USDA AAQTF Meeting Notes Day 1: August 1, 2012 Syracuse NY

Task Force Members in Attendance:

Kevin Abernathy, Cynthia Cory, Manuel Cunha, Paul Martin, Annette Sharp, Doug Shelmidine, Lisa Greene, Sally Shaver, D'Ann Williams, Terry Spence, Bill Angstadt, Robert Burns, Bob Avant, Brock Faulkner, Chris Peterson, Bryan Shaw, Bill Herz

NRCS Staff:

Chief White (only on August 1st), Dr. Wayne Honeycutt, Dr. Greg Johnson, Greg Zwicke, Dr. Adam Chambers, Ted Strauss, Dr. Carolyn Olson, Don Pettit (NY State Conservationist). Presenters included Mark Parson and Ray Archuleta.

EPA Staff:

Robin Dunkins, Kerry Drake, Dr. Robert Vanderpool.

Other USDA Staff

Pete Lahm, USDA Forest Service; Dr. Charlie Walthall, ARS; Dr. Bill Hohenstein, Global Change Program Office.

Meeting Called To Order by Elvis Graves at 8:09 am

Elvis Graves called the meeting to order and immediately turned the floor over to Chief White.

Opening Remarks:

Chief White opened the meeting and made the following remarks:

- The Chief introduced NY Agricultural Commissioner Darrel J. Aubertine and extended appreciation for Commissioner Aubertine's attendance
- The Chief also thanked Mr. Doug Shelmidine for all of his efforts in organizing this meeting and extended appreciation to Mr. Shelmidine for hosting the Task Force in Syracuse and organizing the tour.
- The Chief briefly discussed meetings that he has been having with Janet McCabe of EPA over two jointly-developed (NRCS and EPA) documents he wanted to also share with the Task Force
 - Statement of Principles
 - Agriculture Air Quality Conservation Measures
- The Chief discussed the drought that is affecting many agricultural producers across the country.
 - 1,500 counties have been declared disaster areas due to the drought.
 - We will hear more from Bill Hohenstein later in the day on the issue of climate change.
- NAEMS issues
- Soil Health Demonstration

Manuel Cunha – Manuel thanked Doug Shelmidine for hosting the task force and arranging the field tour yesterday.

Chief White welcomed and recognized Don Pettit, State Conservationist for NRCS-New York. He also welcomed Darryl Aubertine, Commissioner with the New York State Department of Agriculture.

Don Pettit proceeded to present an overview of NRCS in New York.

- Slides were presented and included the following content: New York has a rich and diverse agricultural economy
- Presented State of New York farm facts a rich and diverse agricultural economy
- Briefed on NAQI, anaerobic digestion, and CIG's

Discussion over the Adirondack Park being the largest park and the largest state-level protection are in the contiguous US.

Floor turned over to Darrel Aubertine. He provided a few additional comments and embellishments to Mr. Pettit's presentation.

- Welcome and appreciation for visiting New York
- Appreciation extended to Doug Shelmidine for his work as an agricultural producer
- Dairies are the single largest agricultural sector in New York.
- Currently seven million acres of land under agricultural production in New York
- One million acres of agricultural land is currently underutilized which provides an opportunity to develop a biofuels and biomass industry throughout the state.
- Cornell University provides great leadership in advancing this effort.
- Bill Angstadt: Mentioned that many dairies are not in compliance with CAFO regulations. Dairies are independently owned where poultry CAFOs are generally corporate owned, which influences how manure is managed. We need to focus technical assistance to the individual producers.
- The Chief brought the groups attention to NRCS Conservation Practice Standard 590 and recognized Dr. Honeycutt's contribution to this Practice Standard by providing states with flexibility in applying CPS 590 in individual states.
- Kevin Abernathy: Referenced Don Pettit's presentation and asked if the non-attainment areas in New York are associated with urban/metropolitan areas and whether the designations are of the national and/or state standards.
- Don Pettit: The non-attainment areas are the result of transport from urban areas. New York City impacts the southern areas while the Great Lake urban areas impact the northwest portion of the state. The NAAQS are the basis for their nonattainment designations.
- Robert Burns: Provided clarification on the nonattainment county in the Adirondacks Park. Air pollution transport was explained as the cause.
- Bill Angstadt: Briefly discussed fallow agricultural lands and marginal agricultural lands.
- Commissioner Aubertine: Stated that willow and other biofuel crops provide opportunities for carbon sequestration on marginal soils.
- Commissioner Aubertine: Willow and other biofuel crops provide opportunities for carbon sequestration on these marginal soils.

Review and Approval of the Minutes:

Chief White apologized for not having the minutes available from the previous task force meeting held in February 2012 in Phoenix. The Phoenix meeting minutes will be sent to task force members once they become available.

Annual Ethics Review:

Elvis Graves presented the annual ethics review. Slides were presented

- Task Force members should notify Elvis (or DFO) if a conflict of interest is possible
- Remember these ethical requirements, especially this year with it being an election year
- Contact Elvis (DFO) with specific issues or concerns

NRCS Technology Update:

Greg Johnson gave the NRCS technology update. Slides were presented.

Chief White briefly intervened to explain the vision of the Conservation Desktop and the Conservation Delivery Streamlining Initiative (CDSI) to the Task Force. The Chief explained that the Conservation Desktop is similar to building the foundation of a house, NRCS will build on this foundation in order to get more staff back into the field. This will be like getting 1300 new employees in the agency and help make the Agency more resilient through lean budget years.

- AQAC Guidance Documents for NRCS Conservationists. Describes assessment steps
- NRCS and Climate Change Adaptation: Greg explained this internal document is based on a 40 year outlook of NRCS practices. Bob Avant asked whether the internal document will be applied externally. Greg said that Bill Hohenstein will provide more information over this issue in his presentation.
- Progress with the NAQI and how California and NY have used these payments to replace off-road mobile agricultural diesel engines (CA), other agricultural engines (NY), and for other purposes.
- Updates to COMET-Farm Tool were provided
- Bob Avant: Had a couple comments over multimedia implications. He mentioned that CDSI could be a key toward developing a sustainability certification process. He also recommended that the Climate Variability and Bioenergy subcommittee assist USDA with developing the adaptation plan. Sustainability certifications could also be integrated into CDSI, especially useful for producers that must comply with corporate sustainability initiatives like Wal-Mart.
- Bill Hohenstein: Added that this is in compliance with a USDA departmental regulation. Bill also discussed the Secretary of Agriculture's memo on this topic and the need for development of further policy.
- Cynthia Cory: Expressed the benefits of the NAQI in California by applying emission reductions from diesel-powered agricultural equipment. She said that dialogue with ARB over

California developing a farm equipment rule that will eventually require producers to replace old diesel-powered tractors rated at least 25 bhp. Extended appreciation for recognizing the challenges that occur within the California agricultural sector and the money that has been provided to help replace agricultural engines (and clean the air) in California.

Manuel Cunha: Suggested looking at different concepts of applying EQIP funding and the 2008 Farm Bill, including methods for addressing NOx emissions.

- Extended appreciation to NRCS for efforts in this area.
- The State of California is "off the deep end" and they better not require electricpowered tractors by 2030. Through EQIP, the NOx reductions have resulted in real NOx reductions and "replacing iron".
- The SJVAPCD is currently trying a truck trade-down system approach. Port trucks from California's harbors in LA and Oakland, which were replaced several years ago with cleaner engines, are now going through another required replacement period. These port trucks will be traded-down with San Joaquin Valley producers by replacing the older, uncontrolled agricultural trucks in the San Joaquin Valley with these port trucks. Manuel would like to see a similar trade-down approach for the tractors.
- Credit given to the SJVAPCD, as they plan to obligate \$43 million for replacing Tier 0 diesel-powered tractors within the San Joaquin Valley.
- Mentioned issues over farm labor and commented that "farmers should not be told by 3rd parties to provide employee legal immigration status or told who to hire."
 - Suggested that NRCS should be involved in the certification of farms, mentioned that NRCS is the most qualified agency to be on the farm.

Chief White: NRCS is unlikely to certify farms regarding labor issues; this may be beyond the Agency's area of expertise.

- Kevin Abernathy: Would like to see more estimating effects of conservation practices, specifically to Air Quality. He added that the local air district is placing as permit conditions requirements to following the applicable standards in NRCS practice standards. He would like to see more work on percent control for mitigation measures and identify needs for future research.
- Greg Johnson: Practices certainly have mitigation potential but quantification of benefits is difficult. The Conservation Measures guide with EPA is not for quantification purposes, but for general guidance.
- Kevin Abernathy: He appreciates that NRCS continues providing incentives to update irrigation engines. The regulatory agencies and the Carl Moyer program no longer fund the replacement of irrigation engines due to regulatory restrictions.

Bob Avant: NRCS should consider conversions from diesel to natural gas.

- Bryan Shaw: Natural gas refueling stations installed in Texas received incentives from the State.
- D'Ann Williams: School buses retrofitted to operate on natural gas resulted in significant PM reductions, but NOx emissions increased.

Paul Martin: Recommends replacing diesel with biofuels, specifically compressed biogas. Mentioned a demonstration project on Fair Oaks Farms.

Meeting was adjourned for 15 minute break.

Meeting called to order at 10:17

EPA Updates:

Chief introduced Robin Dunkins of EPA. Slide Presentation...

- NAEMS Reviewing draft development of CAF methodologies. Comment period closed on June 11, 2012. EPA will provide written comments to be presented and forwarded to the Science Advisory Board. Additional meetings are scheduled via teleconference, of which Greg Zwicke will be participating on the call.
- Reciprocating Internal Combustion Engine (RICE) Rule The updated proposal was published in the Federal Register on June 7, 2012.
- Agricultural Air Quality Conservation Measures Collaboration with EPA and USDA NRCS, specifies USDA NRCS conservation measures. Not intended as a regulatory guidance document.
- Exceptional Events Proposed improvements for implementing the Exceptional Events Rule. The 60 day comment period ends September 4, 2012.
- NSPS for Grain Elevators: EPA is currently reviewing the standards, as the last review was performed in 1984. Applies to >2.5 Million bushels. One item is to determine whether the technology requirements apply to temporary sites by meeting permanent standards. EPA Compliance says "Yes". Revisions may result in a separate standard to address temporary storage.
- NAAQS Provided the scheduled review period for criteria pollutants. She updated everyone over the proposed revisions to the PM2.5 ambient standards.

Chief White: Asked Elvis to have a NAEMS update on future meeting agendas from AAQTF members that participate in the SAB meetings.

Questions and Answers:

Cynthia Cory: Appreciates EPA's efforts for resolving the RICE rule issue. There is/was a letter generated by Roger Isom addressed to EPA and thanking them for their cooperation throughout this process.

Bryan Shaw:

- NAEMS Interested in the methodology for emission factor development and would like EPA to look for ways to better inform everyone over the review process. Robin mentioned that methodology decisions have been made.
- Questioned whether opportunities to fix problems associated with NAEMS have been missed, asked whether we are looking at an issue of EPA requesting input yet EPA is charging ahead with actions and not properly adjusting actions and not adequately recognizing comments from the public and research community

- NSPS Grain Elevators Asked whether there are other thresholds for facilities with one million bushels vs. 2.5 million bushels? Robin didn't know the answer. Brock Faulkner answered "Yes".
- Robin Dunkins: EPA took Dr. Shaw's Grain Elevator NSPS question as an action item and will investigate further. The NAEMS project and process will continue moving forward. EPA welcomes any specific data and would like to have that data submitted to the SAB.
- Bryan Shaw: Suggested that by locking on existing science that EPA may be "chasing the wrong rabbits" and emphasized that data currently being used by EPA of NAEMS is insufficient.
- Robert Burns: EPA is requesting raw data from existing studies, raw data seems to be taking precedent over peer-reviewed journal articles.
- Annette Sharp: A National Fire Policy needs to be developed, questioning why EPA is circumventing fire management policy. Suggested that she is unsure whether EPA should be developing national fire policy, this seems more appropriate for USDA. Reemphasized that our country needs a national fire policy. All comments are in the context of the Exceptional Events rule and how EPA addresses smoke management. Second question, what is the scientific basis of the metric for "deciviews"?

Sally Shaver: Asked for further clarification of EPA's nonattainment designations.

Robin Dunkins: Offered to follow-up with a side discussion.

Manuel Cunha: Added discussion over the Fire Policy.

- Bob Avant: Provided two comments: There seem to be concerns regarding the NAEMS study and the long-term process used to develop supporting data for the NAEMS study. This Task Force submitted a resolution during the Salt Lake City Task Force Meeting on this topic. Second comment, grain bins subject to NSPS thresholds of greater than one million bushels in capacity will affect almost all of the grain bins and elevators in this country, this seems like a very low threshold for EPA to be considering.
- Kevin Abernathy: Non-detect issue Believes EPA is not considering all datasets available or not identifying where data sets could be obtained. Recommends EPA consult SJVAPCD staff as they have knowledge and resources available to assist with providing data.
- Robert Burns: Wishes to talk more later over trying to bring in more data sets. An issue is resources to bring data back to life. Is there a timeframe for the NAEMS data? Several other sets of data need to be looked at what time frame and when will emission factors be released?
- Robin Dunkins: Doesn't know what the SEC schedule is. EPA does not want to move forward too quickly. August 13th is their next scheduled teleconference. Does not anticipate taking too long for additional methodologies based on the datasets EPA already has. She does not know what timeframe. Environmental groups also involved with review.

- Sally Shaver: Concern over data and encourages EPA and USDA to work together over proposals in order to determine the implications prior to becoming regulation. Advanced technology installed and regulation doesn't take into account other environmental benefits or impacts. How does technology impact smaller grain facilities? Is there really a public benefit? Impacts to individual farms should be included in the analysis.
- Bob Avant: Do wildfires count toward ozone exceedances?
- Robin Dunkins: Yes, there are cases where fires have caused O3 exceedances. Exceptional events policy will be applied in many wildfire events.
- Kerry Drake: Mentioned that in Sacramento there was an exceptional event during last year's wildfire season.
- Bryan Shaw: Conveyed that exceptional events justification requires a substantial amount of work by the state and local air quality districts.
- Bill Herz: Asked when the Nitric Acid NSPS will be available for review? TFI worked with EPA on developing regulatory thresholds and emphasized that nitric acid production rules could have adverse impacts in the US.
- Robin Dunkins: Agreed to follow-up on the Nitric Acid NSPS and be in touch with the Task Force.
- Chief White thanked Robin and added that comments are being captured. He requests a meeting with EPA to talk about NAEMS, NSPS, Grain Elevators, and Fire/Smoke Policy. Convey time to meet and discuss.

Subcommittee Updates: Emissions Quantification, Mitigation and Validation Subcommittee

Robert Burns introduced Curt Gooch of Cornell University

Curt Gooch, PE, has conducted emissions studies in New York for the NAEMS study. He works at Cornell and is involved with Ag Air Emissions topic since 2003 or '04. He doesn't know much about the regulatory side, but understands the animal side with air emissions. He has developed a program to educate the dairy industry. Overall, the dairy industry felt it was good to participate in the EPA NAEMS and wanted the study in NY. He is not an air emissions scientist, as his interests are with animal environment

Slide presentation. Skipped some slides due to time constraints

A home page on Cornell's website focuses on air emissions. Developed in 2009, includes directions on how producers can fill out an EPCRA continuous release report for large CAFOs that did not sign a 2005 EPA agreement. Developed a workshop to estimate emissions and print the federal form.

Background on NAEMS – Recognized in 2002 that more research is needed before agricultural air compliance requirements are known. A process rate model is to be developed to estimate emissions. Examined what size farm was needed to report and final numbers were developed. In New York, 140 farms participated.

Discussed objectives of NAEMS

Timeline of NAEMS study--noted that GHG monitoring was added later.

NY5B site in New York –

Northeast Dairy Site – 1000 cow dairy, tunnel ventilated freestall barn / naturally ventilated freestall barn/ bunker silo

Fairly isolated location...slides presented.

Implications – Waiting to hear what this all means. Ammonia is what we should be concerned about.

- Bob Avant There is a lot of discussion over the NAEMS on the task force. You have a good vantage point with how a program was developed in NY. Would you have done something different with the design and do you see significant differences at other locations?
- Curt Gooch: Was not involved with the design. Visited two other dairy sites one in California and the other in Wisconsin. At that time, the California site was still setting up. Natural ventilated is a different approach. The Wisconsin site is similar to the NY site. Similar designs were applied at different dairies.
- Bob Avant: A cookbook was given to set up the monitoring. Having seen the cookbook, are there things you would have designed differently if you were to design the cookbook.
- Curt Gooch: He didn't give this much thought. The location of ambient monitoring sites was a concern and gave an example of ventilation air blowing onto a monitor. Air flows from negative pressure sites could influence the nearby air flows with the naturally ventilated monitoring. "Overall, we did the best we could did a good job and the farm did an excellent job monitoring bedding work done in the stalls each day, additional breakdown information on feed."

Sally Shaver: Did you monitor by each barn?

Curt Gooch: Looked at each barn and summed the results together.

- Bryan Shaw: Had a question about whether ammonia would be circulated in the barn. Threats and concerns over penalties for emissions. What do we need to do different knowing emissions can be 100 lbs/day and what are the environmental impacts? We had a crisis over the threat of regulations. Numbers are low, ammonia emissions show some facilities may need to report their emissions. Now we have data to better understand the processes. Challenges with emission factors applied from tested sources may not be applicable to other specific sources.
- D'Ann Williams: Agrees with Dr. Shaw. I know how difficult it is to implement. I would love to do measurements of everything. Would like your comments over lagoons and spreading of manure and implications they may have.
- Curt Gooch: Anaerobic digesters are designed to break down materials, creating more gas. Open storage could create a fiber layer along the surface that helps keep odors down. More studies are needed. Spreading manure is considered fugitive emissions so no

regulations are being considered; however, odors are present. Many farms are moving toward drag-hose injection, which has helped a lot.

- Kevin Abernathy: Individual areas need their own research. The ways animals are fed along with freestall barn variability are all factors. Review of emission factors compared with California is different. Which barns receive winds first?
- Curt Gooch: Three major barns on the facility. All are parallel and generally draw wind from the same directions.
- Kevin Abernathy: Monitors are typically placed upwind and downwind and located at the property line of the CAF, not necessarily at the property line itself.
- Curt Gooch: Monitoring for ventilated barns was essentially upwind and at the fan discharge. Much more difficult to monitor for naturally ventilated barns since wind will have more of an influence on monitoring. The amount of money we had to spend was a factor.
- Paul Martin: I would do things different in California with the naturally ventilated barns. We would have had more control if we have tested ventilated barns.
- Kevin Abernathy: I opposed anything different than what we are doing in California. I was not a stakeholder in support that would make it mandatory.
- Curt Gooch: My concern wasn't on EPA, but on citizen's enforcement (litigation). Council advised NY producers to participate. My concerns on manure are those farms with confined spaces that could potentially cause farm worker fatalities.
- Manuel Cunha: California through OSHA is looking at confined space in dairy and poultry industry. Wait until we have to put a device on a cow to collect and treat emissions.

Meeting was adjourned for lunch at 12:30

Returned from Lunch at 1:15

Curt Gooch continued his discussion, focusing on digesters.

Slide – Comparisons of the GHG reductions and motor vehicles removed:

Gave comparisons of GHG emissions with equivalent cars removed. An average of 0.4 cars removed per lactating cow equivalent.

Kevin Abernathy: Do you have a facility dollar amount for digesters?

Curt Gooch: Did not have the answer. He gave a ballpark figure of about \$600-800 per cow. Economics need better analysis. Need study to examine field application. Some producers have reported better crop yield with digestate over manure application. Pumping off site takes horsepower – fewer solids takes less horsepower.

Chris Petersen: What is the payback time? When can I expect to break even?

- Curt Gooch: He believes it takes about 7 years. Life is 20 years for the covers, 5 years for the equipment.
- Kevin Abernathy: In California, we have a concerted effort to work with the utilities. It is sad, but refreshing that New York has similar issues. Is there any mechanism to work on getting a waste stream that is sustainable?
- Curt Gooch: Kraft did an assessment for their facility over how much biomass is available in a community. They came up with 25 tons from 10 suppliers. Profitability looked at 4 to 20 cents per kWh and in no case was it profitable. Also evaluated converting gas to a pipeline quality gas, which was not profitable. What made it profitable were tipping fees, charging \$18 per ton made it profitable. The going tipping fee rate in New York is about \$75 per ton.
- Kevin Abernathy: Is there the possibility for the industry to negotiate a fixed net metering rate that will allow agricultural producers to be compensated at a rate that is profitable rather than break-even?
- Curt Gooch: Even at high electricity prices (\$0.22/kWh) there is not much profitability in any of the economic scenarios.

Chief White asked that the reactive nitrogen comments under Tab 8 of the workbooks be included in the next meeting between the Chief and Janet McCabe.

Soil Health:

Chief White introduced Ray Archuleta, NRCS Agronomist with the ENTSC. His presentation is on Soil Health.

- Demonstration Soil Stability Tests: Most powerful and visual tool is to bring producers to the soil.
- Dirt Clods were placed in graduated cylinders with water. The clods that broke apart had less organic matter, which originated from conventional tilled fields. Clods from no-till fields contained higher amounts of organic matter remained intact.
- To demonstrate erosion affects, water travels well through no-till soil, but runs off from conventional tilling.

He is convinced that tillage is the largest single cause of climate change.

Slides – A Powerpoint by Janine Benyus shares nature's designs on "TED" website.

- Robert Burns: Regards to no-till. I'm all in. Tennessee is the birthplace of no-till. More recently, five weeds species have developed resistance to Roundup. As such, some producers are going back to conventional till in order to control weeds.
- Ray Archuleta: The best way to control weeds is to plant fresh plants. Once we create a Frankenstein, it's out. We can suppress with living cover. We are doing research with covers.

- Bill Herz: Though I agree with 85 percent, I still believe in adding fertilizers. Even adding manure is fertilizing. You can't compare carbon with significant differences in nitrogen.
- Ray Archuleta: Commercial fertilizers are salt. I tell my farmers to use fertilizers wisely... they generally apply too much fertilizer.
- Bill Herz: What percent of farmers have access to manure?

Ray Archuleta: We can grow most of our fertilizers from beans.

Chris Petersen: I learned a lot from you today. I have enough manure to spread in the spring, never tilled, and planted corn; getting 200 bushels of corn before anyone knew what it was. Thank you very much.

Subcommittee Updates: Climate Variability and Bioenergy Subcommittee

Bill Hohenstein – Presented an update on the USDA efforts with climate change.

Publication: GHG Mitigation Options and Cost for Ag Land and Animal Production – Release 2012

Presented Slides -

Developing a standard for GHG quantification methodology

Biogenic GHG Comments and his letter to the EPA SAB Panel – He referred to the letter and reasons why it was done

- Bob Avant: I believe at the task force meeting a year ago, somebody said that the term "Climate Change" was changing to "Climate Variability".
- Bill Hohenstein: There are differences between climate change and climate variability. Climate Variability is the year-to-year change, where Climate Change is real and confirmed by every science organization. We are seeing in the data changes in temperature and the climate system. When talking about what to do, the research and practices help the farmer address climate variability that affects climate change.
- Bob Avant: He volunteered the subcommittee to provide comments to documents. The subcommittee will take a position on the letter to the Science Advisory Board at EPA. Tight time frame

Bill Hohenstein: A letter is already at SAB. Comments from the task force are appreciated.

Manuel Cunha – There are different philosophies over GHG. He will not stand for farmers becoming permitted by regulators over GHG reductions. Shared concerns over sustainability over GHG. Objections to any proposed management practices that would require farmers to grow different crops. Noted that several agencies are included in the document and agrees that the Task Force should be part of this process.

Chief White: The Task Force could be included.

- Manuel Cunha: Many documents, little time, no money, and we want comments now. For example, biomass power plants in California and BCAP are big; however, BCAP excludes chippers and farmers. Biomass power plant operators don't care about farmers at all. Farmers should not be subsidizing the biomass operators when the electricity rates are so low. Nothing in the documents over GMO's.
- Bill Herz: EPA is in charge of what rules meet equivalent to life cycle assessment for carbon. This is a 10,000 pound gorilla in the room as to what is going to live and die with regards to liquid biomass fuel.
- Cynthia Cory: I appreciate the CIG grants, but I would appreciate more time up front and to have the assistance money showing up little later.
- Bill Hohenstein: CIG programs and GHG initiatives are over-subscribed. The initiative was a specific target; I believe all proposals could have qualified under the general CIG. It is a NRCS program. I want to make sure our office is helpful. We would be happy to participate and assist as well with the task force subcommittees.

Bill Avant: We will have a resolution for the group tomorrow.

Meeting was adjourned for 5 minute break.

Meeting resumed at 3:47

Chief White mentioned that this task force charter is to expire on December 20th, 2012. He asked the members whether they want to have one more meeting prior to the end of the year and recommend a location.

Subcommittee Updates: Emerging Issues Subcommittee

- Cynthia Cory: She held a teleconference for recommendation over what to look at. We looked at a number of issues, including discussions over public health issues. The determination was made to focus on agricultural health at this meeting, and that D'Ann Williams will present information from a relevant health study.
- D'Ann Williams: Began her presentation over the Agricultural Health Study. She mentioned that she was not involved with this study and that her slide presentation was taken verbatim from the website at <u>www.aghealth.org</u>. The who, why, and results (Cancer & Non-Cancer endpoints). AHS request for additional collaboration, and importance to AAQTF. While it appears that farm populations appear healthier compared to other populations, they have increased rates for some diseases and specific injury.

Bob Avant: How does this study compare with truck drivers? Farmers ride on bouncy tractors.

D'Ann Williams: Did not know the answer.

Sally Shaver: Is it all the same group of people?

D'Ann Williams: Yes

- Sally Shaver: Did they ask about military service?
- D'Ann Williams: I don't know. It might have been asked in their questions regarding past work experiences.
- Cynthia Cory Are higher risks considered "significant"?
- D'Ann Williams: Yes, higher risks are considered significant.
- Cynthia Cory: Clarification over women growing up on farms having fewer reported incidents of asthma. She is concerned because of all the precautions taken; asthma cases are higher than ever and on the increase.
- D'Ann Williams: Hypotheses is that not being exposed as a child may cause result in diseases later in life. The more diverse the farming operation the better chance of not capturing a disease.
- Bob Avant: One thing that jumped at me is the evolution of modern agriculture. When I was young there was no such thing as cabs on tractors or covers on sprayers.
- D'Ann Williams: For certain pesticides, it didn't matter whether you were in a cab since exposure also happened during mixing.
- Bryan Shaw Correlation vs. cause. We have epidemiological studies to correlate health risks. Need to find a better way to determine what are the true causes that impact health. Ozone is an example where correlation is used for justifying lowering ambient standard thresholds; however, ozone and asthma do not correlate very well. There are likely other things going on to cause asthma.
- D'Ann Williams: Unless we have on the ground research we are not going to find these results.
- Bryan Shaw: It's the best we got, but it may be misleading.
- D'Ann Monitors to measure everything is prohibitive.
- Chris Petersen: You can't track wind speed and direction when spreading manure. Realities of my world I was hacking and coughing-up stuff.
- D'Ann Williams: There are opportunities to monitor more for rural health. Monitors in urban areas don't adequately report conditions in rural areas. Monitors don't have to be run by regulatory agencies.
- Kevin Abernathy: He shared his recent experience with this wife fighting cancer. Looking at some of the study folks and working in Stanford, there is a difference over the psychological approach of the individual. Farming is high stress work.

D'Ann Williams: I agree. There is a high psychological affect with agriculture.

- Manuel Cunha: This task force was put together to address air quality. When you start comingling, you have problems. Farming is much different today. Pesticides have changed. He has issues that some institutions are still using certain pesticides. I do not support co-funding with health institutions, as we have talked about many other issues with agriculture. Department of Health Services would have to deal with this, but I hope that USDA has a group working on this separately. I work for one of the largest hospital boards and I see more people coming in because of household exposure. They will call that a chemical that has 2,4-D in it. This Task Force must deal with regulatory issues with carbon, GHG, exceptional events, and other things, many we haven't studied yet. If I now allow OSHA to get involved with our air stuff, we have a problem. South Coast spent \$5 million on a health risk assessment for a school. This is not the direction of the Task Force.
- D'Ann Williams: My presentation was not intended for the Task Force to go in that direction.
- Manuel Cunha: Gave an example where San Joaquin Valley residents were trying to make valley fever an air quality issue.
- Brock Faulkner: Concerned that we are going to ratchet down standards that might not be helpful. Will more be looked at co-factors?
- D'Ann Williams: We need more monitoring to examine multiple inputs.
- Paul Martin: Need cross media implications over air, water, and GHG, and more collaborative work with Hispanic community. What strikes the most interest is the effect of environmental regulation on the agricultural community. More certainty with regard to regulatory compliance needs to be developed.
- D'Ann Williams: Cross media was on the list, but no focus on uncertainty
- Terry Spence: I worked as a laborer on my farm and was ignorant. I took many risks with pesticides. We've come a long way. We have a different agriculture now. I don't know where I stand on the air quality aspect for the Task Force, but I have concerns. It's up to this committee to decide. As an air conservation issue, there is a concern. Many farms are integrated, not the old family farm much anymore.

Chief White excused himself and turned over meeting to Wayne Honeycutt.

Subcommittee Updates: Air Quality Standards

Brock Faulkner: A second paper has to do with air quality modeling. There has been delay over monitoring issues. Between the Phoenix meeting and now there have been issues with fire policy and other exceptional events rules. Not acceptable for just a smoke policy. There are several key points – Two issues under Tab 9 but will focus on fire policy.

Pete Lahm gave a presentation over the 1998 Interim Exceptional Events Policy Revisions

- Slides Challenges include definition of wildfire and prescribed fire, agricultural burning and definitions, new standards with general conformity and increasing nonattainment, EE Rule process for ozone and PM, GHG and Carbon Black, and a Tiered Smoke Management Approach
- Brock Faulkner: USDA needs to be driving this fire management policy. Smoke management should not be separate from fire management.

Annette Sharp: How much prescribed burning is occurring?

Pete Lahm: About 13 million acres/year. Wildfire numbers are extremely variable

Annette Sharp: How much burning would it take to get the forests healthy again?

- Pete Lahm: It depends on the treatment between mechanical and forest burning. He estimates about 120 million acres require treatment. Historically in western states 30 million acres a year was a natural cycle.
- Annette Sharp: A surprising factor is that of homeowner security. What does it cost to do exceptional events for EPA? At the Kansas Task Force, it was mentioned to be about \$100,000 per exceptional events demonstration.
- Sally Shaver: Frustrated over the collection of fire data--she doesn't see any progress. At one of the first meetings, a statement was made that the Clean Air Act prohibited fire. Of course that wasn't true. Trying to define anthropogenic fire or wildfire should not be EPA's task. EPA should be focused on the smoke. Encourages USDA to decide what the policy on burning is. Agriculture vs. Forestry, public vs. private. Cross media or cross benefits are not being included in policy development. If we base nonattainment areas on smoke, we won't solve the impacts that caused the problem in the first place. We had a natural events policy and was envisioned to be easy.
- Bob Avant: "Amen Sister". The House is going to open the Clean Air Act. I don't know when, but it needs to be on our radar. There are issues we need to brief the Secretary on. There are issues that continue to go on ever since I've been on the task force. We need to think about what are the implications and opportunities with opening the Clean Air Act. It sounds like it's going to happen. I know hearings will be held this fall.
- Manuel Cunha: "Well said, Sally". I know in our San Joaquin Valley every time we have a massive burn we go out of attainment. In agriculture, we don't burn anymore except for certain situations. The burning issue must be resolved and must be handled by USDA. We can't be against each other (ag vs wildland fire). We need to deal with this once and for all. It should not be discussed in the Farm Bill, as this is reserved for EQIP issues under air quality. The Secretary must get this now, not later. What I would like to do on this one, have every one of us physically sign the resolution.
- Wayne Honeycutt: I recommend waiting until the subcommittee makes a motion. There may be issues with some Task Force members being federal employees and not being able to sign such a document.

Agriculture Emissions Impacts to Workers

- Wayne Honeycutt: We have a tentative item for D'Ann Williams. It was decided that her presentation continue now instead of after dinner.
- D'Ann Williams: Gave a presentation on a public health perspective on Industrial Animal Operations—this was work that D'Ann did several years ago.

Slides presented.

Bob Avant: Perception between traditional and industrial farming process? How do people perceive the difference between the two?

D'Ann Williams: It depends. These are many definitions.

- Bryan Shaw: There is no safe level of PM. EPA has utilized the assumption that benefits are down to zero. Almost all of the MACT rules benefits are very small. What you find is the majority of PM2.5 reductions that most would result in being below the NAAQS standards. All federal benefits are 78% are due to EPA actions.
- Bob Avant: Any thoughts over the epidemiology from the Yakama Valley and its' transferable to other areas?
- D'Ann Williams: Good question, but it's not. Using urban standards to regulate a rural environment is following the wrong rabbit.

Kevin Abernathy: Were allergens from grasses and other sources examined?

D'Ann Williams: No. Allergens associated with livestock, cats and pet were examined.

Wayne Honeycutt adjourned the meeting for the day.

Day 2 - August 2

Wayne Honeycutt started the meeting at 8:03 AM

New York Biomass Crop Assistance Program

Greg Johnson moderated this section with the Biomass Crop Assistance Program (BACP). He introduced Larry Abrahamson, SUNY Center for Sustainable and Renewable Energy, and Virginia Green, BCAP Manager for the Farm Service Agency (FSA) in New York.

Larry Abrahamson, Presented Slides – Project for willow development.

Virginia Green, Presented Slides - New York BCAP Project

Robert Burns: Once the willows get too large, what's their fate?

Larry Abrahamson: Harvester will take up to 4 inch material. I do admit that some materials in Western NY were too large to mechanically harvest. Must harvest the willow by age 6. Multiple stems will turn into a stock and too big to get through the harvesting head. You

don't want to wait more than 8 years. After the final cut (typically 20 years) it can be killed by spraying the stumps and then plowing it out with a regular disk.

- Bill Herz: What are the economics of woody biomass? A lot of these power plants are regulated due to NOx and smoke emissions, as biomass power plants are subject to the same standards as other power plants. Is energy the only product?.
- Virginia Green: We've had other types of applicants other than power plants, such as paper plants for pulp wood
- Larry Abrahamson: We can't get a consistent end user to sign a contract. We could supply other users. We are trying to get a bio-refinery operating, perhaps in a few years.
- Bill Herz: What do you do about the fly ash?
- Larry Abrahamson: The fly ash can be applied to farm land, such as the wine growers. Heavy metals are a concern, primarily due to other fuel sources consumed at power plant. Need to get enough crop in the ground to show users it's sustainable and can use it. Starting a bio-refinery, materials can be shipped farther and still make money. Can also make particle board. Extract sugar out and make pellets pellets that can't get wet.

Bill Herz: If you fertilize will you double your production? What percent nutrients?

- Larry Abrahamson: Irrigation and fertilizer can potentially yield 12 tons/acre. I don't know what percent nutrients.
- Bill Herz: On the tour, we stopped and saw switch grass that could have used fertilizer and water.

Doug Shelmidine: Is the \$27.50 per ton payment at the field or the plant?

Larry Abrahamson: "That's bottom line."

- D'Ann Williams: Are the facilities burning willow, are they specifically burning wood wastes?
- Larry Abrahamson: These plants are burning woody biomass. Other wood materials may be from furniture plants, which are high value product. The state does run tests to determine what is in the fly ash. The biggest problem is the heavy metals.

Wayne Honeycutt thanked Larry and Virginia and welcomed Brock Faulkner.

PM Sampler Update:

Brock Faulkner: Performance of FRM PM Samplers in Rural Environments – An Update

Presented Slides

Sally Shaver: I didn't understand a 16 size.

Brock Faulkner: We wanted to collect smaller than 30.

Dr. Robert Vanderpool of EPA arrived to the Task Force and made the following comments:

I appreciate your continued efforts. I'll be using EPA's wind tunnel within the next few months and will apply these methodologies. Please send me information as it would be helpful. We share a wonderful cooperative effort, discussing procedures and exchange of information. I think we could do a better job communication what we are seeing. This work is not easy. My hat's off to you.

Brock Faulkner: For us to have a relationship with EPA is monumental.

Wayne Honeycutt: I am not the only one who appreciates the collaboration.

Manuel Cunha: Is it appropriate to decide on our next meeting? Manuel made a motion to have the next Task Force meeting in Texas at College Station – Last week of November after Thanksgiving or the first week of December.

Bob Avant: Second the motion.

Kevin Abernathy: We anticipate seeing Dr Faulkner's work at his lab.

Vote was unanimous for College Station, Texas sometime immediately after Thanksgiving.

Meeting was adjourned for 15 minute break.

Emissions Quantification, Mitigation and Validation Subcommittee Recommendations

Robert Burns: Developing a two to four page summary for inclusion with the three white papers. Summary has not yet been written – Sally and I are working on. Develop a standardization framework for future funding, then publish as a ASABE technical reference, and get papers out to the charter of the Task Force

Recommendations on EPA's Integrated Nitrogen Committee Report

- Sally Shaver: Four items of Key Recommendations. All these items should be in place before EPA takes them into a regulatory arena. Significant comments over regulatory approach to non-point sources. Have specific concerns for NOx and supplementing with reactive N. Encourage support for current Ammonia nitrogen in the NAAQS. Commented on water quality issues, though this is not a water quality group
- Bill Herz: Discussion was negative toward agriculture. EPA is already writing regulations simply because of nitrogen. This should be an administrator to administrator issue. Eleven different offices are working on N regulations with lack of scientific information.
- Bill Angstadt: I like what you've done here. What is EPA's approach? I don't know if this is strong enough. What we've gone through with the Clean Water Act sort of bundled area sources and point sources into a single box. Have we stated clearly enough that non-point sources of fugitive agricultural sources should or should not be part of this discussion?

- Sally Shaver: The Clean Water Act it is on the table. Under the Clean Air Act there is no distinction over point or non-point sources. We've watched closely when EPA updates policy. We have to hit it stronger under the water regulations, but I'm not sure what to do under the Clean Air Act since we don't know the regulatory actions.
- Bill Angstadt: We should reaffirm that EPA is not permitting fugitive agricultural sources. I express there is potentially a more forceful approach.

Wayne Honeycutt: Could we move forward for review by the whole task force.

- Sally Shaver: The intent was to show what we support and what we don't support. The format may be somewhat awkward.
- Bill Angstadt: Perhaps we want to be more forceful.
- Bryan Shaw: I want to add to what Bill Herz said. Three things I had an influence on was whether or not we could make EPA decide whether ammonia is a criteria pollutant. There was discussion over removing animal protein from food, and recommended this issue was not relevant. Something needs to be done to educate the public. Discussions over what are reasonable regulatory or voluntary approaches.
- Manuel Cunha: Is it possible that we can get some changes now so we can bring back within the hour to set down direction for the Chief to discuss with Janet McCabe about. Can we do that before we vote on this now?
- Bill Herz: Work in Clean Water Act issues now and work on Clean Air Act issues later. Move forward with what we have now over EPA's reach with the Clean Water Act and create a separate document later to address the Clean Air Act, because it's more difficult to address.

Manuel Cunha: Is ok with that.

- Bill Angstadt: I think that this resolution is to get it to the table, get it to dialogue, confrontation doesn't get us very far.
- Manuel Cunha: I am saying no way legislation will happen within the next few months. I want to explain that we want to have a dialogue with EPA to discuss over the several months. We don't want confrontation. Let's have a meeting at the table with the right people to talk, not get people who just listen.

Paul Martin – Place in a document and forward it.

A motion made that a letter be crafted from the Chief to EPA to outline concerns over air and water quality issues in the several page document and a cover letter for outreach with EPA. Motion carried – Elvis to work with the committee to develop a cover letter for EPA.

Air Quality Standards Subcommittee Recommendations

Brock Faulkner: Deadlines for Recommendation 2 & 3:

I am comfortable forwarding these recommendations to EPA within the next couple weeks:

Recommendation 1 – USDA should draft a comprehensive national fire/smoke policy that maintains ecological integrity and reduces the unintended consequences of catastrophic fires resulting from fuel build-up.

Recommendation 2 – The AAQTF should make formal comments on the current draft guidance on the Exceptional Events Rule (EER) that addresses High Wind Events inclusive of fire/smoke impacts as well as the anticipated EER guidance policy on fires when it is released by the EPA.

Recommendation 3 – The AAQTF should make formal comments on the latest PM NAAQS (now including language about visibility and "deciviews."

Bob Avant: Concerns about watering down the recommendation 1 due to "In Lieu Of" statement. I wondered do you want the power under the recommendation or is there something else not apparent to me.

Brock Faulkner: We don't want to water it down.

- Annette Sharp: My thought is if we can't do it one way, then do it another. The other intention is after we come to some conclusion to install a place holder for developing a conservation measure. We make recommendations that USDA and EPA move forward but place a place holder so it could be modified for this particular process.
- Bob Avant: To follow-up We don't want to exclude EPA from the process. If there is some EPA buy in, that's important. Maybe instead of "in lieu" of this alternative on page 11, instead EPA will be consulted. Make it more powerful.
- Sally Shaver: Recommendations 2 and 3 Want to be more specific on how these recommendations move forward. In regards to fire management, USDA and other land management agencies will have the responsibilities on fire at the right place and EPA with smoke responsibilities. But if the wildfires cause a nonattainment problem then the responsibilities are there.
- Manuel Cunha: I agree with you Sally. EPA's role is the emissions from smoke. We can finally get this done and get this discussion started right away. We need to get this done it has been 15 years. USDA develops smoke management and EPA comments and approves the approach.
- Cynthia Cory: If you have two weeks to get the comments out, our responsibility is getting this finalized by two weeks. If there are changes, stick to a 24-hour turn around. Establish a deadline. If they miss the timeframe, you're out.
- Bill Herz: EPA cannot be the authority to regulate in this regard. There is a specific role for EPA. They develop modeling tools to help ease the process for exceptional events. USDA has a role and a lead, but EPA also has a role or lead or they won't play in this standoff.
- Annette Sharp: Robin would anticipate this back and forth process so we don't submit something to EPA as horrible. EPA should focus on health effects, but why are they involved with fire management since they are not experts in this field. USDA has the experts and that's where it should be managed.

Bob Avant - For clarity, is it clear what we're asking now or do you need more information?

Elvis Graves: It's clear to me. We can set up a teleconference, but I need one of you to take the lead.

Motion was voted on and passed

Wayne Honeycutt directed Elvis Graves to work with the AQ Standards Subcommittee on getting this through the process.

Emerging Issues Subcommittee Recommendations

Cynthia Cory: Yesterday, we had a public health discussion. At the previous meeting we worked with Rick McVaigh who made a presentation and brought a paper regarding a risk-based approach for the NAAQS. We also have examined other ag air quality research ideas. We would like to see if there is any way we can tie some of these concepts together for our next meeting and our subcommittee's direction over the coming months.

No other comments or recommendations, but she did have a couple comments:

- The RICE rule and the Statement of Principles that was finalized. We had an issue and then resolution. Cynthia recognized Robin's participation and thanked all for a good conclusion.
- Coming to California in November is the modification of labeling requirements for Genetically Modified Organisms (GMOs), which has a bounty provision. Several exemptions, including animals, restaurants, and alcohol. In a grocery store, however, items must be labeled. There are no standards or de minimus for GMO's. No certification for acceptance. Can't use the term "Natural" on processed foods. They have challenges and we have a big fight.
- D'Ann Williams: Lisa Greene, Brock Faulkner and I are involved with rural air quality monitoring and initiative and will get something together by the end of summary.
- Lisa Greene: Sampling strategies are not necessarily appropriate, including the analysis. Maximize monitoring network – repository of samples that have not been analyzed for chemicals.
- Bob Avant Consider the possibility that the House of Representatives may open up the Clean Air Act. Some hearings in the House over this issue. This would be something for the Emerging Issues should look at. Task Force should have this on our radar. It will not be a short process, but the door has been opened slightly
- D'Ann Williams: Lisa I think it would be good to know what is going on now. Make some recommendations on what we would like to see collected.

Manuel Cunha: I request five minutes to discuss the MOU.

Wayne Honeycutt: Any opportunities for public comment? No public comments were received.

Resolution for the Climate Variability and Bioenergy Subcommittee

- Bob Avant: Comments are around the uncertainties over the science of GHG for bioenergy. Production and construction of a bio-processing facility. The uncertainties and ambiguous regulations and policies. A concern over a certification systems. Move to approve this resolution for a letter to go forward to the appropriate officials as EPA supporting Dr. Hohenstein's letter to the EPA SAB Panel dealing with biogenic GHGs.
- A motion was made for the Task Force to communicate with EPA over concerns addressed by Mr. Hohenstein.

No comments by task force members and the Motion Passed.

EQIP update –

- Mark Parson Mr. Parson summarized air quality support in EQIP, including CIG(b) funds, called the national Air Quality Initiative (AQI), and also support for several AQ enhancements under CSP.
- Bill Herz: Can you elaborate what is under combustion systems?
- Mark Parson: That is the engine replacement program
- Manuel Cunha: NRCS has done an outstanding job with the EQIP program. Since 1996 NRCS is listening to task force members. It's great to see what you folks have done. You may have the dollars, but farmers are also investing 50%. An effort should be made the Hill over the contribution producers are making. Most producers want to keep their old tractors, but under the Clean Air Act farmers are being forced to replace their old tractors. With Carl Moyer funding in California and incentive grants, we've informed our legislatures where their farmers are placing their money. It's not a free handout of government money.
- Mark Parson: I appreciate that. From the Chief on down, we try to deliver the benefits as efficiently as possible. In the 2008 Farm Bill, "cost share" was replaced by "payments" to help define world trade agreement challenges that cost-share dollars are subsidies. We've been able to demonstrate that payments not subsidies. Regarding the next Farm Bill, we are actively looking at the environmental benefits of these dollars.
- Bill Angstadt CSP Slide No 4 with the spray nozzles and nitrogen. He noted that more acres are reported for controlling pesticides over that of nitrogen stabilizers. Believes not enough education is applied at the field offices or the RCD's.

- Wayne Honeycutt: He sees this as an opportunity to review the approach as an agency. It may not necessarily be a high priority to the producer to add a nitrogen stabilizer, but reducing spray drift is much more of a priority of the producer.
- Mark Parson: Depending on what we see can be interpreted in different ways. I think you are correct, a producer may not know what a particular practice does. We need to look for opportunities for additional education on our side and our partners.

Agency Updates:

Pete Lahm – US Forest Service

Slides –

Handout – A National Cohesive Wildland Fire Management Strategy – Phase II Smoke is identified as a major concern

Annette Sharp: How long is the planning cycle?

Pete Lahm: 10 year cycle. Easy process to amend and appeal.

- Annette Sharp: 10 years is much too long for updates. Most states subscribe to FEMA incident comment system.
- Pete Lahm: Coordination outside an incident is not typically included with incident command. Regarding monitoring, there are issues with overtime and budget for setting monitors. The exception is California. The FS is trying to figure how to fix structure with communicating with incident commander.

Terry Spence: A comment over insurance and liability with burning.

Wayne Honeycutt: NRCS is working on an early warning process for water situations

Charlie Walthall – ARS

Managing Agricultural Greenhouse Gases. Compilation of what work has been done by ARS Data Management Systems – GRACEnet Dr. Walthall reviewed work primarily on GHGs and climate change within ARS. Three publications were mentioned:

GraceNet Managing GHG Emissions

Climate Change and Ag: Effects and Adaptation (USDA)—500 pp, ready by Charlie in next 2 weeks; will give out URL. Will be boiled down to 8 pp NCA Ag section!

CAST 2011 report on GHG mitigation and carbon sequestration in agriculture: \$50 URL site (hardcopy)

- D'Ann Williams: Will members of the Task Force receive complementary copies of the document?
- Bill Herz: I serve on the committee. I will check.

Robert Burns: The GRACEnet book and Managing Ag GHG

Charlie Walthall: USDA Climate Change Affects and Adaptation document should be available in two weeks and posted on the web as an eBook (about 500 pp—will be used to develop the newest Agriculture section of the National Climate Assessment). The executive summary will be available right away.

Cynthia Cory: Research funds for California?

Charlie Walthall: Not for California.

Statement of Principles

Questions/comments:

Manuel Cunha asked for discussion about Statement of Principles document.

Cynthia Cory provided background on SIP credibility for ag emissions reductions (CA example), and that voluntary emission reductions could be applied for meeting a SIP. Nobody has ever done this before where voluntary emission reductions could be applied to a SIP. Manuel Cunha and others thanked all for making this happen.

Closing of the Meeting

Recognition for Doug Shelmidine's work with hosting the meeting and arranging the tour.

Wayne Honeycutt: Check emails frequently. Meeting was adjourned at 12:45 pm.