Minutes Overview

Prevailing themes of the Agricultural Air Quality Task Force's (AAQTF) discussions focused on the need for Task Force oversight of certain issues and on the areas of policy, research, and emerging technology. Various presentations updated the members about the current state of USDA and EPA research and policy and provoked discussions highlighting the chief concerns of the Task Force. The AAQTF was urged to recognize the need to take oversight roles to measure the effectiveness of implemented recommendations and perhaps to focus on issues in the San Joaquin Valley, as it continues to be one of the top areas of Clean Air Act nonattainment in the U.S. The Task Force also developed goals for its new session and identified subcommittees to further define those goals.

AAQTF members:
Viney Aneja
Bob Avant
Mark Boese
Garth Boyd
Nan Bunker
Tommy Coleman
Bob Flocchini
Bob Jackman
Bruce Knight
Ray Knighton
Donna Lamb
Dar Olberding
Cal Parnell
Kevin Rogers
Dave Roper
Joe Rudek
Sally Shaver
Rita Sharma
Annette Sharp
John Sweeten
Doug Shelmidine
Stephanie Whalen
Phil Wakelyn
Bob Wright
Beth Sauerhaft, DFO

Other USDA and EPA Staff:
Randy Freeland, NRCS
Ray Sinclair, NRCS
Elvis Graves, NRCS
Terry Clason, NRCS
Darrel Dominick, NRCS
Darren Hickman, NRCS
John Beyer, NRCS
Javier Ruiz, NRCS
Van Kozak, NRCS
Ron Heavner, NRCS
Jerry Walker, NRCS
Wavey Austin, NRCS
Gregg Sokora, NRCS
Larry Poindexter, NRCS
Meredith Dahl, OGC
Jean-Mari Peltier, EPA
Philip Lorang, EPA
Greg Susanke, EPA
Linda Metcalf, EPA
Robin Dunkins, EPA
Scott Mathias, EPA
Karen Flournoy, EPA
Michele Laur, EPA

Members of the Public
Linn Wainner, OK, DEQ
Eddie Terrill, OK, DEQ
Teena Gunter, OK, DoA
James Orgeron, LA, DEQ
Steve Thompson, OK, DEQ
Rhonda Jeffries, OK, DEQ
Mary Pettyjohn, AR, DEQ
Ron Petty, private
Bob Drake, private
Paul Martin, California Dairy Assn.
Ben Weinheimer, TCFA

Ross Wilson, TCFA
Marla Peek, OK, Farm Bureau
Josh Zahn, National Biodiesel Board
Avery Palmer, Inside EPA
Bryan Shaw, TAMU
Jordan Vaughn, Dairy Producers of NM
Vic Johnson, General Chemical
Albert Heber, Purdue University
Darrin Drollinger, AEM
Trisha Marsh Johnson, Jones-Hamilton
Andy Miller, AR Farm Bureau
Dan Waldner, OSU
Art Stoecker, OSU
Rick Treema, Johnston Ent.
Lance Embree, Johnston Ent.
Glenn Gehring, Cherokee Nation ITEC
Melinda Hoskin, Sac and Fox Nation
Rebeckah Freeman, AFB
J.D. Carlson, OSU

Agricultural Air Quality Task Force
Meeting Minutes
Tulsa, Oklahoma
Thursday, August 28, 2003

Beth Sauerhaft, USDA-NRCS, opened the Task Force meeting and immediately turned it over to Alice Whitecloud who conducted a Native American welcoming ceremony. Following the ceremony, Sauerhaft introduced herself as the Designated Federal Official and discussed a few points of business.

Darrel Dominick, State Conservationist for NRCS, welcomed the group to Oklahoma. He then recognized Annette Sharp with a Certificate of Appreciation and eagle feather for her leadership in air quality issues both within the state of Oklahoma and nationally.

Sauerhaft echoed Darrel's appreciation of Annette Sharp and thanked him and Randy Freeland for their assistance with the field trip and meeting. She then introduced Steve Thompson, Executive Director of the Oklahoma Department of Environmental Quality. Thompson also welcomed the task force members to Oklahoma and acknowledged the importance of agriculture within the state.

Bruce Knight, Chief of NRCS and Chairman of the Agricultural Air Quality Task Force (AAQTF) gave an update on NRCS activities including progress in implementing various Farm Bill programs – especially those that may have some air quality benefits.

Jean-Marie Peltier, Counselor to the EPA Administrator, gave an update on personnel changes in EPA leadership and briefly mentioned a few items of interest to the group such as methyl bromide and the Safe Harbor Agreement.

Sauerhaft opened a discussion of the May meeting Minutes. After a few minor comments regarding the minutes, Phil Wakelyn asked that approval be held until the next day due to a couple of places where there are minor questions and inconsistencies. Bruce Knight agreed to honor this request.

Knight opened the floor for discussion of documents recommended for submittal to Secretary Veneman.

Annette Sharp handed out information from the Education and Technology Transfer Committee on two projects they are proposing the task force do during this charter: a Manual and a website. These would be discussed in greater detail on day 2 of the meeting. Joe Rudek recommended that a Committee be instituted to review products going on the website. Annette recommended that her committee would be the one to do so.

Bob Avant presented documents from the Research Committee that would be discussed later on. These included a draft resolution on the non-road diesel rule and a strategy for meeting research needs historically discussed by the task force.

Dave Roper made a presentation on behalf of the Policy Committee.

The following members who were not at the last meeting introduced themselves: Donna Lamb, National Air Quality Program Manager for the USDA Forest Service. Dar Olberding, Idaho farmer and lobbyist in the state legislature dealing with air quality issues. Viney P. Aneja, professor of air quality, North Carolina State University.

Beth introduced Scott Mathias, Acting Associate Division Director, EPA Office of Air Quality Planning and Standards. Scott prefaced his presentation by announcing that he had just been on the job for a month and he was looking forward to this opportunity to learn first hand about some issues facing agriculture. He discussed the NAAQS review process for the 8-hour ozone and PM 2.5 standards and implementation of the rules governing these standards.

Wakelyn asked if it is appropriate for states to apply National Ambient Air Quality Standards for PM as boundary line measurements. Mathias replied that EPA doesn't think that meets the spirit of the Act.

Shelmidine asked what the implications are of being listed as nonattainment for our county in New York right off Lake Ontario. Mathias responded that the basic requirements that would apply to any nonattainment area, apply. There would be an obligation to do some planning regarding how they would try to move the area into attainment. In some cases, the planning process might be quite simple. If you are not deeply into nonattainment, it is very possible that some regional and national measures that are already on the books, or being planned, will take care of your problem.

Aneja asked why there is such disparity between the attainment dates for 8-Hour Ozone and PM2.5 criteria pollutants. Mathias said he would address this later but provided a short answer that the PM 2.5 implementation program is governed by Subpart I of the Clean Air Act. This subpart gives the designated areas up to five years and possibly up to ten years, upon the Administrator's discretion, to meet the standards. The attainment dates are set under Subpart I. For ozone, EPA did attempt to use Subpart I to

set attainment dates which would have allowed areas that had both PM and ozone nonattainment areas to put them on the same schedule. However, the Supreme Court said that EPA did not adequately take into account the 1990 Clean Air Act Amendments. That is Subpart II which contains specific requirements and attainment dates depending upon the severity of the nonattainment problem in the area. So EPA has to reconcile the Supreme Court's decision versus EPA's original intention to provide states with the flexibility to put their programs on the same track.

Whalen asked two questions: 1) If there is recognition of the speciation differences on particulate matter in the Criteria Document. 2) Since a lot of the impetus for putting these rules in their place is the estimated health risks to society, is there ever any post-mortem or studies verifying that this occurred - or does one assume there have been measurable benefits to health?

Mathias responded to the first question on speciation stating that his recollection is that the different studies do in fact, show some potential associations with some of the different species within PM. They don't do it consistently across the country. He believes the scientific conclusion coming out of the Criteria Document is that it is still appropriate to regulate mass, total mass, at this point in time until more is known about the species themselves.

Shaver responded to the second part of the question stating that the Agency is required to do a retrospective look at Clean Air Act implementation. But it has been done more in terms of nonattainment areas and how much progress has been made in meeting the standards. In terms of PM that may be a little more difficult, but EPA has actually done chamber studies with humans and seen the physiological impact of certain levels of ozone which is pretty well proven in the health community. Some of that is epidemiological studies, and doesn't necessarily carry the same weight as the actual human exposures.

Boese asked if Mathias could give an early indication as to what EPA might do with regards to the 1-hour standard when it finalizes the implementation rule. Mathias was unable to provide any information on this as senior management had made no decisions.

Flocchini asked Mathias what is going on in a rural county that would have high ozone or ozone violations? Why are the receptor sites the ones that have to try to do the control issues when obviously they are not the ones producing and this is clear for a pollutant, a secondary pollutant such as ozone? Mathias responded that the Administration is trying, as you know, through things like Clear Skies Act to eliminate ozone and PM transport. Hopefully through Federal programs and vehicle programs, there will not be a need for extensive local controls.

Calvin Parnell requested updated/more recent data on PM10 and ozone nonattainment areas including a map showing progress made bringing nonattainment areas into attainment.

Questions from second half of presentation:

Sharp asked what legislative action states should be keeping an eye on in terms of this resolution of conflicting deadlines between PM 2.5 and regional haze. Is there a backup plan? Mathias replied the passage of the SAFETEA doesn't look great and we are concerned about that. We're not sure what other legislative vehicles might be candidates for inserting and getting it passed.

Sweeten asked what they should read into the absence of nonattainment areas for ozone and PM2.5 in the Great Plains. Mathias replied that it indicates a good job being done; that the meteorology out there is favorable; and that without the densities of other areas, there isn't a problem. He hadn't taken a look at the 2001 to 2003 data.

Aneja asked what EPA thinks might be in the future of ammonia as it relates to PM Fine. Sally Shaver promised to discuss the issue in greater detail later.

Bob Flocchini asked what EPA thinks is the uncertainty in transport models and what are the state-of-the-art transport models. Mathias didn't feel qualified to answer but offered to facilitate a presentation on the subject at a later meeting. Bob thought such a presentation would be valuable and that the example mentioned earlier of the exceedence in New York truly demonstrates the importance of such a discussion. He thinks this will become an academic interest in terms of looking at a transport models. He wanted to get a feel for what EPA thinks the relative uncertainty in their own models would be.

John Sweeten requested an EPA update on the deliberations regarding a PM coarse standard.

Avant asked if there would be more time to work on the PM coarse rule and make sure it's based on experience from good science. Mathias replied that he anticipates the PM coarse rule moving on a similar timeline as that for PM 2.5.

Mathias proceeded with his presentation on the Clear Skies Initiative and Transport Rule and the progress EPA has made since the Initiative was introduced by the administration.

Aneja asked if any tangible benefits in terms of either nitrate reduction and deposition or ozone concentrations have been seen due to the 1990 Clean Air Act. While Mathias couldn't specifically answer this question, he did clarify that the implementation schedule for the NOx SIP Call doesn't require compliance until May of 2004. Therefore, we may not be seeing substantial NOx reductions yet.

Rogers asked what happens to areas under current regulation for PM10 nonattainment that have had to implement operational changes; what happens when a PM standard switches to a coarse standard? Is there a grace period? Is the reason PM10 is switching from PM10 to coarse because the Supreme Court said we needed to have

coarse standard? Mathias said that he assumed that the things producers have been doing will help towards attainment of both the fine particle and the PM coarse standard. There will have to be some sort of transition strategy, maybe similar to the one that EPA has introduced with ozone, where there are a couple of options: one, keeping the 1-Hour requirements or the PM-10 requirements in place; and the other one where we sort of partially remove them.

Sally added one quick comment that before everyone goes away thinking that removal of the PM-10 standard is imminent, they should remember that in 1997 the Agency tried to weaken that standard and the courts came back and EPA was not able to do that. And there had been discussion about repealing that at the time.

In reference to the Clear Skies legislation, Wakelyn asked if this means EPA can't, on its own, propose something like the Clear Skies Initiative. Could they issue a proposal to address some of the issues that we are dealing with and therefore the legislation would not be needed? Mathias said EPA is required to follow the Congressional authorization language in the Clean Air Act (CAA; 42 U.S. Code 7401 et seq.) to address regional transport.

Knight, seeking clarification, asked if this is intended to be an enabling platform to allow development of trading mechanisms as a means of responding to the compliance needs as opposed to the standard common controlled regulatory approach. If so, what practices or activities present opportunities for contribution to trading mechanisms? If both the Clear Skies Initiative and the Energy Policy Act passed, would that bring us into greater compliance in 2020? Mathias replied, yes.

Public Input

Ross Wilson, Texas Cattle Feeders Association, urged aggressive involvement of the Task Force with the development of the PM Criteria Document.

Marla Peek, Oklahoma Farm Bureau, wanted to ensure that EPA is collaborating with ARS and not trying to gather data on their own or through different avenues.

Darrin Drollinger, Association of Equipment Manufacturers, wanted to alert the Task Force of the potential difficulties with EPA's Non-Road Diesel Rule for producers and equipment manufacturers.

Prior to introducing the first speaker after lunch, Sally Shaver clarified that while EPA recognizes that ammonia is a precursor for PM Fine, they also understand that the science on which to base strategies for minimizing PM Fine and its precursors is very uncertain.

Phil Lorang, Group Leader from EPA's Emissions Monitoring and Assessment Division, gave his presentation on the revision of the National Emissions Inventory of Ammonia from Animal Husbandry. The inventory deals with ammonia from all

livestock including those on and off pasture or confined. He discussed several projects: one deals with an ammonia emission model focusing on monthly level estimates, monthly totals and covers all sources of ammonia, animal feeding, fertilizer application, motor vehicles and industry. The second covers just dairy and tries to do more accounting of variations across the U.S. and factors in temperatures. The third is LADCO, Michigan Air Director's Consortium, also called the Midwest Regional Planning Organization (RPO). Fourth, is a new project of all five RPOs pooling their grant money and using EPA as a mechanism to prepare an emissions model for animal feeding operations.

Questions:

John Sweeten said that according to slide number eight, step two, there were fifteen tracts like model farms. Does that mean there are only fifteen ways that livestock and poultry are produced? Lorang responded that the fifteen is actually more than that because some of them have variations such as cows lactating or not lactating or solids separated or not separated. In such a situation, the two cases were combined into one tract. EPA is aware that there are many ways to raise animals and many dimensions to farms and depths of pits and everything else, but the assumption is that every animal lives in one of these fifteen plus types of operations. This is a way of trying to reflect some of the variation among operations without getting into an impossible number of distinctions which could not really be treated separately anyway.

Knighton inquired about the process for providing more of a national input into this emission inventory and asked if there were another mechanism for rounding out the research nationally and updating the inventory on an ongoing basis as the research results come in? Lorang asked if he were talking about after the completion of this cycle. Knighton said this would be an ongoing process as research results come in. Lorang recommended the inventory be widely broadcast as invitation for comments and a meeting with USDA to decide if there needs to be a structured process for comment during those two months. In addition, the RPOs would be the other forum for discussion on the inventory and it would be good to bring in involvement of agriculture.

Jackman asked how EPA would account for the emissions inventory in relation to the high fecal content of ammonia emissions, regardless of the number of chickens currently housed in the barn. Lorang replied that while he's not sure the approach is the best, for now, they will assume steady state so that what you feed one year, gets excreted that year and gets emitted; and he couldn't speak as to whether that is a good or bad approximation to the actual physical situation.

Wakelyn asked Lorang what the confidence limits would be on the model that he is using. Wakelyn also asked if there had been any effort made to measure the other precursors that are required to produce PM2.5 particulate from NH4 emissions by complicated atmospheric chemistry. Lorang did not know the confidence limits on the model as this is not his area of expertise. Lorang also stated that EPA is doing work on estimating precursors of PM 2.5.

Flocchini asked Lorang to elaborate on taking existing emission types and transfering them across animal types. Will emission factors from chickens be used for beef? Lorang responded that there are lagoons on some beef operations; if there were no testing of emissions from lagoons on beef operations, they might take findings at hog farms and try to make them applicable to a lagoon at a beef operation. This would occur where there was no other option.

Peltier asked if there is a way to tweak the approach to make it more reflect the recommendations from the Academy and develop a process-based model instead of model farms. Dr. Sweeten replied that one would need more research to be done.

Boyd inquired why the rush to push forward if some recommendations are ignored and emissions data, that need to be collected, are not ready.

Boese asked if there is any work taking place to better our understanding of the entire process regarding the conversion of ammonia and NO_X to ammonium nitrate? Lorang replied that there's a lot going on but he doesn't know the details.

EPA Agricultural Update:

Sally Shaver, EPA, began her presentation going over the CAFO fact sheet. A sample disk was distributed that can be used to guide people through the OAQPS website. Further discussion related to the animal feeding operation strategy and the need for a better understanding of emission sources to address air environmental issues associated with large animal operations. The goals of the EPA strategy are 1) to work cooperatively with the stakeholders to get meaningful air quality improvements; 2) to provide some assurance to the public and the regulatory authorities that the producers are complying with the Clean Air Act; and 3) to identify any new issues, new technologies, new concepts and define the process of how we could get those approved and applied expeditiously.

Questions:

Knighton expressed his concern in not being able to identify a single person at EPA to be able to talk to regarding agricultural air quality research done at EPA.

Parnell asked Shaver to clear up some confusion regarding reporting requirements under the Clean Air Act and CERCLA/EPCRA. Shaver stated that they are two separate laws and that reporting requirements under the CERCLA/EPCRA would only overlap with Clean Air Act in that air emissions would be estimated in the same ways. CERCLA/EPCRA requirements are on specific threshold amounts. The penalties for failure to report are extremely heavy, and the applicability of CERCLA/EPCRA to AFO/CAFOs is an issue that is still under discussion by EPA.

Parnell asked a question regarding the driving force for the Safe Harbor Agreement being CERCLA/EPCRA, not the Clean Air Act, since there are not a lot of major sources out there – sources in animal agriculture. Would the fact that there are not a lot of major sources in animal agriculture have an impact on the Safe Harbor Agreement?

Shaver continued her presentation stating that the Voluntary Compliance Policy draft document is undergoing internal review at both the EPA and USDA. She gave an update on the issue of permitting agricultural sources under the Clear Air Act (Title V and New Source Review (NSR)) stating that what is a source and what is included as fugitive emissions is still under review.

- In terms of the California Title V update, the legislation (SB700) in California would revoke the agricultural exemption.
- A new permitting issue under the Clean Air Act that has recently come up is the regulation of animal incineration.
- Regarding the update on emission reduction credits, there is a policy or guidance document that is pending which will require tracking and quantification of emission reductions.
- There is no progress to report on the ag burning guidance document.
- Environmental Defense filed a lawsuit against EPA last week petitioning EPA to list PM diesel emissions as a hazardous air pollutant (HAP) under the CAA. A second petition was presented to develop new source performance standards for new and existing stationary sources of diesel PM emissions under Title I of the Clean Air Act.

Questions:

Wakelyn asked if there were policy in California regarding how to decide whether a farm is a major source that would require a Title V permit for various air emissions. With regard to regulations in CA for irrigation internal combustion engines would farms in other states be affected in the same way? Shaver responded for the irrigation engines, the Agency went forward with rulemaking which says that certain types of engines manufactured after 1996 and meet the requirements of the Clean Air Act for Tier II type engines, if you have those in place, then they would not be subject to the Title V permitting requirements.

For older stationary diesel engines, based on number of engines and hours of operation, growers could be required to get a Title V permit.

The CAFO situations that fall under the definition of major sources will be delayed until an August date. Litigants agreed to give us until November 13th before those additional sources would be required to apply for a Title V permit. In anticipation that the legislature in California would be able to remove the ag exemption in a timeframe that is required a state run program would be instituted and the time frames for compliance would be extended.

In response to Wakelyn's question regarding the applicability of the CA situation to the rest of the country for irrigation i.c. engines, Shaver replied, no. The direct final rule that EPA promulgated only applied to the situation in California; that's really the only area that EPA is aware where it might be applicable because of the nonattainment status (i.e., some agricultural areas in CA are in severe (25 TPY) or extreme (10TPY) nonattainment for ozone). She thought the irrigation pumps were somewhat of a unique situation to California but for other sources, she did not think it would be unique and that anything EPA decides for those sources would have national implications.

Kevin Rogers asked that in reference to animal emissions, what does it take to stop the time clocks for six months and allow the new information to be used for this process as opposed to continuing down the road with information that is not quite up to date? Sally replied that she had committed with her colleague, Phil Lorang, to solicit feedback on the ammonia emissions inventory from the Task Force before it went out and that if a few months were necessary to wait for some specific data that would clarify issues, timelines ought to be able to be adjusted.

Bob Jackman asked if the number of medical incinerators has increased in the United States from the 2000 Sally mentioned. Sally replied that the number had dropped to less than 200 medical waste incinerators.

Cal Parnell asked if a decision had been made regarding whether fugitive emissions would be counted toward determining the Title V annual emissions that we pay Title V fees for? Sally responded that when we were talking last year, we did say the decision had not been made regarding those. You do not count fugitive emissions for major source definition. There was a lot of concern however at that time on the part of the Agency, at least, that once you were in and you were a major source, then the modification that increased your fugitive emissions could trigger a new source review permitting. EPA has since looked at their rules and do not think that is the case because those particular types of sources are not part of the listed number of sources where that applies. We thought we had finalized certain rules; we had actually proposed to do something and we never did finalize it and that was a number of years ago. Now, there may still be some quantification issues. There may also be some local controls that are necessary for some of those fugitive emissions. I think the states would still have the opportunity to require fees beyond Title V as part of their Title V program.

Dave Roper made a motion, and Garth Boyd seconded, to seek reasonable time to procure more scientific data to establish more accurate emission factors based on current and ongoing credible studies. A brief discussion ensued regarding the phrase "reasonable time."

Joseph Rudek requested clarification on the motion in regard to the charter by which the Task Force was formed and specifically to its task of advising the Secretary of Agriculture. Dave Roper responded by saying that the charter gave this authority and that the 1997 MOU facilitated the request coming from USDA to EPA.

Rita Sharma made a motion to make an amendment to this motion making it time-definite that the date be based upon the termination date for the expansion and be made previous to the first meeting in 2004, stating "Such scientific information could be received and disseminated to the Task Force prior to our first meeting in 2004." There being no second, the amendment was not in order.

Chief Knight returned to Roper's resolution to seek a reasonable time to pursue more specific data to establish more accurate emission factors. The motion was carried by unanimous vote.

Parnell motioned that the Task Force Chairman appoint a Committee to monitor and provide input to the EPA's process for promulgating a NAAQS for PM coarse (PM 10 to 2.5) to ensure that the impacts of new NAAQS upon agriculture operations are considered and report back to the Task Force at the next meeting. This motion was seconded by Phillip J. Wakelyn.

Bob Flocchini motioned to postpone action on this amendment until after the reports were given by the Emerging Issues and Research Committees. Parnell and Whalen seconded the motion. There being no discussion, the motion was passed by unanimous vote.

Sally Shaver recommended the Emerging Issues Committee take responsibility for reviewing the regulation of animal incineration which is found under Section 129 of the Clean Air Act. Knight asked the Chairman of the Emerging Issues Committee if they would accept this recommendation. Avant accepted this responsibility for the Committee.

Mark Boese gave a quick update on the highlights of legislation on the Assembly floor in California. He began with SB700 which is a bill that was introduced to align both federal and state law regarding Title V and the New Source Review Rule. This bill has been amended several times but as it sits now, it would require that serious federal nonattainment areas within California adopt, implement and submit for inclusion into the state implementation plan, a rule or regulation requiring best available control measures and best available retrofit control measures for agricultural sources of air pollution and for precursors and fugitive emissions from these practices.

Bob Avant followed with an update on the Clean Air Act Advisory Committee. He briefly shared the presentation he made to this Committee earlier in the summer. This presentation highlighted the differences between agriculture and other industries and some of the issues agriculture faces.

Kevin Rogers delivered the Emerging Issues Committee report. This Committee recommends working on the following issues: the adaptation and use of process-based models, accurate emission factors, agricultural VOC emissions, alternative performance standards, quantification of reductions associated with BMPs, innovative trading opportunities, renewal fuel production, standardizing of sampling and monitoring PM

emissions**;** voluntary incentive-based programs, non-road diesel rules and holding a summit for emission factors and modeling.

John Sweeten discussed a draft concept paper for holding a summit on modeling and emission factors.

Dr. Bryan Shaw, Texas A&M University, was then introduced and discussed CERCLA and the emissions of ammonia from animal feeding operations. These emissions need to be quantified accurately in order for EPA to move forward with their regulatory and decision-making process. Dr. Shaw also addressed the recommendation from the NAS Panel that USDA and EPA, in cooperation with other experts, work to evaluate protocols used for monitoring and sampling of emission factors.

Kevin Rogers asked task force members if they thought that holding a summit in the future on this issue could be beneficial. Boyd thought it was a good idea. Chief Knight asked who would pay for the summit. Sweeten responded that funding would be through a combination of small grants and programs. The types of grants would be from different agencies and possibly some foundations. Also corporations or industry groups might provide funding.

Before departing, Jean-Mari Peltier made a final comment regarding the need to get a handle on emission factors from animal operations and those associated with BMPs that have real environmental benefits.

A motion was made to accept and file the report and that a more detailed framework of the summit proposal be drawn up and presented to the Task Force at the next meeting, including a financial proposal. The motion was seconded by Calvin B. Parnell, Jr. There being no discussion and upon a unanimous vote, the motion carried.

Bob Avant began the Research Committee presentation by asking each Federal Agency to give their report individually beginning with the ARS update by Bob Wright. Wright provided a handout summarizing ARS air quality research. ARS currently has twenty-seven projects that partially or totally contribute to air quality goals. The main areas of research are: (1) measurement, prediction, and control of gaseous and particulate matter emissions from animal production operations; (2) measurement, prediction, and control of particulate matter and gaseous emissions from crop production and processing operations. Bob mentioned three new ARS activities: (1) partnering with EPA to evaluate instrumentation for measurement of ammonia through EPA's Environmental Technology Verification program; (2) partnering with private sector groups to develop and evaluate instrumentation and techniques to characterize emissions from agricultural operations; and (3) establishment of a new lab in Bowling Green, Kentucky that will focus on environmental issues associated with animal waste management.

Questions:

Bob Flocchini referenced the five-year programs and asked if they were in various stages or just starting and if the 233K at Lubbock, Texas is dedicated to air quality or is that the total project? Wright replied that all ARS projects in a National Program are on a five-year cycle. New projects can be started during the cycle if additional funds are appropriated or an existing project is redirected. Wright stated that the $233K listed for Lubbock, Texas represents the part of the project dedicated to air quality research.

Bob Avant voiced his concern regarding the need to put some priorities on these air quality issues relative to funds expended so there's no downtime.

Stephanie Whalen suggested that a quick way to get money would be to take a percentage of the monies for anyone involved (commodity groups) and set it aside for risk assessment purposes.

Avant asked Ray Knighton to give an update on CSREES activities. Knighton spoke about the NRI Integrated Air Quality Program. He stated that sixty-two applications had been received. A panel will meet the last week in October and awards are projected to be made in mid-November. In reference to the FY04 NRI RFA, the Under Secretary required one RFA to come from NRI. CSREES has been authorized to spend up to twenty percent of the budget on integrated activities. Because of this, there is going to be a mixture of integration in basic research in the FY04 RFA for the Air Quality Program. Also scheduled for the third year of the Air Quality Program, is a tentative national workshop for awardees in the first two years proposals to conduct a national worship around emission factors and best management practices.

Questions:

Flocchini wondered how successful they had been formulating their review panel with people that have expertise in air quality and agriculture. He also recommended that the summit be done earlier than the third year. To this Knighton replied that he just got his panel manager on board last week and otherwise it's too early to tell how the review panel is going. Regarding the timing of the summit, to a certain degree, they're captive to the budget process and the timing of the program that CSREES runs.

Avant introduced Donna Lamb to give an update on Forest Service activities. Donna briefly discussed the five consortiums located around the country. Next mentioned was the Missoula Technical Development Center that did a comparison on real time particulate monitors needed for prescribed fire. A comparison with the federal reference method was also done and it developed new calibration factors. The Forest Service is also involved with the IMPROVE monitoring network. The Forest Service monitors PM 10 and PM 2.5. For PM 2.5 monitors, the Forest Service has monitored this for almost fifteen years. This monitoring is approximately eight million dollars worth of research or implementation that is on the ground currently in the Forest Service.

Avant suggested deferring the updated report on the Research Program until the morning session. Sauerhaft pointed out that by postponing the above report, Dr. Parnell's motion that was previously postponed until after the presentation of the Emerging Issues and Research Committee would be entertained tomorrow after all of the Subcommittees' presentations were complete. After a brief discussion, as acting Chair, Dr. Sauerhaft decided to postpone the report to be voted upon for acceptance until tomorrow, asking everyone to please look at the information tonight.

PUBLIC INPUT

Al Heber indicated that he believes scientific measurements are needed and that buildings are the best place to start getting baseline air emissions from CAFOs. He described how he calculates gas concentrations and ventilation air flow rates. The basic principles of industrial air pollution monitor methods are extremely useful and are being applied in two current federal projects. The data acquisition system allows for remote operation and calibration of instruments. More data is needed and it is great CSREES provided NRI funds and ear-tagged them for proposals.

Trish Marsh-Johnson announced there are currently two U.S. poultry and ag association projects under way with between eight and twelve months of data collection on emissions from dry litter poultry facilities. She reflected on the brief mention of animal incineration to be regulated by the Clean Air Act stating her belief that the most effective containment strategy in farm animal disease outbreaks is immediate depopulation of susceptible animals around the outbreak premise. Two previous disease outbreaks actually grew because of fighting between the Environmental Agencies and USDA APHIS on the disposal options. Thus, the animals could not be disposed of as quickly as possible. It was asked that the Committee would consider the need for animal incineration during farm animal disease outbreaks in addressing and promulgating rules under Section 129. At the very least, have a farm animal disease exemption or catastrophic loss exemption.

Sauerhaft closed the day's meeting by asking Dave Roper, in reference to his motion that was carried to seek a reasonable time to procure more scientific data to establish more accurate emission factors to go forth as a recommendation for the Secretary of Agriculture, to please draft the contents of such a letter for review by the Task Force in tomorrow's meeting which will be put in proper format.

The meeting for August 28, 2003 was adjourned.

Day 2

AAQTF members:
Viney Aneja
Bob Avant
Mark Boese
Garth Boyd
Nan Bunker
Tommy Coleman
Bob Flocchini
Bob Jackman
Bruce Knight
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Agricultural Air Quality Task Force
Meeting Minutes
Tulsa, Oklahoma
August 29, 2003

After Sauerhaft opened the meeting, Avant discussed the work of the Research Committee. He described a background document in which the previous task force identified a sixty five million dollar effort to implement the research program. He acknowledged that while the group had limited success getting small amounts of money re-programmed, a

million dollars a year won't accomplish the research needs in a timely manner so that regulatory needs can be met; and, in the current budget situation with the deficits that the federal governments facing, these amounts may not be realistic at all. Therefore, anything that we can obtain above the current levels of funding would be viewed as a success.

Top priority issues were identified as PM 10, PM 2.5, better emission factors, and a more accurate emissions inventory. Baseline emission factors are critical for regulatory efforts. The committee recommended a long-term priority of re-visiting the sixty-five million dollar programmatic issue and trying to encourage USDA staff, through the budget process, to try to get the sixty-five million dollar program authorized through Congress. The committee recommended that a short-term priority is to consider reprogramming internal funds to get some of the very high priority matters underway.

Avant continued that the four priority research issues to target for initial efforts for developing emission inventories and factors are: PM 2.5, PM 10, NH3, and H2S. There are probably tens of thousands of potential emission sources if you look at agriculture, all over the map. Depending on the process, it can cost almost one hundred thousand dollars to develop one emission factor. There is not enough money in the federal budget to develop emission factors for each and every one of these areas. This means we have to target the ones that are the biggest challenge to us and then solve those problems first.

Avant continued his discussion with the PM 10 sampler issue raised earlier by Viney Aneja. There is disagreement on the performance of the PM 10 sampler when you get beyond the ten micron range and most of agricultural activity goes beyond that so there ends up being a bias issue. It is important to have a correction curve or some way of accounting for areas outside the sampling range capabilities of the PM 10 samplers. This would be very important for agriculture to meet compliance demands.

This issue becomes somewhat clouded when EPA takes a look at the PM coarse (PM 10 – PM 2.5) issue and how it affects the PM 10 sampler. If we are looking at a PM coarse standard, how does that affect the performance curve of the PM 10 sampler? And, how will it affect sampler performance when we get into an environment where particle size goes beyond the mass median diameter of ten microns, especially in the agriculture area.

The importance of agricultural dispersion models is another area the task force has discussed. Land Grant Universities are doing some good work on dispersion modeling relative to agriculture. In addition to these air quality sampling, inventory, and modeling issues, if agriculture doesn't devise good control technology, agriculture will be out of the game. This sums up the comprehensive way in which we recommend looking at research needs.

The attached report identifies some of the areas that really are at the top of the list of requiring attention. This is followed by a plan of action beginning with the reprogramming of funds for FY2004 and designation of identification of separate programs for air quality within USDA. After the short-term steps are initiated, the long-term step is to try to initiate the 5-year 65 million dollar research program that we have recommended in the past.

Wakelyn clarified some of the sampler issues saying that the argument is not that different federal reference method (FRM) samplers have to be used, rather that implementation adjustments need to be made to address the over sampling bias that occurs when FRM samplers are used in rural areas with large mass median diameter (MMD) particulate matter.

Rudek requested peer reviewed articles describing the sampler bias concerns. Wakelyn gave him a copy of the "white paper" developed for the last AAQTF by Dr. Parnell.

Rudek recommended that odor and pathogens, monitoring protocols and process-based modeling be added to the priority list. He didn't see development of emission factors as the issue, rather it's a policy issue where USDA should assist EPA in the revision of existing emission factors and adjust available data. He asked for clarity as to how the research priorities and proposed distribution of funding were drawn up.

Rudek discussed the pressure to put agriculture out of business completely ignores the PM health effects. He also noted the sentence at the end of the third paragraph is unclear and that the PM Fine (PM 2.5) standards are based on very sound science that was tested in the courts.

Avant identified committee members: Bob Avant, Viney Aneja, Robert Flocchini, Calvin Parnell, Bob Wright, Mark Boese, Donna Lamb, Tommy Coleman, and Philip Wakelyn. He didn't foresee an objection to adding Rudek's recommendations regarding odor, monitoring protocol, process-based modeling and external expertise. These points are noted on page 3 of 3. He continued that repeated priorities reflected thinking of previous members and provides a logical starting point for this group to provide recommendations.

Avant voiced concern about health effects and that agriculture is under attack from a number of different sources - internally in this country, and externally due to pricing situations and the strength of the dollar. The textile industry in this country is going to be virtually non-existent because of pressure from overseas and the world economy. He added that all agriculture is under stress and that the Task Force agrees that agriculture is not asking for a pass on regulations. Appropriate regulations and if good data don't exist, bad data could put agriculture out of business. It is very important that the Task Force develop issues that could affect the liability of the strategic importance of agriculture in this country. He added that it's important that the Task Force address these issues so that agriculture in this country can complete globally.

Flocchini responded that Rudek raised some interesting points but emphasized that all comments regarding the existence of various data need to be referenced so that everyone is discussing scientific issues on equal footing. As a member of the NAS committee, he responded to the odor issue saying that EPA does not regulate odor under the CAA and there isn't an odor standard, that's why it's not on the list. In addition, Wakelyn indicated that pathogens also are not regulated as air pollutants under the CAA.

Rudek replied that he didn't intend any offense but that with all the discussion of the PM 10 issue it would really benefit the panel to have the scientific papers behind them. He would like to be educated and see the science behind it. Regarding a standard for odor, there are no standards for ammonia either so the issue is whether the Clean Air Act covers odor or not. He thinks that the discussion of odor and regulation is an interesting and worthwhile perspective for discussion. Rudek offered that he would like to participate in the Research Committee from this point forward to try and work out some of these details as we move forward.

Flocchini recommended, with the permission of the Chair, that Rudek be part of this subcommittee. He asked that Rudek's comments be put in writing with references that can be reviewed by the Task Force. This is absolutely critical in order to discuss this issue including odor and pathogens.

As Chair of the Research Committee, Avant invited Joe to participate with the group.

Aneja suggested dialogue with EPA because they are responsible for managing the environment in the US.

Shaver offered to fulfill requests regarding the PM monitors. She has taken the issue back to the monitoring staff at EPA and talked to some of the OAQPS scientists. There is recognition that the cutoffs on the monitors are not precise. As I think we discussed in this committee before, we're probably not going to change the federal reference methods. However, we did agree at least internally that we would consider this issue in the implementation of the standard and as you saw yesterday in Scott Mathias' presentation, the time is now and so I will commit that this issue gets address in that guidance. I do think it probably would be helpful for your committee to be on call so that we can sit down and have a dialog with Scott Mathias in order to figure out some options for how to deal with this issue.

Knighton suggested that the list of items in the first paragraph is confusing. He was unclear research committee's intent that these items be recommendations for research. He suggested that this needs to be clarified if this is indeed background information, and therefore needs to be moved to the background. He informed the task Force that CSREES is in the process of working on their FY 2004 budget for the integrated air quality program - the NRI.

Knighton asked for clarification on what was intended by—"the task force should be consulted on project selection." He does not think it is appropriate for the task force to consult on this section because there are a number of scientists here who have submitted applications to that program and that would present a conflict of interest.

Avant replied that the task force should be consulted, at least in a general sense, on research priorities. This is one of the virtues of both Knighton and Wright being on the task force. The task force should weigh in to some degree on the overall research priorities from the funding point of view.

Parnell offered Rudek references that refer to agricultural models. We're not using agricultural models. We're using models designed for industrial operations. We're also using air models.

Rudek clarified that there have been a number of times when, it's been said by others on the task force that it will take some time to get the agricultural community up and running on a lot of its modeling efforts. He continued that he was merely saying that there is a lot of expertise outside of the land grant universities that can help fill the modeling gaps.

Whalen said we are fortunate to have task force members that were on the NAS Committee and able to help with some of these priorities. In addition, this was a field with very few researchers 30 years ago and it hasn't changed all that much. That's what this task force has been saying – funds need to be directed to the people with the expertise and ARS.

Sweeten said that the American Society of Agricultural Engineers has a committee that is working in this area of emission rates and factors, developing standards for odor measurements and other constituents. This work will help move these task force priorities along. He emphasized this in response to Rudek's concerns, saying that they're working hard to work with other technical societies to move these issues forward. He further said that it's a long-term effort developing standards and getting peer review consciences.

Shaver asked whether the committee meant to discuss BACT or if that were too narrow and should be replaced by Adoption of Best Management Practices which is broader and less constraining.

Shaver responded to an earlier question saying that she thinks part of the confusion has been that EPA did not want to make adjustments to the federal reference method because of the long process involved. She felt this issue could be dealt with better in terms of the implementation of the standard and that the time was definitely ripe for EPA to become more fully engaged in this issue.

Avant motioned that the task force move forward with those four bold bulleted items including the odor and convey them to the Secretary. This was seconded by Whalen. He recommended adding some verbiage in the second item about dialogue with EPA regarding implementation of the federal reference method. He requested the group allow the committee to incorporate those general changes on pages four of four and put that in letter format and send that on to the secretary so that, at least some policy can be on the record for action as necessary by both Bob and by Ray and by the secretary also. It's all but that in the form of a motion.

General discussion clarified that the task force will authorize the research committee to draft a letter and then forward it on to Sauerhaft for Chief Knight to submit it to the Secretary.

Flocchini noted that he disagrees with the total incorporation of those two items, two and three and one and four. He thought that they were important enough to note separately from the overall recommendations

Sauerhaft said that the motion on the table is to send a letter to the secretary using page four of four with the priorities for research - she assumed as amended by the research subcommittee. The motion was called to vote and all responded favorably; none responded in opposition; Shaver abstained. She noted that Rudek will be added to the Research Subcommittee.

Flocchini volunteered Dr. Parnell to do a workshop on the research area at the next meeting.

Sauerhaft continued with the motion on the table that had been postponed. Parnell had motioned that the task force Chairman appoint a new subcommittee to monitor and provide input to EPA's process for promulgating a standard for PM coarse; to ensure that the impact of the new NAAQS upon agriculture operations are considered and reported to the task force at our next meeting.

Flocchini volunteered Dr. Parnell to do a workshop on the research area at the next meeting.

Parnell amended his motion to have this subject be assigned to the research committee and that the chair of this committee appoint a subgroup to deal with this.

Rogers seconded.

Rudek pointed out that at the first meeting ad hoc committees were established to discuss the greatest points and official chairpersons with responsibilities evolved. He wondered if there should be a formal selection of the committee chairs.

Margheim interjected that in the past, the Chief as Chair has always appointed task force members within the boundaries of some constraints. As task force committees are organized, they are required to have a diversity of folks so that all views are represented.

Sauerhaft reiterated the original motion that the task force Chair appoint any committee to monitor and provide input to EPA's process for promulgating a NAAQS for PM coarse to ensure that the impact of this new NAAQS upon agricultural operations are considered and report to the task force at the next meeting. And then the amendment is that rather than the Chair of the Task Force appointing this committee, that this would be like a sub-work group of the Research Subcommittee that is appointed by the Chair of the Research Committee.

A motion to accept the amendment was carried.

The amended motion was then discussed with Parnell clarifying it. The purpose of the motion is to have a Subcommittee of this Research Committee of this Task Force to inspect and monitor what's going on; perhaps provide some input with EPA and the process, if there is an opportunity; and, keep the task force informed as to what's going on.

The motion was called and subsequently carried.

Avant asked that anybody wanting to serve on the Committee, would let him know.

Margheim echoed Rudek's point that it is very appropriate for the Chairman to officially put a list out of the various committees and their Chairs. He promised to discuss this with Chief Knight to make it official.

A presentation ensued by Greg Tomberlin from Barlow Projects, Inc who described his company's waste to energy project which uses chicken litter.

Knighton gave a brief description of collaborative efforts between USDA and NASA .

Lamb gave a briefing on the US Forest Service's Healthy Forests Initiative

Roper gave a report for the Policy Committee in which he delineated some of the areas they propose working on. The report was accepted by the Task Force and the group was encouraged to work with other committees to coordinate areas in which there was overlap of issues.

Sharp gave a presentation for the Education and Technology Transfer Committee. She described the pilot effort for the manual which they are working on. This will be a reference guide for producers, planners, regulators and others to help them understand terms, regulations, abatement strategies and personnel and agencies involved in working to reduce agriculture's air emissions. This group also proposed design and handling of a website for this electronic manual – the website would be housed at Texas A&M University under the supervision of Dr. Parnell. The Task Force accepted the report.

The next meeting was set for Dec 3-4, 2003 in California with promises of more details to come.

Sauerhaft adjourned the meeting.