USDA Agricultural Air Quality Task Force Meeting Minutes
Phoenix, Arizona
February 7-8, 2012

Day 1 – 2/7/2012 - Start at 8:05

The Phoenix meeting of the USDA Agricultural Air Quality Task Force (AAQTF) was convened by the AAQTF Designated Federal Official (DFO) from NRCS Elvis Graves. Mr. Graves started the meeting with some housekeeping items (lunch, internet)

Introduction

Mr. Graves then introduced the chairman of the AAQTF, NRCS Chief Dave White. Chief White then proceeded with:

- Welcome
- Introductions
- Thank you to Kevin Rogers and the AZ Farm Bureau. Chief White expressed appreciation for the wonderful tour. Extended a special thank you to Keisha Tatum and the AZ NRCS staff.
- Overview of the Agenda – Chief summarized the agenda.

Welcome from the State of Arizona: Henry Darwin – Director, AZ Department of Environmental Quality

- 100 years of statehood being celebrated next week. The five C's – Task Force addressing 4 out of 5 – Copper, Cattle, Cotton, Citrus, Climate
- Climate is what draws people and tourism to AZ
- Maricopa Co. is serious nonattainment for PM10, dust is on everyone's mind and everyone does their part.
- Pinal Co. is Nonattainment for PM2.5 and for PM10
- In order to solve this everyone needs to contribute to the solution
- Ag has acknowledged they have some contribution to the problem and have stepped up to the plate and helped solve the problem
- Maricopa Co has developed a BMP list
- 5% Plan – obligation of the state on how to achieve an air quality standard by reducing PM by 5% every year.
    - EPA did not think it was enforceable or trackable as it needed to be for the BMPs implemented
- Arizona continues to have extraordinary dust storms
- The EER – one of my biggest frustrations, and thinks EPA shares the frustration. It is of monumental importance that this be resolved because it overwhelms all best mgmt. practices.
- Large power plant (Navajo Generating Station) – 95% of energy is spent to move water. Very important to our agricultural community – "The Central AZ Project" brings Colorado River water to central Arizona. Issues with this plant and Regional Haze. This shows how another air quality requirement can impact other things like water and energy.
- Not all is doom and gloom, Biofuels are a shining spot – economic opportunity, renewable energy source and the agricultural communities' focus on this window of opportunity

<u>Question and Answer Period</u>

- Manuel Cunha – biofuels – and how ag can benefit but also it has been detrimental (i.e. corn ethanol)

Response: biomass from forests, algae, sees benefit, and so should not limit to just growing biofuels, agree need to look at all aspects

- Sally Shaver – do you have tools to balance tradeoffs of water, air, power?
  Response: We should be reviewing our energy policy as it relates to environmental protection and environmental control. We are asking coal power producers to spend lots of money on controls and at the same time telling them that we should be investing in alternative energy & renewable fuels. We need to talk about both – cleaning up current methods and requiring new technologies.

Keisha Tatum– NRCS State Conservationist

Introduction to AZ from the NRCS perspective – resource management practices due to ranchers often ranching lands that are not necessarily privately owned. CCPI project in the borderlands initiatives. NRCS-AZ is starting to work with BIA next week. Briefly discussed July 5, 2011 dust storm. Non-attainment areas, then a Class 1 airshed. Eight natural resource concerns relating to AQ in AZ. Air quality and energy management are high priorities, two million dollars were spent for AQ initiative this year, $8.8 M through this Farm Bill. NRCS-AZ kicked off "We Care" initiative in January 2012. Air Quality is slated to be one focus of the month long "We Care" initiative.

Keisha mentioned she started her job on 9/1/2011

- Agriculture is a $3.5 billion dollar industry
- 15K farms, 20K average farm size (some up to 100K acres)
- Top producing crops: lettuce, hay, cotton
- Land ownership in the state: 16% private, 40% federal, 30% tribal, 12% state trust
- Coordinated resource management process – private farmers/ranchers will also ranch on federal lands therefore have a successful process which links together the various agencies so that the private landowner can have a single management plan on all the lands they ranch.
  - Starting this process with Tribes just this week. Excited about this
- 7 out of 15 counties are considered nonattainment
- 43 conservation practices that address AQ and two financial assistance programs (air quality and energy)
- The State Conservationist sits on the Governors BMP committee
- Focusing of the "We Care" About Conservation
  - Focus theme every month and AQ will be a focus for a month, developing training materials and doing workshops
  - Steve Barker – technical leader for all AQ issues

Question and Answer Period

- Manuel Cunha– cattle/rangeland – do you know how many farm acres you have and how many acres of cattle/rangeland?
  Response:
  - 72 million acres total
  - 52 million acres grazed
  - 400K in cropland
  - Jim Seiber – transportation in AZ – Is there any new thinking about transportation in AZ – moving goods, place A to place B.

  - Response by Keisha Tatum: NRCS provides assistance to reduce dust on roads.
  - Response by Kevin Rogers: We're so integrated with the metro areas. Our farmers and ranchers are very dependent on new technologies, because of transportation issues (ex. cotton picking), so they jump on things that can help.

Review of the Minutes from the Previous Meeting

- Cunha – move to accept. Seconded.
- McVaigh – need to remove "Dr." from his name. No objection.
- Minutes approved

Emissions Quantification Subcommittee – Dr. Otto Doering, Purdue Univ. (speaker)

Reactive nitrogen study. SAB advises EPA on the science behind regulations. EPA report was commissioned nearly 5 years ago. The SAB reviewed the report after 3 years; Otto became chair of the committee. Agriculture is involved in more than half of the anthropogenic nitrogen. Atmospheric N emission reductions are the most cost effective. EPA must bring together the office of air and the office of water. Reactive N could be reduced by 25%.

- Movement of reactive nitrogen through the environment
- Worked on this report for 5 years, less than 200 pages (good)
- This was different in that the EPA Science Advisory Board decided we needed to know more about reactive nitrogen – commissioned by the SAB, not by EPA itself
- Most food systems are low on nitrogen, but we have excess Nr in US, China, Europe
- Sources of Nr
  - 10.9% is Nr from Haber-Bosch process
  - Biologically fixed nitrogen (beans etc.)
  - Fossil fuel transportation
  - Stationary (electric power plants)
  - Industry
  - Ag supplies more than half the nitrogen that enters our environmental system
- The nitrogen cascade
  - It is slippery – it changes form – moves from land, air, water
  - Once it gets into the system as Nr it has the ability to morph
  - Energy and food production put nitrogen into the atmosphere (energy) and land (food production)
  - We are putting about 5 times more into the system than what natural biological nitrogen fixation achieves.
- Chesapeake Bay – nitrogen inputs. This picture is a regional/local phenomenon. The picture would look very different for the Midwest or the San Joaquin Valley.
  - Atmospheric nitrogen is the least expensive to control and gives most bang for the buck. This is just one way to look at it though.
- Biggest Recommendation: EPA has separate offices of Air, Water, etc. – but nitrogen is continually cycling between. All offices need to work together and with USDA

- Recommendation: EPA should consider a range of Nr risk management options (see PowerPoint)
- The SAB estimates that a 25% reduction of Nr introduced into the US environment in the next 10-20 years with existing technologies.
- Need to look at the ratio of cost of nitrogen vs. cost of corn. And even at the top end of the productivity curve, farmers will keep applying nitrogen to get that little bit more productivity (it's still cheaper to apply more nitrogen to get that little more productivity).
- Nitrogen in rivers – more flow results in more nitrogen
- Recommendation: Obtain more and better data to inform management decision-making
    - Need to work with many agencies
    - Better fertilizer application data – Bill Herz was on the this Nr Committee
    - Gas and PM emissions from agriculture
    - NOx and NOy to supplement existing monitoring
- Recommendation: Management Strategies Research
    - Carbon, soil carbon
    - Biofuels – how will this increase nitrogen?
- AQ Recommendations
    - Expand NOx control efforts
    - NH3 as a harmful PM precursor
    - Reexamine the criteria pollutants in terms of NOy

<u>Question and Answer Period</u>

- Bryan Shaw (Nr Committee Member) – Emphasize some points and ask a question – Agreement on needing regional assessment of nitrogen (whether a problem exists and how to address). It became clear how little we knew. Need better data and better understanding. Reduction goals – where he is least comfortable with – based on what we think can be done. Otto – please comment on your comfort with these.

  <u>Response:</u>
    - Total of 25% reduction is for all sectors, and some sectors can do more and some less. Based on a workshop with several/many experts attending. Thought this could be a number w/o being draconian. This 25% also corresponds to another 1990's study that had a similar number.

  Clarification (Dr. Shaw):
    - Many passionate people involved. Had been a move to recommend that ammonia be a criteria pollutant. Dr. Doering brought people together and there was 100% consensus on the report

- Doug Shelmidine: Animal nutrients – Is there any information on the effectiveness of the non-point source technologies that have been implemented/taking place?

  <u>Response:</u>
    - Report contains info on how, for example, nitrogen load at dairies has gone down as production has gone up. The Broiler industry is the only place where nitrogen contribution is greater than the 1970's but that is because there are so many more broilers. Nitrogen in the corn – can you then hold the Nr in the system as long as possible? From feeding the corn to the manure, etc. Part of our challenge is holding the Nr in the food production system and not letting it escape.

- Chuck Rice: – no till results in nitrogen benefits and carbon benefits in soil. Nitrogen is retained in the system – tile drainage nitrogen systems are causing additional discharge of nitrogen. Like the approach about regional nitrogen management systems – not supportive of cutting N use by X%. Data is critical, we are losing capacity.
  Response:
  - Starvation of carbon in nitrogen systems. Nowhere in the report do they push for 25% reduction in N use.

- Manuel Cunha: In CA have three studies going on. There is a miscommunication between agencies. Regulators do not understand science. You must be very cautious about recommendations. Wants to see a recommendation added about a caution about adding regulations. Recommend the four California studies need to be added to the committee.
  Response:
  - A section in report on management options. Walk through all options from private markets, emissions trading, to regulations. Recommendation is that the SAB needs to look at your local area and discuss what is applicable.
  - Appreciate the CA work because they tried to get data when writing this report.
  - Counter Response: Data are difficult to get because farmers/ranchers have had regulators run amok. Still want to see a cautionary statement about regulations added to the summary. Asked that they insert the word "caution" when discussing regulations.

- Cynthia Cory: Thank you for an articulate and entertaining presentation. This is to Sally Shaver about Subcommittee recommendations. UC Davis' assessment and cross-media relationships are important for reactive N. This is an important issue. We are at an intersection – Clean Air Act, CA GHG rule – need to perform cross-media analyses and this needs to be emphasized.
  Response: Sally Shaver – yes, we wanted people to hear Otto and will be having a call now as follow-up

- Bill Angstadt: three points you made that have implementation for NRCS policy 1) public recognition of nitrogen as an issue, 2) cross-media, in the Chesapeake Bay we have focused on water quality and not on air quality. Need to look at nitrogen application to crops. New manure management manual is still allowing over-application of nitrogen because the assumption is made that 80% is lost to the atmosphere, and therefore over application is needed. He thinks NRCS has opportunities here. 3) Your cascade struck me – keep the nitrogen in the box.
  Response: Otto Doering – you are right on target

- Chief White public statement to NRCS Deputy Chief for Science and Technology Dr. Wayne Honeycutt – Let's talk about what NRCS can do on this topic in 2013.

- Paul Martin: Appreciation expressed. He is confident that the entrepreneurial spirit of the American Farmer can address these issues but producers need help, from research, from NRCS, from ARS and need time. Not sure we're going to get the time needed once info gets to the public. How is public discourse going to be kept on track? So that we can have the time we need.

Response: Otto Doering – difficulty is because of how nitrogen cycles through so many media, and communication to the public is difficult. Message "Keep nitrogen in the box" – this could be understandable to the public. Need to target areas of the country. Don't need to explain the whole complexity. There are no silver bullets.

- Chief White – sees a responsibility of making sure this report does not die on the shelf.

- Leon Weaver: 1) Comment – Keeping it the box. Issue in the Midwest is the increased tiling and adoption of anaerobic technology. Competing technologies and need to understand how to choose among technology options. 2) Question – non-point aspects – please expand on needed institutional changes
  Response: Otto Doering – my value judgment/perception, is that we are not getting the level of participation we need in the voluntary conservation programs. Problem with Congress and the Farm Bill about targeting (it does not want to target specific problems – "every person on the subcommittee must be able to get money out of every program". Sees this as an institutional changes that is needed – we need to be able to target problems. Targeting was not allowed in 2003 Farm Bill, this is important as is cross-compliance.
- Eileen Wheeler: How do you address airshed within the context of watersheds?
  Response: Otto Doering – the group did not make specific recommendations on how we can do this. Deciding on what the airshed was for the Bay was a problem. We did the best we could. The SJV is a little easier because of the Mountains. It's a challenge and not sure how to do it, but need to understand.

- Brock Faulkner: Observation – Rocky Mountain national park, movement of N into Class 1 area. Tremendous cooperation between industry, producers, and other constituents. Good partnership that could serve as a model for N analysis. Desperate need for reactive N information beyond GHGs. Analyze fundamentals and more research.
  - Question: How comfortable and confident are you in the cascading of nitrogen?

  Response: Data are not available for the research community to grab directly - some data are backed out. Jim Galloway at the University of Virginia and Elizabeth Boyle at Penn State were largely responsible for this information. Jim thinks it is +/- 20%. Constantly get data, site specific management – USDA, National Academies, and EPA. Locality-specific data are necessary prior to a heavy regulatory program. Teams have been looking at the movement of ammonia and other Nr into the park for the last 6 years. There has been great cooperation between industry, Ag, EPA, State. Desperate need for research into reactive nitrogen. There are good tools out there that are perhaps not as well quantified. Concerned about the modeling we are using and assumptions that go into the models. How comfortable are you about the nitrogen cascading and the orders of magnitude associated with the different parts?
  Response: Otto Doering– thinks they had good modelers. Per Jim Galloway (the modeler) – "we have it +/- 20%". Also noted there will be an EPA conference in March to deal with AQ Modeling

- Sally Shaver: Comment and request. Comment – Does not think we have good cross media tools in place to make these decisions and thinks that the current statutes aren't set up to deal with cross media issues. The push is to take available information and make policy decisions. We need to think about the message for the public, because there is a good side to reactive nitrogen and we don't want them to be riled up before we understand what is going on.

Request – as we make recommendations about this that we keep this part of the message that it's not all bad.
Response: Otto Doering – the report illustrates what we do not know. SAB can use this report to say to EPA where we do and where we don't know enough to support regulations.

- Chris Peterson: Has raised a lot of corn. Research is necessary and soil testing. Thinks that regionalizing this is key. Management and planning, in managing nitrogen you either use it or lose it. Higher weather variability makes managing nitrogen more difficult.
  Response: Otto Doering – with climate variability it becomes even more difficult to plan nitrogen management

- Chief White summarized: 1) Voluntary efforts are working 2) The NRCS 590 conservation practice standard changes will enhance effectiveness 3) We must continue taking a systems approach.
  Response: Otto Doering – compliments to the Chief on the Mississippi River Project.

EPA Update – Janet McCabe

- NAEMS Study – SAB is going through its process naming the committee. Hopefully announce in spring. First looking at emission estimation methodologies from broilers.
- RICE Rule – promulgated an IC Engine Rule.
  - EPA is reviewing concerns with RICE and the San Joaquin Valley
  - EPA had thought that the rule would not adversely impact agriculture but the Agency is finding out it may, and need info about how many and where those engines are located. This information is needed so that they can move forward with Rule reconsideration.
  - The Agency will have proposal out in May, finalize Rule by Dec 2012.
- EPA is working with NRCS on an AQ Conservation Measure Guide - Not a regulation, not a requirement, it's a Guide, and it encourages collaboration. Another, in a series of tools, that farmers could use to improve air quality.
- Exceptional Events
  - Continuing to work with comments received on Exceptional Event Guidance. Hope to have another draft out this spring and final in summer. One thing EPA hears is that some of the issues would be better dealt with Regulatory changes, and this is an option that is always weighed (regulation vs. guidance). Regulation takes more time.
- PM NAAQS – no new news, agency still not changing (see ppt)
- Ozone – Proposed rule 2013, final 2014
  - Two implementation rules 1) classification rule – Rule on the ozone classifications based on the new 75 ppb. Most areas are close to the std and will be considered to be marginal. 2) guidance on what states need to be putting in their implementation plans (later this year)
- Boiler MACT – finalized last year, and then the agency undertook a reconsideration. Final rule is likely in May.
- Mercury and Air Toxics Rule
  - Feb 16 – beginning of the compliance deadlines. Significant Rule.
  - Navajo generating station – is impacted by this rule and this is a big/important facility for the area. Address the uniqueness of this in the Preamble of the Rule. What happens at this generating station will affect the surrounding tribal communities.

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- Fire Policy
  - Expect draft Summer of 2012
- Area (small) Source Standards for Prepared Feed Manufacturing

Question and Answer:

- Cynthia Cory: Thank you for update on RICE Rule. Rick came up with numbers for San Joaquin Valley, and Cynthia has been talking with ARB to get more numbers. Other western states have been inquiring about this. Want to let you know that you have our commitment to work on this – these numbers are difficult to get
  Response: Janet McCabe – realizes that especially outside of CA it is difficult to get the numbers.

- Annette Sharp: Thank you for your continued attendance at these meetings. 1) The Air Quality Standards Subcommittee has recommendations that will be coming your way. 2) Fire Policy – this group has been working on this since 1996. Concerned that we're going to get a Policy after the fact w/o opportunity to get comments in. We would like to make comments on this draft Policy and would like to offer up research. Annette thinks USDA has research to help. We want to provide you with comments on the Exceptional Event guidance and participate in the Fire Policy.
  Response: Janet McCabe – if you have comments now on the guidance then that is great. Fire Policy – this has always been a challenging issue to balance AQ and need for fire.
- Kevin Rogers: Thank you for mentioning the Navajo plant. On the tour yesterday we talked about how the majority of the pumping power that pumps water from the Colorado to Phoenix is from this plant. 2) We know we are close to hitting the National Ambient Air Quality boundaries for PM10 in Pinal County. Next week we will be talking about PM2.5 boundaries. Looking for input from your office on this.
  Response: Janet McCabe - Gina McCarthy was in AZ last week and went to the Plant. We're taking this seriously. Very complex issue. Regarding the boundary for Pinal County – in process and should be done soon and it makes sense that PM2.5 and PM10 are in the same time/process.

- Manuel Cunha: RICE –I will ask Rick to make comments on this for the San Joaquin Valley as well. In 1997 there was the discussion of prescribed burning. In 1999 agriculture began working with land managers. In 2003 it went into the archives, it got lost. This document has been done and has been vetted by agriculture. Expressed disappointment that this task force has not been asked about it. Requests that this document be used by EPA. Please work with NRCS to sit down with those Task Force members that were engaged and be engaged. Disappointed that this Task Force's policy is not mentioned and yet we have a summer deadline.
  Response: Janet McCabe 1) we do not have a deadline, we have an expected goal. 2) the document is not underground; we don't tend to start from scratch 3) nothing is going forward. w/o all stakeholders have an opportunity to weigh in.
  Response: Robin Dunkins - We have not lost the document. The challenge has been to develop a Policy that applies to all. We held a series of meetings across the country to get input.
  Response: Chief White - The document is on the AAQTF website.

- Sally Shaver: Request regarding the boiler MACT. Difficult to determine who applies to. Need a 2-pager developed, or something for producers to use to know whether they are covered or not.
  Response: Janet McCabe – yes, we try to put fact sheets out. And in this case we need one from the perspective of the agricultural community.

- James Seiber: Fire Policy – looking forward to reviewing. 1) will parts of that be made available for review? Take up as an agenda item in the future?
  Response: Janet McCabe – we will take this as a follow-up item on how we can engage on this. The AQ Standards Subcommittee identified as a point of contact for follow-up.
    - James Seiber: regarding excess biomass in agriculture and how to deal with and needs for biofuel, seems like we ought to be able to connect these two. Is anything going on with your office and DOE on this?
        - Janet McCabe: we work with DOE on innovative fuels issues. Challenge is that you often don't have the stuff in a place that is useful.
        - Chuck Rice: EPA has a SAB on biogenic carbon and that they want to treat biomass just like coal.
            - Janet McCabe – that is an over simplification, but yes there is a SAB.

- Kevin Abernathy: When our local permitting agency got word of the RICE rule, it was disheartening. Rather than having redundancy, EPA should give exemptions to states that have more stringent policies/rules. Over 6000 engines were replaced with EPA/NRCS/Carl Moyer.
  Response: Janet McCabe – not the first time this has come up and appreciate your comment
- Rick McVaigh: We provided data on these engines and also recommendations. Would like to have farmers continue to operate under the San Joaquin Valley District Rule, feel it is more stringent. There is another option of adding tailpipe controls until 2018. Kevin had mentioned a family farm putting an SCR on that didn't work, and Rick thinks the best thing is to replace the engine (addressing toxics and NOx at the same time).
  Response: Janet McCabe – thank you.

- Hong Wei Xin: NAEMS – 1) Scheduling – when are the data expected to come out? 2) Emission quantification subcommittee submitted a list of candidates and some did not get contacted, is there any plan to have these individuals contacted especially uncertainty analysis?
  Response: Janet McCabe – EPA does not pick the panel so I do not know anything about this. In terms of engaging those people, this will be a public process and we would not turn down input and knowledge from experts.
  Response: Robin Dunkins– some of the people that were involved in the collection of the data may need to be contacted. Timing of the data. Dependent on the SAB process. Holding off issuing the EM's. Agreed to do them all at the same time. Regarding the info going to the SAB from EPA, there will be a FR notice 30 days before the meeting along with another FR notice on accepting comments.

- Chief White: Thank you to Janet McCabe.
  Response: Janet McCabe – thank you, my pleasure, and Robin is the one who really knows what is going on.

GHG and Biofuels Subcommittee

- Bob Avant has drafted a sustainability whitepaper
- Corporate sustainability programs and policies also drive agriculture, not just government rules/policies

Frito Lay and PepsiCo Presentation – Three part PowerPoint

- Discussion of the Sun Chips factory tour and PepsiCo's sustainability planning efforts.

Terry Spence – appreciative of the corporate sustainability efforts. What is done with the oils after use? ANS – Oil is the enemy of the membrane, oil is skimmed then turned into fuel and used as a fuel for the trains that go around the Grand Canyon.

Chuck Rice – Environmental sustainable agriculture, water, energy, how far is that being extended throughout the supply chain? Supply chain sustainability – two large grain handling facilities – Sydney IL and Gothenburg, NE facilities. Some of the purchasing suppliers, WalMart suppliers and their agplan. There is not an ag-person on the WalMart team.

Chris Peterson – He is impressed, just a farmer from Iowa. He is a consumer out there. He wants a better world for his grandkids. Healthcare costs, obesity, - you all need to get out and talk about this – peer pressure can move the needle. They are good corporate citizens, advertise that - keep up the good work.

Kevin Abernathy – amazed at what we saw at the Casa Grande facility. Definitely have the cashflow, cost of production is often above the price of the crop. Farmers are often shackled - Would they approach these if they were more cash strapped? How would they retrofit the Modesto plant given all of the regulatory requirements of CA? ANS: They try to stay out of the papers, invest in regulatory requirements prior to the regulation drivers.

Bill Norman – sustainability effort follow-up on the supply chain. Supply chain sustainability effort – cotton "field to market" initiative. Metrics in the areas of water, water use, energy, and other aspects of sustainability. Developed commodities- corn, cotton, peanuts, wheat. PepsiCo is part of the sustainability consortium. Multiple ways to measure these outputs. Metrics have been developed in the ag-community. All around the table can recognize the benefits.

Lunch Break

Meeting resumed at 2:10

Arizona Ag Air Quality Efforts – Panel Discussion (Greg Johnson, NRCS, Moderator)

Rick Lavis (AZ Cotton Growers Assoc.) – started the panel discussion and the history of the agBMP program and the nonattainment region for Pinal County. Ag was identified as 13% of the PM problem. They engaged partners and designed the BMP reduction program. BMP need to be 1) workable, 2) verified scientifically 3) economically viable. The governor would select the BMP panel members.

34 measures were developed. EPA, USDA, and others were agreeable to the program. Legislation 1552, two measures per farm. The region was expanded and DEQ wanted to expand the area. Regulators expanded the area. Cessation of night tilling. In 2009, section 1205 was expanded to have BMPs for animal agriculture. Ag BMP committee.

Fundamental questions were raised regarding the BMPs. More specificity and more ability to quantify the benefits of the BMPs. All 39 BMPs were revised. Report form was revised and a periodic survey every three years has been submitted to DEQ.

Question – Annette Sharp – when reports are sent to the DEQ, is there a statistics program that receives these data? Were they alerted to the increased reporting and possible larger workload? A – yes, the department of Ag was alerted.

There was some discussion of the specific practices that have BMPs.

Bas Aja (AZ Cattle Feeders Assoc.) – Mr. Aja worked through his presentation. He grew up in a family where fixing blame was never the solution. Nobody wishes or wants these regulatory programs, it is something that we have to live with. He discussed moving policies through government and the difficulty of getting people to agree on policy objectives. One of the BMPs works better than all others, it is rainfall. Pinal county nonattainment areas were discussed. Tribal lands are unregulated. He discussed BMPs and monitoring data. Daily tracking and notification are attributes in which the county is very proficient.

February 1, 2009 they started their own study, sprinkling on a daily basis. Monitoring data spikes could be associated with certain operational challenges (broken axle and overturned water truck). They can point to 4-5 days within the non-compliance issues with a specific monitor site. Three primary BMPs on the feedyard. Utilize 3-6 gallons of water per head per day. Alleys were sprayed with water. Completed the beltway conveyor for the distiller's grain rather than trucking. Tracked cost by maintenance, fuel, oil, and water costs. $1400 per day for the BMPs on two feedyards. Conservation of water requirements are applied to feedyards in AZ, 20 gallons per head per day is the maximum. They are bumping up against capacities for the groundwater. That feedlot is located in a water mining area.

The county completed a source apportionment study called "RARE". Changes in the PM2.5 standard got their attention. PM Fine numbers have declined. They feel that they have a PM10 issue rather than a PM2.5 issues. The preference is to focus on the PM10 issue rather than the PM2.5. 1 in 6 monitor was good enough to get them into non-attainment status but EPA is stating that they will need a 1 in 3 demonstration of compliance to get out of the program.

Challenges – he covered the challenges slide in the presentation. Need better wind events data.

Summary – continued research needed.

Question – Manuel Cunha: Asked whether they had considered a tax rebate for providing food for humans? How many cows are in the area? 60,000. How many ranches? Answer: 50-60 farmers.

Manuel clarified that those are 50 or 60 families. Fires in CA that destroyed forests and billions of dollars of property were difficult to show as an exceptional event. Mr. Cunha also asked for a round of applause for Janet McCabe for coming to this meeting.

Manuel Cunha: wants to acknowledge Janet for coming here (applause).

Appreciation expressed then inquiry as to what the AAQTF could do to help?

Rusty VanLeuven (AZ Department of Agriculture)

– filling in for Brett Cameron. Provided slides and Mr. Cameron's presentation, which was an overview of Arizona agriculture, new and emerging challenges, and air quality issues. They have a goal of providing voluntary industry compliance. The voluntary compliance continues to grow.

There were no Questions for Mr. VanLeuven.

Eric Massey (AZ Department of Environmental Quality)– His organization is more regulatory and enforcement based. Phoenix has been nonattainment since 1990 and the Clean Air Act Amendments. In 1996 the area has become a serious non-attainment area. The Phoenix area is subject to a 5% plan. Some of the most stringent dust control technologies in the entire country. Success is in the eye of the beholder, monitors are still seeing the exceedances but the annual levels are being reduced. The Phoenix area has nearly doubled in population. 2006-2007 timeframe Phoenix has some terrible stagnation events. A Senate Bill was adopted in 2008 with an aim to demonstrate compliance with the NAAQS in 2010. Several exceptional event demonstrations were submitted but EPA was unwilling to accept three of the four exceptional events. One challenge in the past is "how do we deal with an ag. BMP" program. Mr. Massey's agency is the enforcement agency. He mentioned that there is an enforcement need but compliance assistance and BMPs are another way of assisting sources achieve compliance.

The solution needs to fit the problem. Compliance assurance, what does this mean? BMPs are preventative and a handbook has been developed. Ag BMPs and compliance assistance and unannounced inspections. Ag BMPs work well with DEQ – land leveling activities and a particular farmer was provided as an example. The purpose and importance of BMPs, DEQ is starting to look at the plan in light of achieving significant emissions reductions. How do we handle dust issues? DEQ along with stakeholders have been meeting every other week, rolling out systems of communications for multiple days. Monsoon seasons and isolated thunderstorms create challenges for their weather forecasting team.

They work with the community to try to avoid non-attainment at the monitors. EPA's exceptional events draft guidance has been helpful in reducing the volume of paperwork necessary. The July 5 2011 exceptional event was discussed.

Why is all of this important? 5 % doesn't seem to be solving the problem.

Question: Annette Sharp – Since turning in the 2008 exceptional events, can you estimate the number of man hours required to submit an exceptional event demonstration? A – Approximately 1100 person days, from the planning perspective there are 2-3 people working on compliance assurance.

Is there a way of incorporating field visits back into the Ag. BMP program? Feedback does not have a feedback mechanism.

Comment: Kevin Rogers – the state legislature is in session and Mr. Rogers wanted to recognize and appreciate their attendance. Technically, the farmers do not turn in BMP forms. Implementation plan enhancements will include the submission of forms. Start date – January 2013. The goal is that the monitors will quit tripping and they will become maintenance.

Exceptional Events Presentation by Colleen McKaughan (EPA)

Presentation and slides.

Question: Manuel Cunha – appreciation and gratitude expressed. How much are the federal partners being responsible for their portion (BLM, Forested lands, Tribal lands)--farmers and rancher are getting a raw deal. Military practices on Camp Pendleton. What is the answer? A: Federal partners are also responsible, and mentioned dust suppressant that is used on BLM lands.

Question: Jim Seiber – When unusual winds (Santa Ana) occurred in California, were there detectable increases in health issues? A- there were discussions of Valley Fever and the increased numbers.

Air Quality Standard Committee -- Brief Presentation by Brock Faulkner

Brock Faulkner walked the group through three documents and expressed appreciation for all of Annette Sharp's work. Brock encouraged Task Force members to read through the documentation provided to the Task Force.

Recommendations are in the document but were reviewed by Brock. Five items were read and reviewed by Brock.

Discussion:

Question Pete Lahm – high wind events, anthropogenic and non-anthropogenic, keep it focused on PM and don't go into the fire issues.

Brock Faulkner provided a brief PowerPoint update on the PM Sampler issue.

Question: Chuck Rice – You are picking on one end of the curve – replication, deviation, and standard variability. Chuck Rice: being devil's advocate – what about the undersampling of the smaller particles?

- Brock: minor compared to the oversampling of the larger particles.

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Day 2 – 2/8/2012 - Start at 8:05

Elvis Graves, AAQTF DFO convened day two of the AAQTF meeting. Details on public input at the AAQTF meeting were provided by Mr. Graves.

Cynthia Cory (Emerging Issues Subcommittee Report): Introduced Rick McVaigh, San Joaquin Valley Unified Air Pollution Control District, to discuss a Risk Based Approach to Air Quality Planning. Mr. McVaigh: Developing new metrics to make sense of Air Quality Planning. There are no silver bullets to solve the air pollution problem. Exposure to tons of emissions also requires exposure, need to stop looking only at tons of emissions and need to relate those to exposure. Another important factor is chemical composition of different particles. Chemical oxidants like ketones are toxic and other particles are less toxic. Surface area is also important. Science can be used to guide air quality planning. Wood smoke and residential wood burning has an impact on PM2.5 levels resulting in 30 & 70 premature deaths, respectively. Poorer areas tend to go to the hospital rather than to a doctor, therefore hospital admissions tend toward poorer regions of Fresno. Ultrafine particles are being investigated through a pilot study. In the urban areas of Fresno they are seeing high levels of ultrafine particles. Re-entrained road dust is being seen as a source of ultrafine particles. EPA has been very cooperative, EPA was very open and very cooperative.

Question: Pete Lahm – Familiar with wildfires and multiple pollutant impacts of sources. Answer: - Wildfires produce hundreds of tons of emissions, preventing wildfires is one of the best things they can do to reduce emission episodes

Question: Annette Sharp – In addition to BenMap what tools have been used to quantify the health effects? Which air model are you using? Answer: – ISC3 and CMAQ for air quality and BenMap is being used to examine health effects.

Question: Bill Norman – Air quality seems to be emulating the pesticide…said he is going to be dead and gone before they meet the 2008 O3 standard. How are they going to meet the AQ attainment demonstrations? The graph in Rick's presentation was discussed by the group and Rick further clarified the messages coming from the graph. In the San Joaquin Valley agriculture is one of the most impacted source of emissions.

Question: Kevin Abernathy – Gratitude expressed for Rick's presentation. As a person living in Turlock, CA the air quality has dramatically improved. Kevin has a clear view of the mountains from his house and congratulated Rick on his work. He asked if there was 100% emissions control, how far would we be from the 1997 O3 standard? Answer: – In 2020 emission reductions could be achieved, the cost of emissions would continue to rise. When talking about spending large amounts of money they want to be focused on the best value for that money. Question: – do they need to continue to put pressure on

EPA to get away from the mass-based emissions? Answer: – when focusing on spending large amounts of money they need to focus on the most beneficial sources.

Question: Manuel Cunha – In 1993 they spent $60M on the almond harvest emission factors – AP42, where there was a void of agricultural emission factors. At 2am in 1996 the task force was entered into the Farm Bill. Within that farm bill they looked at EPA and who within USDA needs to participate. NRCS was selected because of the relationships with farmers. Recommendations - Manuel would like to commend the air district. At the next meeting they would like to show slides on the "tune up of cars" program where they spend $500 to tune up cars. Agricultural equipment program, conservation tillage, less passes, all of the best management practices. For EPA to seriously look at the risk-based approach. You could shut the whole valley down and they would never meet the air standards. What is left, 400 commodities (cattle to vegetables) or you can only grow specific crops or farmers can't work on certain days. In the recommendations he would like to see "risk based" highlighted. Farmers are at the pendulum, dairies have been lost from CA, dairymen and dairywomen. He would hope that EPA would look at this. The economics are important – he would encourage other states to not follow CA.

Question: Jim Seiber – possibly hold a seminar on the Davis campus so that researchers are doing basic research and not focused on immediate needs. On the campus, they could consider holding a seminar to inspire research on immediate issues. Other question, regarding seasonality of work. Seasonality, how do these things vary over time and how do you focus your efforts? Answer: – seasonality is important but there is the need to meet the air quality thresholds every day of the year. Question: Pete Lahm – Appreciation, other media were mentioned yesterday by Otto Doering. Answer: – yes other media could be in the plan.

Q- Bill Norman – referenced bar graph that represents 2005 NOx emissions, can you provide more recent implementation of NOx controls? Answer: – switch to another graph that describes.

No further questions:

Move to Task Force Subcommittee Recommendations.

Emerging Issues – Cynthia Cory

- Wish Janet McCabe was here.
- "Allow a risk based approach be …" Move "Recommendation" 2 paragraphs above
- Typo in #8
- Recommendation #6 – natural background needs to be taken into account
- Bill Norman: complement Rick on PowerPoint and committee recommendations. Recommendation moving these all as amended. Manuel Cunha seconded
- James Seiber – fumigants are a big issue in CA. Further work needs to be done to reduce VOCs from fumigants. Do not want to lose track of this issue
    - Cynthia – almond industry. They have done lots of work on dust reduction and can send to James
- Chief – recommendations pass unanimously

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Emissions Quantification Subcommittee - Paul Martin

- No recommendations at this time
- Very interested in Nr and will be taking this up. Anyone interested invited to join discussions via conference call. May be an opportunity to develop a list of principles that can be used to develop approaches/policy. Need to recognize value of nitrogen. Nitrogen trading. Ammonia.
- Papers on standardized reporting … get done by next meeting
- Exposure study by D'Ann Williams – we will discuss by email/conference call. Things we can learn from D'Ann Williams.
- That is our agenda between now and next meeting
- Brock Faulkner: Eileen Wheeler and he and others have been invited to be on the NAEMS board, so would appreciate getting the documents/input from the Subcommittee. Paul – thank you we would like to participate
- Manuel Cunha: have Otto Doering be part of this discussion as well as Dr. Shaw. Chief offered to follow-up with Otto if necessary, Paul will let the Chief know.
- Bill Norman: ARS has a report. This might be another resource to consider. This was requested but has not received that presentation. Report is online (released Sept 2011). Action Item- staff send to all TF members.

AQ Standards Subcommittee – Brock Faulkner

- Brock Faulkner: Recommendations are in the letter behind tab 8. Five recommendations on page 5.
  - Pete Lahm got him language of concern, will suggest that the language of fire in the high wind event doc does not belong, but will not add to these recommendations, but will bring it up in discussions with Janet McCabe next time.
- Comment – Doug Shelmidine – wondering if all of the best control measures are included in the control measures document. Response – if adopting practice standards these are researched.

- Annette Sharp – before EPA re-invents the wheel … toolbox needs to reassessed every 5 years. We want to call EPA's attention to the fact that USDA has the best research available
  - Chief – we are always adding new practices and refining
- Manuel Cunha: had the exact same question. Add "BMPs CMPs and newer technology available to farmers and ranchers" after RACM/BACM
  - Annette Sharp– need to keep in mind that this is going to EPA and RACM/BACM is the language
  - Manuel Cunha– they understand CMPs
- Kevin Abernathy: if these practices get into a rule, will farmers still be able to get funding to implementing these practices?
  - Chief – the answer would be NO. No impact on USDA programs
  - Rick McVaigh and Bill Angstadt also had questions.
- Bill Norman: Recommendation 2 – such as BMPs, CMPs and other established technology
  - Bill Angstadt – concerned about opening the door too wide to EPA – they create their own BMPs - experienced on Chesapeake Bay
- Manuel Cunha moved to accept the recommendations. Second – recommendations passed unanimously.

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GHG and Biofuels - Chuck Rice

- Bob Avant working on a whitepaper
- Adam Chambers will share SAB and biogenic fuels analysis website with Task Force
- Framework for carbon accounting associated with biofuels
- Jan 18 draft on the web, subcommittee may have comments to the SAB

Discussion of next meeting topics. Charter of five issues for this Task Force – are there going to be additional meetings.

Topics for next meeting

- Bill Angstadt – 1) better access to ARS, NIFA, ERS staff people. 2) Program Issues – all programs. In DC we had the opportunity to have access to program leaders. 1) Research in the Farm Bill 2) higher access to program leaders (CCPO etc.)
- Manuel Cunha: 1998-1999 – huge push by the task force to setup needed research. Led by Dr. Parnell. It was in the 2002 Farm Bill. Presented to the Secretary for $40 million per year. CSREES took over, and competitive grants, and Task Force did not have much say in it. That's why in CA we went to our Senators to move on AQ research. Might be a good discussion to bring back the history of this. Have the Chief and ARS working with this Task Force to get the research projects necessary.
- Bill Angstadt – example of poultry house design. If we had 20 million, what would be the priorities of the Task Force? Geographically?
- Chief White Summarized: 1)Priorities of research - ARS, FS, NIFA and 2) programmatic issues
- Chuck Rice: Question of timing. Farm Bill hearings starting this month. June 2012 Farm Bill. Are we going to be behind the times?
    - Chief White– I think ok, Feb 28 the Chief will be on the Hill testifying.

NRCS Technology Update– Greg Johnson

- Chief – this Ag BMP document could be the basis for the Air Quality Standards Subcommittee recommendation #2
- Manuel Cunha asked if any psychological training was provided for farmers (humor). Drought, the taking of water, ESA, Federal Courts, and the creation of tumbleweeds. Fields become dry because the courts took the water to give to fish. OK, TX, NM, AZ, CA when you take resources from the industry when trees are abandoned predators come in. How we deal with predators and exceptional events? Sudden increase in abandonment, major item under heading that talks about where farm land is taken out by Mother Nature or by the courts.
- Greg Johnson – interconnectivity, natural and human environment imposing when and not if air quality issues will emerge. As we do adaptation planning we need to take this in account. It's about not IF you are going to have wind erosion but WHEN.

Forest Service Update – Pete Lahm

- Kevin Rogers: wants a copy of presentation to the TF. As we move forward with managing our forests we need to make sure that they provide good habitat, need good forest management. Thank you
- Manuel Cunha: Important for states/San Joaquin Valley. A state Senator wanted to eliminate all ag. burning. Ag. burning less than 9-11% - dropped tremendously. Have ag smoke and what they are trying in California air district at the next meeting. Pete, I am concerned about the word biomass. Is it a biomass facility? 11 cents/kw vs. hydro 0.05 cents/kw. Alluding to biomass in pie charts. NRCS is coordinating with states that burn. Whose numbers are correct? Recommended topic for next meeting – NRCS and burning and working with states that burn

Public Comment

Jim Klinker, AZ Farm Bureau, Good science has to support good decision making. He heard a common theme, as we wind these standards down something is going to break. It is important that we continue the work of this Task Force. We need to make sure that we have the ability and the infrastructure to produce food in the US.

Kevin Rogers thanked Anthony Smith from Congressman's office.

Public comment period closed

ARS Update – Charlie Walthall

- Earmarks were terminated and several offices were closed. Personnel update, folks were maintained. With focus on this change, there were no staff lost regarding the AAQTF.

- Manuel Cunha: Farmers getting credits for not disking their lands. They can only farm the land the way they sold the credits. They can't change, and makes it almost impossible to sell the land. This is a legal issue. Need this as a topic for a future meeting**.**
- Bill Angstadt: A permanent easement is permanent. Manuel: this is also a disclosure issue. Bill Angstadt: In the cross-media discussion, where does this all fit in our revised 590. Air issues are not being discussed. 590 does not tackle the cross-media issue, it focuses on indexes.
    - Chief: we will look into with Dr. Honeycutt and his team
    - Dr. Honeycutt – we are trying to reduce losses to anything (whether to the air or water) but your comments are well taken.

Next Meeting

- Budget – Chief White briefly discussed budget cuts.
- Chief turns floor over to Dr. Weaver. Focus and theme for next meeting. Theme of leveraging involvement of agency scientists. Do we want to think about optimum location to do this? Do budgets affect this?
    - Chief White: Manuel Cunha how do you feel about this?
    - Manuel Cunha: I feel we need to be in that part of the country because of transport issues and conditions. Manuel Cunha – willing to forego his travel expenses in order to meet in upstate New York.
    - Bill A: ARS Fort Collins where GRACEnet and Colorado State is working on COMET, National Forests issues. Also Beltsville would have good access to EPA, USDA.
    - Kevin Abernathy: critical that the area we go to has a Task Force member living there.

- Annette Sharp: NY had been suggested years ago. That area of the country has significant AQ problems. Has staff explore other means of having people join the meeting (video, satellite, etc.)?
- Chief White: – stay with Upstate New York and explore technology options.

Chief – express thanks to AZ hosts.
Meeting was adjourned by DFO Elvis Graves at 12:14pm MST.