dropping tools that have been used for many years in the past, so who is to say that they won't do that again.

Wayne – Would the AAQTF like to respond to the letter received about the Yakima issue?

C – Bob Avant – Suggest we just take the letter for information only.

General agreement about taking the letter for information only.

End of discussion

### **Strategies and Goals Session**

Brainstorming of topical areas for the AAQTF between now and end of Charter in April 2015:

Fire/smoke, Exceptional Events Rule

Reactive Nitrogen

Biogenic GHG issues

Scientific basis for 2ndary ozone standard

Dust issues related to production agriculture

Fate and transport of pollutants (NH<sub>3</sub>, PM)

Odors and PM, specifically quantification or validation, monitoring and assessment; how to define and characterize

Bio-aerosol and pathogen transport from manure application (pivots or high-pressure irrigation systems)

Measurement methods, sampling, and implementation of sampling data – one-size-fits-all is not a good approach

Direct funds into percent control/effectiveness of current mitigation practices/measures.

Quantify on-farm effectiveness of management practices

Voluntary measures – what is latest and greatest? How to direct funds to focus conservation?

Standardizing techniques for measurement and expression of units of emissions

Hydrogen sulfide – property line standards

NAEMS data and how EPA will use it

Better guidance for AQ BMP selection and NRCS conservation practices

Cross-media issues

Sustainability

Verification and crediting of BMPs

Reactive N is important, but mainly ammonia

Compile success stories, identify positive past outcomes

Air quality issues associated with agricultural byproducts, including non-manure byproducts; seafood industry

Formation of secondary aerosol from ammonia

Research, working with ARS and NIFA to identify priority AQ areas

US food and fiber production impact statement of regulations – related to quality and quantity and sustainability

Guidance/suggestions for EQIP related to AQ

Industry-driven sustainability initiatives

Need list of new EPA regulations (100 new regs?)

Research – monitoring, assessment

NAAQS, ongoing changes and implications for agriculture

Climate hubs – AAQTF should be the FACA related to the hubs

Cost analyses for complying with regulations

## **Break**

## **Public Input Forum – No public input Return to Strategies and Goals (captured on-screen)**

Pete Lahm – USFS report

Overview of AQ in FS

Loss of 21 MM acres of forest and 4.4 MM acres of rangeland by 2060

Fire impacts in CA and LA

Q – Kevin Abernathy – How much have the limitations of prescribed fire and policy limited the ability to fight wildfire?

R – Pete Lahm – Air quality poses some challenges to prescribed fire, but many areas understand the need for prescribed fire. Also budgetary challenges.

Q – April Leytem – So, prescribed fire is more of an issue of funding than other concerns? Have analyses been done looking at cost effectiveness of prescribed fire?

R – Pete Lahm – Yes on both. Areas have different cost effectiveness of fire due to return interval and other factors.

Q – Sally Shaver – On fire councils, are the air quality regulatory agencies participating?

R – Pete Lahm – Not in all.

### **Greg Holt – Agricultural Research Service (ARS) report**

Climate Change, Soils, and Emissions research study area

35 projects in 29 locations with 98 scientists

4 main focus areas

Cotton Gin sampling project overview

C – Rick McVaigh and Bill Norman – The cotton gin sampling project was a great success story.

C – Bill Norman – In spite of significant involvement of EPA, EPA still has issues with the sampling protocol and equipment. PM sampler issue is still an issue.

C – April Leytem – There are important groups within ARS (GRACEnet, Livestock GRACEnet) that can be tapped into for air quality.

**Break for lunch at 12:09 pm ET**

**Reconvene at 12:45 pm ET**

### **Ray Knighton – National Institute of Food and Agriculture (NIFA) report**

History of CSREES/NIFA AQ efforts

Overview of 2008 Farm Bill changes to CSREES/NIFA

### **Greg Zwicke and Mark Rose – Natural Resources Conservation Service (NRCS) report**

## **Subcommittee breakouts**

### **Subcommittee reports**

#### AQ Standards

Chair – Brock Faulkner

Identified issues around ammonia as a precursor to PM2.5 – Rick McVaigh leading

Actions:

- Reactive N comments on Integrated N committee report – finalize and move the previous letter forward to EPA – approved
- Continue research activities associated with PM sampler issue – prepare and forward letter to EPA in support of continued activity - approved

### **Emissions Measurement and Mitigation**

Co-chairs – Eileen Wheeler and April Leytem

Continue emphasis on NAEMS

Focus on ammonia emissions

Atmospheric fate

History/review/gaps

Opportunities for mitigation via NRCS

Possible white paper on history/gaps

Actions:

- Speaker at next AAQTF meeting – atmospheric scientist to give understandable information on ammonia fate and implications for PM2.5
  - Look at LADCO report authors as speaker
- Funding for research gaps on ammonia
  - Suggest placeholder for an ammonia CIG effort for Regional Conservation Partnership – hopefully for FY14
    - Look also at geographic differences

### **Climate Variability Impacts**

Co-chairs – Bob Avant and Cynthia Cory

Set up conference call to engage on Climate Hubs

Ray to pursue an invitation for the subcommittee to attend the CAP meeting during the first full week in January.

Biogenic GHG emissions and the status of EPA's decisions for regulating biogenic GHGs

Engage w/EPA (Sarah Bittleman)

Revisit smoke/fire policy of USDA

Actions:

- Make AAQTF paperless – no more binders
- Set up AAQTF Dropbox? Or other cloud system for document management system

Chief to follow up with Sarah Bittleman to learn about status of biogenic GHG exemption and regulation. See if AAQTF can help work on biogenic GHG issue - approved

Cynthia Cory – AQI is political football in Farm Bill right now, so need support from USDA for AQI. AAQTF supports AQI. – See handout for language

Bill Angstadt – motion to schedule joint meeting of AAQTF and FRRCC – Have Secretary work with EPA Administrator

Bill Angstadt – content/contact list sent out to group

Bill Angstadt – overview of CEAP presentation this morning.

Huge sediment load reduction from voluntary conservation in the past 5 years

Greg Johnson – thanked Bill Angstadt and his son-in-law for the tour last night.

Greg Johnson – discussion of travel changes

Wayne Honeycutt – Greg Johnson to be contact with EPA to transmit follow-up items from EPA update

Subcommittees address Chief's 4 charges to AAQTF

Dr. Honeycutt will work with Chief and OSEC to get more explicit follow-up on what happens to AAQTF recommendations and a better understanding of that process

Kevin Abernathy – relate to AAQTF the process of AAQTF recommendations to the Secretary

R – Dr. Honeycutt– Informational Memos are much better received and easier than Decision Memos

Kevin Abernathy – having someone like Janet McCabe at the meetings from EPA was very beneficial. Can we ensure that there is the same coverage in this iteration of the AAQTF?

R – Dr. Honeycutt – will communicate that to EPA. Can also send recommendation from the AAQTF.

Bill Angstadt – If we meet with FRRCC, EPA will have to be there. Maybe have Secretary suggest to EPA Administrator to have FRRCC focus on air issues this term.

Kevin Abernathy and Bob Avant – Don't want to hold AAQTF meeting hostage to FRRCC schedule.

Bob Avant – recommend next meeting in Maui in May or Boise in late April or May. Idaho meeting could focus on fire/smoke issues, dairy operations along Snake River, close to Yakima. AAQTF approved next meeting April 29 – May 1 in Boise.

Bob Avant – meeting after Idaho can be in College Station, TX in late August, with tours. So moved. AAQTF will meet August 19-21 in College Station on campus at Texas A&M.

D'Ann Williams – will Yakima group receive a response to their letter?

R – Dr. Honeycutt – AAQTF did not elect to make any additional communications.

Eileen Wheeler – Concerned about having meetings so close together.

R – Dr. Honeycutt – Maybe able to schedule better, but like to get 2 meetings still this FY

Bill Angstadt – Dates are important to the location, as well, so get dates set as soon as possible.

R – Dr. Honeycutt – will work with Chief's schedule

Sally Shaver – Why go to Idaho first?

R – Bob Avant – can't see bioenergy crops if earlier meeting in TX. Better in late summer and early fall.

**Meeting adjourned at 4:22 pm ET**