

**CITIZEN ADVISORY COMMITTEE for the
GENERIC ENVIRONMENTAL IMPACT
STATEMENT (GEIS) on ANIMAL AGRICULTURE
Meeting Notes
February 13 &14, 2001
Holiday Inn, Arden Hills**

CAC members or alternates in attendance: Gary Allen, Pat Bloomgren, Fraser Hart, Gretchen Sabel, Andy Steensma, Pat Henderson, Harold Stanislawski, Tim Tracy, David Preisler, , Galen Lisell, Troy Gilchrist, George Raab, Myron Just, Kristin Sigford, Tina Rosenstein, Helen Palmer, Dennis Bottem, Bob Ferguson, Kent Sulem, Larry Schultz, Jim Sullivan, Duane Alberts, Mark Schultz

CAC members not represented: Chris Radatz and Ken Albrecht

EQB staff present: George Johnson, Gregg Downing and Angela McGovern

Facilitator: Virginia Pierce and Charlie Peterson, Management Analysis Division

Guests: Paul Toren, EQB Boardmember, Matt Drewitz, MDA,

The meeting came to order at 9:30 a.m.

Please note that these minutes are only an extract and summary of the discussion, which took, place over two full days. These minutes do NOT include every remark made by every person. The minutes try to capture some of the major ideas. An audio-tape of the entire meeting is available to any interested party to review.

In order to make the minutes more useful, I will occasionally insert my own thoughts or bridging observations into the text without attributing these to myself. Sometimes I will add material or opinion based on my readings or meetings attended , which I feel helps explain the topic under discussion more completely to an outside reader. To help reduce confusion, where it is not obvious that these remarks are coming from George Johnson, I will italicize the material to remind you that this text is my thought , not due to any member of CAC. I apologize if this was unclear to anyone or they felt I was misquoting them. I take full responsibility for my editorial license.

Welcome, overview, and introductions

The meeting opened with remarks by George Johnson. He informed the CAC members of the contents of the two mailings sent and pointed out additional materials at their place. Marlene Halverson had sent in a partial document on Animal Welfare late on the afternoon prior to the meeting. This was copied and distributed to the group.

To help reduce the confusion from multiple policy documents a color coding system was used to distinguish among items.

Mr. Johnson then provided an update on the progress on the Technical Workpapers (TWP's). He indicated that he was extremely sorry about not having a complete document on Animal Welfare. In his opinion, Ms. Halverson has made a sincere effort to produce the material but has reported being unable to get the feedback from her European advisors in a timely fashion. Despite the delays on this topic progress must be made on the other areas of the GEIS. CAC may revisit the Animal Welfare TWP later or do policy recommendations in absence of the TWP. Work will have to proceed on other topics regardless of this delay.

Virginia Pierce made introductory remarks on her goals and expectations for the meeting. She advised the group that she had a scheduling conflict and that Charlie Peterson would be facilitating Wednesday's session. The main outcomes planned for February's meeting was to get policy recommendations for the three topics we have already worked on. These include; Human Health, Air Quality and Odor and Animal Welfare. Virginia Pierce discussed the area of policy development and recommendations with the group. She also mentioned the group had its first opportunity to review the draft GEIS language for the section on Human Health. EQB staff abstracted this material from the EarthTech TWP. It is intended to be a shortened version of the most pertinent TWP material, which will be used as a summary of this TWP for readers of the GEIS. The first draft of this document was fifty pages and EQB staff feel it needs to be condensed a great deal. Virginia also asked for approval of the January meeting minutes.

Due to a schedule miscommunication the Soils Department will not be speaking in February. Their team will present in March 2001. Mr. Johnson explained the reasoning behind the extensive minutes produced for the January meeting. The intention was to more accurately capture the discussion and viewpoints of the CAC members as we try to come to some agreements on policy statements. The meeting minutes are eventually going to be posted on the Internet to inform the citizens of how much discussion went into these policies. CAC was generally pleased with the level of effort and detail in these.

Mr. Johnson informed CAC about the need to have public meetings once the draft GEIS was completed. The group was polled as to their recommendations for times and places for these meetings. EQB is required to have a series of public meetings around the state to present the work done and seek comments and criticism from the citizens on the results. Invitation was made to have as many CAC members as possible attend these meetings.

The intention would to have six to eight meetings located all around Minnesota with one or two in the Twin Cities. It is important to have CAC members at these meetings to show the extent of the long-term Stakeholders involvement in reviewing the scientific information and developing the policy recommendations. Citizens need to be aware of how much volunteer time and effort went into the GEIS. The document should not be perceived as solely a State of Minnesota Planning Agency production.

The people of Minnesota need to understand why the process has taken so long and cost so much. The importance of the CAC is that it represents many groups with divergent interests agreeing to find areas of compromise while identifying areas that need additional study.

Mr. Johnson noted that policy development is a difficult process. It will become a much more significant aspect of the project in the months ahead. The Legislature is wrestling with many of the relevant issues this session. They are seeking whatever preliminary guidance we can provide as soon as possible. CAC will continue to work on policies for the draft GEIS for the rest of their time together. Any policy suggestions that the CAC is able to reach consensus on, will carry great weight with the EQB and the Legislature given the diversity of stakeholders on the committee and their long deliberations. There will be a strong drive to find consensus on as many policies as possible. A mechanism will be provided to give voice to minority viewpoints along with the consensus of the group.

Mr. Ferguson recommended that in southwest Minnesota the best time for public meetings for farmers would be before September 15 and after October 30. Mr. Johnson notified the CAC that except for Animal Welfare, all contracts are delivering on time and within budget. Debra Elias Morse who is working as Technical Writer and Assistant GEIS project manager for the University of Minnesota will be visiting CAC on Wednesday to observe and update the group. She is also writing the description of Animal Agriculture TWP and will be assisting EQB in drafting the GEIS document.

The Feedlot Inventory/Census project is nearly complete with the data gathering in the non-inventory counties. Mr. Scott Freburg of LMIC staff will present an update to CAC in the March 2001 meeting. He will also discuss some of the potential for spatial analysis of the collected feedlot data. This portion of the project is a bit behind deadlines due to some complications working with the National Agricultural Statistics Service (NASS). Agricultural census data used in the non-inventory counties is subject to some the same restrictions that you find on US Census data. Individual farmers or operations cannot be identified. Only statistical aggregates of data are available in some areas.

Mr. Johnson informed CAC that as we approach the end of the State fiscal year, we are likely to find ourselves with some extra money in our budget we must spend or return to the Legislature. One of the most legitimate ways to use these funds is to contract for additional work products with our existing contractors. Mr. Johnson notified the CAC of this possibility. He asked them to be aware that they might need to authorize additional expenditure for services in accordance with their previously recommended priorities for future work. The exact amounts available will not be certain until April or May 2001.

Ms. Rosenstein asked if we had already contracted for a Phosphorus Index as this item was the highest single priority of the CAC in previous discussions. She was assured that the University of Minnesota, Soils Department, had already undertaken this item.

Mr. Johnson also reminded the CAC that due to certain inflexible time constraints EQB would not be able to finish the Animal Agriculture GEIS by the end of the 2001 Fiscal Year on June 30, 2001. We were currently requesting an appropriation of \$ 170,000 from the Legislature from FY 2002 funds to carry the GEIS process through until January 2002. Continuation and completion of the Animal Agriculture GEIS is the highest single priority for the Planning Agency's budget request. Mr. Johnson and Mr. Sullivan had been meeting with a number of Legislators to update them on the GEIS and make them aware of this budget item. There is a lot of legislative activity and discussion on feedlot issues this year, so we wanted to make sure our item was not lost in the confusion and zeal of budget cutting.

The project has lost some time in the beginning of the process and when Susan Schmidt left. In order to finish all work tasks and allow for the required public process, we require the continuation of CAC and EQB's project team for six months beyond the original completion date. EQB staff has met privately with Senators Dille, Berg, Krenz, Price and Representative Ozment. Everyone we talked to was supportive and interested in bringing the project to completion.

The most frequent questions from Legislators were; "When are you going to be done?, Why is it taking so long? What will you produce that I can use this session? And WHEN CAN WE HAVE POLICY RECOMMENDATIONS!!!???"

Ms. Palmer wondered if we were going to issue any preliminary policy recommendations or issue these all as part of the final GEIS. Mr. Johnson responded that while our project plan is to not issue any preliminary policy recommendations, the Legislature is pressing to get any preliminary material they can to help inform this session's debate. There are a number of forces swirling around, emerging issues relevant to feedlots are capturing the public's attention. Examples of this phenomena include: The desire of many in the farming community to take some of the budget surplus and use it to help smaller farmers meet the environmental upgrade requirements of the new feedlot rules. EPA is increasing the stringency of water quality permit standards for feedlots nationally and Minnesota's permits may need to be stricter. The permit workload for MPCA's Feedlot program is dramatically increasing, while they are facing serious staff reductions across the board.

Odor is becoming a much more volatile visceral issue due to the highly publicized ethanol plant in Saint Paul. This facility smells very much like a farm odor to many city residents and they have a zero tolerance for odor in the urban area. Saint Paul Planning and Zoning and the City Attorney have begun legal proceedings against the offending firm. The ongoing controversy on Hancock Pro Pork EIS Cost dispute continues to challenge the EQB Board with exactly what issues do you look at and in how much depth in a feedlot EIS. Technical debate over air dispersion modeling and odor emission rates and the associated costs is becoming a substantial concern of the EQB Board.

In the first week of February Mr. Johnson attended the Livestock Odor workshop given by the University of Minnesota staff. At this training they discussed the use and development of the OFFSET odor estimation program to establish setbacks from feedlots.

This program has been instituted and prototyped in Nicollet County. Ms. Rosenstein of CAC was also at this training and has a great deal of practical experience with the ramifications of using this tool. The University of Minnesota is going to extend the OFFSET pilot to five additional counties across the State to fine-tune the model in different settings.

Mr. Johnson also introduced the difficult and embarrassing topic of the Legislative Auditor's report on our CAC process. He introduced the subject with the colorful "dead rat on the table" metaphor. It seems that Auditors examining our program discovered that for the last three years a number of CAC members may have inadvertently been receiving per diem payments they were not entitled to by law. This applies only to the daily \$ 55 payment, not any travel, lodging or food expenses reimbursed to CAC members. Any full-time employee of Federal, State, County or Municipal Government, including the University of Minnesota is not entitled to claim per diem for a meeting if they receive their regular pay on that day also, unless they have made previous provision to turn that per diem into the authorizing authority. The auditor and our accounting department will send statements to those affected by the ruling.

Mr. Ferguson notified the CAC that Mr. James Ische, his alternate had recently suffered a serious injury to his neck in a farm accident, inducing shock and requiring hospitalization. Mr. Ische is recovering slowly from four crushed vertebrae and a severed artery in the neck. The prognosis is for approximately six months of rehabilitation prior to returning to full duty. CAC members expressed their sympathies for Mr. Ische.

Ms. Henderson briefly related her experience at a conference on Agricultural and Environmental Law she attended in Ann Arbor, Michigan. The title of the conference was "Industrial Agriculture in the 21st Century." The theme of the conference was balancing the environmental and public health impacts versus the social and economic costs. She felt this meeting was extremely relevant to the CAC's GEIS project. The audience was primarily environmental activists according to Ms. Henderson. Producer groups were not well represented. The program strove to understand the dilemma of "What is truth in science?" It seemed that both sides pick and choose those aspects of science that best justify what they had to say.

Editorially, I might add that our group must strive to be objective and "Fair witnesses" to the science we are investigating. It is far too easy to ignore facts that don't agree with our pre-existing biases. We all, are guilty of seeing what we want to see and ignoring what we choose not to see.- GJ Ms. Henderson mentioned that Mr. Jann from the EPA, Region 5 spoke at this meeting. She observed that people seemed to be unwilling to change their preconceived notions even when faced with substantial evidence of uncertainty. North Carolina public health experts were present and stated undeniably AFO's are a threat to human health. She also mentioned graphic information provided by an activist group called Waterkeeper's Alliance concerning the impact of Pfsisteria in the North Carolina Coastal area. Ms. Henderson indicated that she was profoundly affected by the challenges to the paradigm of traditional agriculture due to the increasing

prevalence of unintended environmental consequences of traditional farming made large. She referred to the three stories or myths of traditional agriculture. These are;

- Of course, farmers will protect the environment and land because they are good stewards for their children. *(Sadly, farmers are being so burdened by regulations and economics that good stewardship suffers in too many cases - GJ)*
- This country produces the cheapest, safest food in the world *(Although it is somewhat a question of semantics, our food is not “safe” or “cheap” any longer- GJ)*
- All farmers, no matter the size are factory farmers because they produce fiber and food. *(It doesn't matter what terms you use, farmers are subject to the same laws of physics and economies of scale as everyone else. The industry is consolidating. - GJ)*

According to Ms. Henderson, these three arguments have no hope of surviving in the modern paradigm of environmental activism. Agriculture simply has to come up with a better story to fit the modern realities. Ethnicity of food consumption is going to become a much more important issue as America continues to culturally diversify. *A good example of the dilemma is the strong negative reaction to traditional Hmong slaughter techniques being used in Hugo, Minnesota. Some Asian cultures prefer to slaughter animals that are in terror, based on the belief that fear makes the flesh taste better. This belief clashes strongly with the animal welfare and animals rights movement, which believes we should minimize unnecessary cruelty to any living creatures. Dietary demands of the growing Hispanic and Asian populations are changing the varieties of food commonly available. – GJ* There has been an overall 10 to 12 pound per capita increase in meat consumption from 1960 to 1998. *There is also a growing vegetarian movement, which avoids many animal products. Customers are segmenting into many specialized market niches. - GJ*

One presenter at the conference listed some actual costs of externalities associated with AFO's including: groundwater contamination, fish and shellfish kills and habitat destruction, loss of recreational and commercial fishing habitat, loss of tourism and degradation of environmental, scenic and recreational areas and food chain imbalances. Increasingly people are asking what is the total cost or the “real cost” of animal agriculture when you include all the externalities. There is a growing sentiment that farmers and processors should pay for these hidden costs which taxpayers have been subsidizing. Large feedlots have become a major political question all over the United States. In Michigan some neighbors of feedlots have been given tax relief due to the inability to sell their properties. A copy of Ms. Henderson's notes will be mailed out to each CAC member with the March materials.

Ms. Rosenstein brought up how the increasing size of animal agriculture operations in other parts of the US color our discussion of environmental problems in the GEIS. She mentioned that she was talking to Larry Jacobsen, from the U of MN, who was contacted by a facility in Idaho planning a 55,000 Sow, farrow to finish operation. The size and scope of the operations in North Carolina, Missouri, California and other places are so far beyond Minnesota's experience as to be almost incomparable. Yet the public thinks all feedlots are alike. Ms Rosenstein brought up the recurring issue of sustainability in

Minnesota animal facilities. She recalled a previous discussion at FMMAC some years ago regarding a recommendation to EPA to include a nutrient balance approach in permitting CAFO's. Sustainability can be easily defined as having no more animals in an area than those that would provide manure to fertilize available land at agronomic rates for Nitrogen and/or Phosphorus.

Our folly in disconnecting animal production from manure utilization is a major reason for the problems we have with large feedlots. She said that we must use the nutrient in the region these are produced. Sustainability is about an ecosystem approach to animal agriculture. Ms Henderson agreed on the importance of balancing inputs and outputs. She also brought up one other profound point raised at that conference. Scientists are observing that we treat human waste to control disease and aesthetic problems. *Policy makers are asking if maybe it is time we subjected the far larger quantity of animal wastes to similar levels of treatment as we do to human waste for public health protection. One alternative that the public may eventually demand is that feedlots have the same type of wastewater and sewage treatment facilities that we now require for human populations. - GJ*

The increasing public health concerns for protection from microbial epidemics make this a scenario a possibility. Obviously this approach would increase the cost of animal production dramatically and have other unintended consequences.- GJ

Mr. Lisell asked how much discussion at this conference revolved around the courts and legal actions taken to provide citizen recourse. Ms. Henderson said there was a lot of discussion of this approach. She recommend that CAC members visit the site keeper.org for additional information. Ms. Palmer pointed out that this was Robert Kennedy" group currently suing five states over large hog feedlots, including Minnesota. Mr. Hart indicated that the head of this organization was a retired Marine Corps lawyer with time on his hands to sue everybody in sight.

Mr. Johnson then introduced Mr. Downing who spoke concerning the extracted text for the Human Health section of the draft GEIS. The first draft of the extracted text involved taking the Literature Summary (LS) and Technical Workpaper (TWP) and reducing this down to the most important summary information. Our first attempt was squeezed down to fifty pages. We felt that each section should be no more than 15 to 20 pages. We also need to see how well the extracted text answers the questions posed in the Scoping document. Many CAC members indicated that they had not had time to give the document thorough scrutiny. At this point Mr. Downing indicated our plan was to cut and further edit this text down. The most critical feedback to EQB staff was any remarks from CAC indicating if they feel we missed any major points in our summary.

In examining the draft of the extracted GEIS text on Human Health, Ms. Palmer questioned the tone of some introductory statements concerning the level of problems and the issue of moratoriums. Mr. Lisell also felt the tone was not balanced enough with regard to the possibility of future risks not yet fully apparent. The health aspects of air contamination seemed to be de-emphasized in Mr. Lisell's opinion. He also raised the issue of the emphasis on best management practices endorsed by the EarthTech TWP. A number of CAC members took issues with specific wording and phrasing of the extracted text. These comments are noted and will be acted on by EQB staff.

Ms. Rosenstein mentioned that many of the perceptual problems we will encounter with our GEIS are well explained by the model of public reaction to risk. She became aware of this model at the recent feedlot odor workshop. This model states that total risk in any situation is a function of the actual hazard, which can be statistically measured, and the level of outrage which is perceived differently by every member of the public. *In the areas of human health perception and outrage are extremely important factors to keep in mind. Feedlots, particularly odors, generate outrage far in excess of the actual medical hazard. This means that by any rational evaluation, feedlots will seem a much greater risk than they actually are. Public perception and outrage are very significant and real phenomena that must be dealt with, even these seem irrational to an impartial observer.- GJ*

Mr. Downing pointed out that the extracted text is CAC's product, which will go into the draft GEIS. While the GEIS will heavily borrow technical information from the existing Literature Summary and all the Technical Workpapers, it will also incorporate our best interpretation of CAC's vision of the major issues and policy recommendations needed to help deal with the changing environment. The draft text is a first attempt for EQB staff to echo the deliberations of CAC into a written form that will ultimately be released for public comment. A second more condensed version will be prepared for the March meeting. Mr. Johnson pointed out that we will allow TWP's to stand as submitted. CAC or EQB will not be editing the consultant's work products. The major opportunity for CAC members to express their own viewpoints is in this draft GEIS document. Debra Elias Morse will be doing final editing on the GEIS document. Her writing skills will be needed to deal with the variety of material and opinions expressed.

Ms. Bloomgren wanted to make it extremely clear that in her professional opinion the single most important human health impact from feedlots is their contribution of nitrate nitrogen to groundwater. This point was not addressed in the extracted text and should not be lost. Mr. Hart felt the document had too much an emphasis on the pro-producer side. He felt we needed to balance the citizens concerns more carefully. Mr. Preisler felt that the document was not biased too heavily in favor of producers. He felt that it mainly emphasized the need for further research in many areas.

Mr. Stanislawski, Mr. Hart and other members pointed out several areas in the text where the language seemed to be slanted or biased one way or another. Mr. Johnson advised the group to edit the text at their convenience and send their remarks back to us. We will examine and incorporate all appropriate comments and deletions. He advised the group that we needed to squeeze the material down and make it more comprehensible to the general public. Mr. Downing advised CAC on the need for deadlines and staying on schedule. Ms. Palmer asked about all the documents we were producing for our project. For clarification these will include the :

- Original Scoping Document completed by CAC and EQB staff
- Literature Summary completed by the University of Minnesota
- Individual TWP documents produced by various consultants
- Draft and Final GEIS which will include summary text and policy recommendations developed by CAC and EQB staff

Debate revolved around how much technical data, charts and tables would be included in the GEIS. It was pointed out that the actual TWP's and Literature Summary would be referred to in the GEIS but we would have to restrict the detailed information to conserve length. Mr. Hart pointed out that we need to distill out the most important information. We have not figured out what our sense of purpose in producing these documents actually is yet. Without a consistent vision of what we are trying to do the document appears to be a "Mish-Mash."

Mr. Raab gave a brief update about the purchase of the Turkey Store by Hormel. The Turkey Store and Jennie-O will be merged and the management rearranged somewhat. Mr. Raab did not anticipate any major changes in his attendance or participation. He said Jennie-O was the largest turkey distributor in the US, producing 900 million pounds of meat annually. Turkey Store produced about 350 million pounds of meat a year. According to Mr. Raab together the combined firm has a lot of positive synergies.

CAC began discussion of Human Health policy recommendations. Mr. Bottem questioned whether we would be separating issues of national and international importance from those that can be dealt with at the state or local level. Ms. Bloomgren began to pull out some of the issues that were not directly related to Health. She felt that the adequacy of MPCA's program was better dealt with in the Role of Government TWP.

Ms. Rosenstein suggested we divide information into categories of : Here's what we know and Here's what we don't know. We are lost in a sea of excess information and we don't know what is really important. Mr. Larry Schultz indicated that it was extremely important to resolve funding problems in order to solve the human health problems. Mr. Lisell expressed his concerns that the fundamental questions are: "Is public Health being adequately protected by current regulations?" and "Are these regulations being enforced?"

Mr. Lisell's point of view was that most neighbors of large feedlots would answer no to both these questions. Ms. Henderson made a strong call for increased funding of MPCA Feedlot program to more effectively implement and enforce the new feedlot rules.

Mr. Hart speculated that perhaps we needed a "Neighbors Bill of Rights" He asked what rights does a neighbor of a CAFO have? He said, "we have right to farm laws, what about the right to be a neighbor." There was a sense from several members of the group that we needed to classify issues into relevant categories such as short-term, long-term and emerging issues. Mr. Bottem speculated that BSE would be a short-term issue and over relatively soon, whereas antibiotic resistance was likely to be a long-term issue we would need to deal with into the foreseeable future.

Ms Palmer reminded us that in so many of these issues we need to confront the dilemma of state versus federal or even international issues. As an example, she cited antimicrobial resistance where Minnesota by itself could not control or prevent the problem. In her opinion, we need to go on record as a state endorsing some of these far-reaching policies to put pressure on the federal government. A number of CAC members chimed in with their approval of this statement. Ms. Rosenstein advocated making simple direct statement that cut through the scientific obfuscation and tell people what we think we know and what we don't know. Ms. Henderson stated that we should also identify areas that need additional research.

Five Key Issue Areas emerged from the discussions. These were:

- Water
- Air
- Emerging Issues
- Adequate Funding to Support Existing Programs
- State/Federal/International Cross-boundary Issues

Questions have emerged that EarthTech emphasis on BMP's does not address some of the underlying problems adequately. Even if there are BMP's how do we know the firms are following these? Do we have any evidence that BMP's can reduce the level of nitrate nitrogen in surface or groundwater or reduce hydrogen sulfide or odor emissions at feedlots? Ms. Sabel stressed that BMP performance standards needed to be tailored for local conditions. BMP development can be designed to provide the needed level of public health protection at the selected site. A disadvantage to BMPs is that these are voluntary so they cannot be enforced or required where these are most needed.

Ms. Bloomgren recalled some Minnesota environmental regulations where BMP's were encouraged but there was a provision that if standards were violated these or similar practices could actually be required. Mr. Preisler pointed out the feedlot rules used size

criteria to determine the level of regulation and schedule of implementation. Ms. Henderson recommended we advocate continued funding for FMMAC with the charge that they develop a set of feedlot BMP's.

There was a discussion of the BSE issue by several members, including some in the back or along the wall. Most of this was not adequately picked up on the tape.

Mr. Stanislawski reiterated the need for certification and inspection programs to provide quality assurance. Ms Palmer mentioned that education and training seemed to cut across many issue areas. Ms. Bloomgren said that given that we have not received the final presentations in other related topics we cannot actually finalize the human health policy recommendations. Discussion occurred about what risk levels were acceptable in Animal Agriculture. Mr. Larry Schultz said that public health considerations are the most important consideration. Mr. Stanislawski tried to establish what risk levels we were targeting and were we considering the cost benefits involved with providing this level of public health protection.

Certification programs seem to be the only reasonable way US states have found to allay public concerns consistently. Mr. Mark Schultz asked if this program was industry self-certifying or was there an independent third party providing the quality assurance. Mr. Stanislawski indicated that unless an independent party with regulatory authority did this the public would not accept it. These types of environmental assurance programs that have been used in other states. It would make a good policy recommendation for the draft GEIS. Ms. Sigford was wondering at how these recommendations directly related to human health. Mr. Downing pointed out that perhaps we could direct some of our research funding towards having the Role of Government TWP team look into this environmental certification issue in other states.

EarthTech Air Quality Interim Final TWP Presentation

Mr. Mike Valentine introduced his team to explain the modifications they had made in the draft TWP on Air Quality after hearing CAC's remarks. Mr. Paul Gerbec began the session with his explanation of how the revisions were made in response to CAC's comments. There was a need to de-emphasize the odor complaint data and put more emphasis on the ambient air quality data. Some of the more highly technical data was moved to appendices in the end of the report. The tone and emphasis of the TWP was closely re-examined and modified to reduce what might be perceived as a bias one way or another. Mr. Gerbec went through a detailed list of CAC comments and indicated what edits EarthTech had made in response to these remarks. A written copy of this list and responses was mailed out to each CAC member and alternate in advance.

The technical details of air emission factors was supplemented with an introductory section to better explain the complex topic. The use of the term “ambient air quality” was clearly defined and the document edited to remove previous ambiguities. Air quality in the feedlot industry is about twenty years behind the point where comparable industries like pulp and paper or wastewater treatment are currently. It seems inevitable that more stringent air quality regulation of feedlot facilities will be required in the future. The use of the Warroad site for background air quality was evaluated for this project. Despite some limitations to the site, it is the best data presently available. In closely examining the few sites where the most odor complaints were generated, the major finding is that all these had large lagoons for waste treatment.

EarthTech modeling experts in Massachusetts were not extremely impressed with the use of the OFFSET model for feedlots. The Final Air Quality TWP report provides more detail on this subject that may be useful in future debates on air dispersion models. To minimize feedlot air emissions, EarthTech advocated the use of Best Available Control Technology or BACT to reduce emissions to the lowest reasonable rate. This approach has been used successfully by Missouri. Purdue University produced two studies on manure pit additives that shows there are some compounds that do reduce odorous and noxious gases from pits and lagoons. EarthTech also received several relatively minor comments from the Department of Health and appropriate changes were incorporated into the text to deal with these comments.

Mr. Jim Sullivan expounded on the discussion of pit additives. He reviewed the report and wanted folks to know that more than 90% of the pit additives either did nothing or made odor worse. Mr. Preisler concurred with this observation.

Mr. Stanislawski mentioned the importance of manure lagoon aeration, manure methane digestors, and manure solid/liquid separator technologies to help control air emissions. Mr. Sanstedt from EarthTech indicated that he had not found any major work in this area although he was aware of the technologies. Generally, these techniques have not been found to be cost-effective in the present economic environment for Minnesota farmers. Ms. Sigford took issue with EarthTech’s analysis of feedlot facility compliance with hydrogen sulfide standards and a comment on page 20 of the document. Mr. Valentine checked the language and indicated Ms. Sigford was correct. He stated that this misstatement would be corrected in the Final TWP document to reflect her observation.

The discussion of Air quality policies was initiated following EarthTech’s departure. Ms. Henderson mentioned that she and other members of CAC would be interested in receiving an update from the University of Minnesota team developing the air modeling work being studied with the Stakeholders group. Mr. Sullivan gave some information on the activities of FMMAC and the research efforts of the Stakeholders group in air quality and odor emissions. Mr. Lisell has some concerns that the Stakeholders group does not

have adequate representation of neighbors of feedlot facilities. Ms. Bloomgren expressed concern that all that CAC seems to agree to is that this topic or that topic, need more study. Her experience with the Legislature is that they become annoyed if the only recommendation the committee comes up with is give us more money to study these issues further.

Mr. Stanislawski expressed his concern that taxpayers have spent \$ 400,000 to develop OFFSET using the INPUFF module and now the EarthTech report says this model is inadequate on page 65. He wondered whether we had wasted all this money and now we needed to spend more to develop another model. Ms. Rosenstein explained that to her understanding of the limitations of the tool based on extensive discussions with the University of Minnesota staff and her experience applying the model to real situations. The University and EarthTech should compare notes and iron out the difficulties. She recommended the policy of endorsing further work to refine the OFFSET model. Mr. Sullivan who is familiar with a number of models indicated OFFSET was a good first step. In his professional opinion abandoning it would be a mistake. He also indicated that research underway would probably create better models in the next couple years.

Mr. Stanislawski indicated his understanding was that the State of Minnesota spent this money to help farmers by developing a low cost tool to help them plan and establish setbacks to meet odor emission standard. MPCA currently requires hydrogen sulfide modeling in their EAW's.

The only person who currently does this a gentleman named Charlie Gantzer. He was the first to get his model approved by MPCA and now has a pseudo-monopoly on this product. Other air emissions models are being developed which may give different or potentially more accurate results. There is a great deal of uncertainty in the whole area of computer modeling of contaminant movement due to atmospheric chaos and the limits of collecting accurate input and flux rate data.

Ms. Henderson identified the major issue groups she saw in the numbered Air Quality policy recommendations. These were:

- Science and technology - 5, 6, 8, 9, 10, 13
- Regulation - 1, 2, 4
- Resources - 3, 7, 11
- What other States are doing - 12

The group then did an Air Quality policy definition and grouping operation under the primary guidance of Charlie Peterson. He tried to group and consolidate similar ideas. Ms. Palmer encouraged us to make a recommendation that the State of Minnesota request the Federal government increase their activities and funding of research in air and odor

generation from animal operations, and also to increase the level of federal regulation of these operations. She opined that this type of recommendation would probably apply to other areas of the draft GEIS as well. Mr. Stanislawski suggested we recommend that the OFFSET model be updated to include hydrogen sulfide as a component and that the Legislature provide the University of Minnesota additional money to upgrade the existing model.

Mr. Sullivan indicated that there were techniques and models available for calculating hydrogen sulfide from industrial complexes, but that this monitoring and model application has not previously been required for feedlots. Mr. Sullivan recommended having David Schmidt from U of MN address some of these technical questions on the development of the model. In response to the remarks by some members of CAC, MPCA staff members, Mr. Sullivan and Ms. Sabel emphatically clarified that they had never said the OFFSET was bogus. The Minnesota Legislature has restricted the number of feedlot sites where modeling is required when doing an EAW. The facility proposer is always given the choice between installing mitigation measures or to do predictive modeling. Mr. Preisler clarified the feedlot rules modeling requirements with Mr. Sullivan. Mr. Lisell wanted to make sure that the evaluation of thick straw cover on lagoons was included as this was an important issue in his experience. He wanted to make sure this practical result was not lost in the discussion.

In hearing the conversation among CAC, Mr. Peterson was detecting the need for clarification on a number of issues. Then there was a brief check-in and summary of the day's events. Mr. Larry Schultz expressed concern that it was premature to make any recommendations on Animal Welfare without having a complete draft report. Mr. Downing explained that if we kept falling behind schedule, we would have to have more meetings or longer meetings. The group felt that it would be best to try to finish the Human Health and Air Quality policy areas. Ms. Palmer expressed concern that in the future we may have to eliminate guest speakers in order to use the time on policy development. Ms. Pierce encouraged people to notify us if there are major issues that have not yet been addressed by policies.

The second day of the meeting began with introductory remarks by Mr. Johnson. Since there were not enough CAC members present to begin the issue of quorum was raised. *My past experience was that on most boards or commissions who ever shows up constitutes a quorum entitled to take action for the entire group. As we try to seek CAC consensus on policy recommendations it will be important to revisit the ground rules. CAC must be able to make consensus recommendations with the present group on potentially unpopular policies. We can not allow the fact that one or more members who did not attend a meeting reopen consensus discussion later. There will be a mechanism for minority viewpoints to be expressed in the GEIS document. So every voice will have a chance to be heard. We must be able to have consensus even if we don't have unanimity.*

This item will be brought up and discussed in the March meeting.- GJ

Wednesday's meeting would continue with policy development in Air Quality, Animal Welfare and Human Health. Additionally Dr. Thomas Blaha will make a presentation on the MNCert pilot project. CAC moved right into Air Quality policy development. Mr. Peterson took the lead on Air Quality policy definition and refinement. CAC examined their work from the previous day. They grouped and consolidated similar policy recommendations and ideas into more appropriate groupings. Ms. Sabel explained the nature of the moratorium on swine lagoons. This ban will statutorily expire with the completion of the GEIS as established by the provisions of new feedlot rules.

The CAC discussion revolved around the need to correlate the hydrogen sulfide monitoring data with odor complaints. While we have a great deal of data on H₂S and Ammonia, we don't have good quantification on how this relates to odor levels and other air emissions that might also have health effects singly or in combination. Ms. Sigford recommended that MPCA take odor testing equipment to any site they are investigating for H₂S violations. As long as they were out there testing for H₂S take odor measurements as well. Mr. Sullivan pointed out that this approach may be limited by the delay in response time to odor complaints and also the additional cost imposed by the extra odor testing. Odor is such a complex subject that it needs to be separate from H₂S, even though H₂S itself does have an odor. The direction CAC is going is that we need other tools to measure and quantify odor beyond those currently available.

CAC recommended that we develop a model county odor ordinance for counties that includes the OFFSET model as a component. Often times when such an ordinance is promulgated, it passes by word of mouth around the state to other counties and townships, which have a similar need. So these additional units do not have to reinvent the product.

Mr. Preisler stated that there is a lot of work going on in these areas, we should be aware of before going blindly into policy recommendations. The stakeholders group is trying to get procedures for handling volatile organic compounds, odor and other areas. He advised that they should be invited to explain their research efforts. Mr. Preisler also advised us to look at what other states are doing to see what we can use to inform our recommendations. He said that unless we investigate this research we could spend a lot of time reinventing the wheel. Mr. Lisell cautioned us that this research was not done yet. New science will only enhance our existing understanding.

Mr. Preisler notified the group that many commodity groups are instituting independent third party audits to aid in quality control and quality assurance. Independent on farm audits by a neutral third party are being used as a suggested first step to improve operational problems at a facility as a first step of an enforcement action. USEPA is

funding this program to help improve customer relations and provide more customized cost-effective control of facility problems. Mr. Johnson pointed out to the group that in all our recommendations calling for modifications in our practices that we need to keep cost in mind. If we require on farm audits or more modeling or monitoring, these actions impose a cost on the facility or the complainant or the taxpayer. Mr. Sullivan mentioned this briefly when talking about odor monitoring, but it is a fundamental point to remember. Who is going to pay for these actions? and what is an appropriate and fair way to distribute the cost burden? Mr. Sullivan said the analytical cost of one odor sample was approximately \$ 200. He also strongly advised that as much of the odor response and complaint management as possible be handled at the local level by townships or counties. The MPCA does not have sufficient staff to effectively deal with agricultural odor complaints.

Mr. Lisell agreed with the approach suggested by Mr. Preisler, but he emphasized the importance of quick response to these incidents. Mr. Preisler said a number of Minnesota farms have participated in a voluntary pilot program for on-farm audits, which involves a cost of \$ 1,000 to \$ 1,500 per farm without taking or testing any samples. This audit is a whole farm examination focusing on practices to minimize water quality and air quality emissions. The “On-Farm/Environmental Assistance program” was initiated by the National Pork Producers Council with 1.5 million dollars in check-off funding. EPA provided 5 million dollars to operate the program through the nonprofit Clean Water Foundation. This program offers free on-site assessments to pork production facilities of all sizes and types across the nation. Based on 1,160 completed farm audits, five basic challenges have been identified by the assessor teams. The challenges are:

1. Lack of an emergency action plan
2. Rust or dirt accumulation on ventilation fans
3. No warning signs around access points to manure storage
4. No gravel strips around buildings or sheds
5. Drainage ways inadequately vegetated or showing major signs of erosion

The discussion became quite lively as rapid-fire response and comments to the proposed odor policy recommendations occurred. CAC members were encouraged to write down their ideas and modification so these could be added into the draft documents being prepared. A good stopping point was reached in the discussion, so we finished talking about odor. The other air quality aspects of feedlots were going to be discussed after the break.

Even though we are pushing CAC to come to some agreement on the topics, we realize that there will be additional revisions. As we approach the draft GEIS there will be many topics and streams of similar ideas flowing together. The area of air quality and odor is an extremely complex topic because it is both quantitative and qualitative, fact and

opinion , there is real risk and there is the perceptual aspect. Odor is a powerful basic warning signal. There are deep psychological components in how we feel about what we smell. Another fundamental problem is that feedlot odor is intermittent and transient, so you never know when it will happen or how long it will last. - GJ

The group was able to come to some tentative agreements on a number of major classes of recommendations. These included:

1. Evaluate and implement new types of facility designs and mitigation options
2. Monitor national and international research results on air emissions from feedlots
3. Assess and characterize existing air emissions data to establish a state-wide database for air pollutants modeling and monitoring
4. Ban on outside open swine manure lagoons until technology and/or mitigation reduce odors to an acceptable level
5. Monitor other states feedlot air pollution and odor activities

About two years ago, Mr. Sullivan of MPCA was involved with the University of Minnesota and the US Department of Agriculture in a Stakeholders group to develop the national air quality program for animal agriculture. Their charge was to identify issues and to direct research funds. Priorities included nutrient deposition (long and short term) looking at agriculture as a source and sink of these nutrients, PM₁₀ and PM_{2.5} and chemical aspects of odor. Discussion was halted and a five-minute break undertaken as Doctor Thomas Blaha , the scheduled speaker had arrived.

Doctor Blaha from the University of Minnesota spoke on the MNCert pilot program with the Minnesota Department of Agriculture. Mr. Just introduced Dr. Blaha , with whom he had traveled to Europe looking at livestock production in Denmark. Dr. Blaha is an international expert on animal health and food safety issues. Europe had dealt with some of the same food safety issues ten to fifteen years ago, that we now face. By developing standard quality assurance and a holistic food safety approach, Denmark has been able to become a market leader. Dr. Blaha indicated that there was a great deal Minnesota could learn from German agriculture.

He said that with BSE, world agriculture has reached a major crossroads. The public agrees that something major is wrong with animal agriculture. The seemingly endless chain of epidemics and accidents are shaking consumer confidence. Signals from agriculture are mainly negative. Fifty years ago the farmer was highly respected, feeding the world. Now, they are ruining the land and spreading epidemics. Don't think that we are immune to BSE. The public is losing trust in the food they eat. Consumers don't understand the scientific details, but they hear something is wrong with what we eat.

Much of the problem occurs because of the anonymity of the longer supply chains. In the recent past you knew the butcher and the farmer where the meat was grown. You trusted them more because you saw them everyday. If something was wrong you went to them and they fixed it or compensated you for your trouble. Now the chain is so long and so anonymous that nobody know anybody, so trust is decreased. The only effective means to replace lost trust between suppliers and buyers is quality assurance. This is a tool to guarantee both sides that it is what it says it is. An independent third party determines that the item meets the advertised quality standards. Farmers and food producers in America had historically never applied this approach, except in specialized niche markets until very recently. Free trade and open markets has a huge impact on food production and processing practices. World consumers will start to expect higher quality products.

Societies are no longer very interested in subsidizing inefficient food production. The United States is hampered by dividing food safety among several authorities, such as FDA, USDA, EPA and State public health departments. Canada is the first country in the world to put all food safety responsibilities under a single agency. The European Union is about to establish a single food safety agency to regulate all member country's practices. To ensure food safety we need transparency and we need traceability. We can achieve this only if we fully integrate food production and the food safety system. Dr. Blaha presented two diagrams of the food production and marketing system. One model resembled the current American system. The second was an integrated model based on the European system..

The integrated market model provides a mechanism to easily serve the specialized demands of any unique set of market needs. There is no longer a "meat market". There are many segments, one group stresses animal welfare, one group stresses organic production, another segment wants no genetically modified organisms, another segment wants free-range meat. Some groups want combinations of these attributes. This is the market of the future. It supplies the market with whatever combination of factors it needs. In 1999 Minnesota has started a pilot program to explore the value of a food product certification with the state Agriculture Department and the Minnesota Pork Producers. The first requirement was to establish a written set of quality assurance procedures. Documented procedures are essentially to provide a quantifiable measure of product assurance and ensure consumer confidence in the product. To maintain this standard, one must repeatedly do internal and independent external audits to insure these procedures are continuously followed.

For example, Japanese consumers are extremely concerned with food product quality. They will pay a premium price for highest quality food. This program could be easily applied to any agricultural commodity. The program only makes sense, if a substantial fraction of the producers participate. European meat processors also use an edible barcode system for quality assurance and traceability. Denmark exports eighty per cent of

their meat around the world. Where ever the meat ends up the individual package can be traced back to the processor and the individual farm and particular date it was shipped. The Japanese told Dr. Blaha that “they want products with a story. They are sick of buying anonymous products. We don’t know who produced it or how it was produced.” The high quality food products will probably first be distributed through higher value retailers and then it is likely to trickle down to other markets. There is an increased cost for this quality control and this will have to be reflected in price increases.

Ms. Palmer raised the question of the market demand for antibiotic-free meat products. Dr. Blaha indicated that the market has drifted into subtherapeutic use of antibiotics because it was cheaper than other means to maintain food production. As soon as the market says to producers this is not acceptable anymore, they will produce what consumers request. People have to be willing to say, we will pay more to guarantee our meat does not have antibiotics. In his opinion, Dr. Blaha sees the American food consumer is ready to make a huge paradigm shift in their opinion of how food is produced. Five producers are currently involved in the pilot program. More than 250 additional farms are on a list to join the program. Right now market demand is not calling for enough of the product to justify the additional costs of production. MNCert will not provide anything to a consumer that is an unethical practice.

The Board of Animal Health oversees the practices of certified facilities to ensure that no laws are violated in providing the product. Mr. Mark Schultz asked for clarification on the ability of multiple producers to participate in the product including smaller farms. He also wanted clarification on the question of antibiotic use in farm animals. Dr. Blaha indicated that antibiotics could be used in animals for ethical medical treatment only. He concluded with his belief that the certification program was the best available tool to allow the small independent farmer to produce a high quality product and survive in the global marketplace. With that CAC broke for lunch.

Mr. Johnson resumed the meeting by reintroducing the topic of animal welfare. Due to problems beyond their control, CAC was four months behind on this topic. It seemed that after Dr. Blaha’s presentation it was a good time to briefly revisit the subject. Mr. Peterson tried to identify if there were any key issues we could use to start formulating initial policies. Ms. Palmer reminded the group that Marlene Halverson had identified what she thought the major priorities in animal welfare were. This was recorded on the purple sheet, which was handed out to the CAC members. Among the major issues mentioned by Ms. Halverson were:

1. Intensive confinement of animals
2. Artificial selection and breeding for single traits to the detriment of animal viability
3. Subtherapeutic use of antibiotics in feeds
4. BST and other growth hormones

5. Mutilative surgeries in animals (tail-docking, debeaking)
6. Exemption of farm animals from anticruelty laws
7. Conditions of animal treatment during transport and slaughter

Mr. Stanislawski made a policy recommendation to support research and investigation of alternative styles of animal production to determine if these can be successfully imported into American animal agriculture. Ms. Palmer suggested that we could promote animal welfare by supporting the “five freedoms” of animal behavior mentioned by Ms.

Halverson. These include; the freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury and disease, freedom to express normal behavior, and freedom from fear and distress. What could Minnesota do to promote these five freedoms? What needs to be done and on what kind of timeframe?

Mr. Mark Schultz was concerned at how we address the volatile issue of animal rights. While he was extremely supportive of the need for animal welfare, he was concerned that the animal rights movement could try to disrupt the validity of our document. He wanted to emphasize his support for research on an animal welfare oriented livestock production system. Ms. Palmer stressed that we needed to form a balanced group that would look into the implications of changing animal agriculture from a commodity production system to looking alternative livestock system that recognizes the animal is a sentient being. Mr. Allen supported this idea philosophically, but he stressed the need for a feasibility study of the cost-benefit of converting to this type of system.

Ms. Palmer had spoken to Ms. Halverson the previous evening and received a fax listing key points to consider in policy-making. Ms. Halverson indicated that elimination of gestation crates for pregnant sows , mandatory phase-outs of certain practices over a period of one to ten years, and a ban on battery cages for laying hens would be good ideas. Mr. Hart felt that mandatory restrictions were too draconian. He thought CAC would have trouble agreeing to mandatory animal welfare restrictions. Mr. Allen pointed out that we needed to involve the federal government in this area. With interstate commerce realities, he was reluctant to recommend policies that would place Minnesota producers at an economic disadvantage relative to their competition. He was willing to recommend the USDA look at these practices. Mr. Preisler reminded the group that there is a great deal of current research is looking at different kinds of housing systems for dairy and swine to evaluate the practicality of many of these alternative systems. Our debate was occurring in the absence of these facts.

He felt the group was talking a great deal about areas they knew very little about. Ms. Palmer pointed out that in the latest version of Ms. Halverson’s TWP she mentions recent initiatives in New Jersey, Florida, Illinois directed at livestock animal welfare. This demonstrates that individual states can take unilateral actions without full federal involvement in the issue. The New Jersey Department of Agriculture was required to

promulgate standards for the humane treatment of animals on farms. Illinois has banned forced molting of laying hens. Mr. Hart opined that problem was that many in the group have completely conflicting values and we are talking past each other. He stated that we must respect the opinions that different people have. There is a vocal minority intensely concerned with this issue, so it must be recognized and addressed objectively. Ms. Palmer stated that animal welfare is a great concern to many people. It will not be solved by the Pork Producers, we will not get rid of the problem by belittling it. Mr. Mark Schultz indicated that in this area he would be reluctant to make broad sweeping policy recommendations. He wanted to support research, collect information and carefully examine how we can promote a positive image for animal agriculture without causing economic harm to Minnesota farmers.

Mr. Hart stated the animal rights movement provides a philosophical foundations for the animal welfare school. A number of CAC members spontaneously muttered disapproval at this remark. Ms. Sigford indicated that this statement polarized the situation. Ms. Henderson asked if we could wrap up the topic and move on. Other CAC members indicated they had more to say on the subject. Mr. Hart made the distinction that in his previous remark he was not trying to include the most radical animal rights groups, such as PETA. He was referring to the large number of people who believe that animals are sentient beings and deserve to be treated as creatures and not things.

Mr. Hart pointed out that we don't know what really is natural behavior for many farm animals. These have been domesticated for so long that these would not be able to survive without continuous human nurture and support. Mr. Stanislawski mentioned that many CAC members had toured Mr. Allen's dairy farm. He challenged the members, "What could Gary do differently that would enhance animal welfare?" *This created an awkward moment in the group. Tension rose between a couple of the more vocal members around this point.- GJ* Mr. Peterson interrupted and redirected the group back to the task at hand. He asked if the CAC could support a policy to recommend further research on animal welfare oriented production systems. The groups was reluctant to come to consensus. Mr. Preisler felt the language was biased and had trouble with specifying "animal welfare oriented" He announced that he had another appointment and had to leave. Ms. Henderson indicated she was very disturbed by his action. All the CAC members had sacrificed a great deal of time and energy to this process. The tension in the room was palpable at this point. Mr. Peterson tried to break the tension by reminding us of the schedule and changing topics.

Ms. Palmer asked a procedural question. She wanted to know if we were taking a final position on policy or merely trying to discuss the topic. She was informed that we would revisit this issue and nothing about animal welfare had been finalized. We then took a break.

Mr. Johnson reconvened and recognized the difficulties the group was having in the discussion. He said our goal was to approach perfection by successive approximations. Nothing ever goes as fast as we want it to. Legislators are not too interested in the Literature Summary or the Technical Workpapers. What they are interested in is the simple distillation of facts and policy recommendations. Ms. Bloomgren offered to prepare a draft of policy recommendations on Human Health. This would then be sent out to CAC members in advance, to be discussed at the next meeting. The group was reminded that none of the policies would be final until the EQB approved the Final GEIS report. Ms. Bloomgren gave an overview on her perspective on Human Health policy needs and what principles were guiding her efforts. She indicated that she would prepare a draft with the understanding that CAC could then revise her work as needed. Mr. Hart and Ms. Sabel offered their support of the approach and thanks to Ms. Bloomgren for undertaking this task to help CAC along.

Ms. Sabel raised the meta-issue of cumulative impacts. This topic will be covered in the Role of Government TWP by Decker and Paddock, but Ms. Sabel felt that it also needed to be addressed in the Air Quality discussion. The great difficulty is the multiple meanings and interpretation of this term sometimes confuse the debate. Mr. Sullivan stated that the major issue evaluating the cumulative impacts of air quality is the acquisition of good source emission data and adequate dispersion models. Mr. Peterson said that if there are additional pieces write these down and give these to Mr. Johnson. The group was comfortable with having Mr. Sullivan drafting up policy ideas for later CAC review. Ms. Sabel asked for clarification on the revision process and deadlines. She wanted to know when we get to agree to things, when are we finally done with a topic.

Mr. Downing indicated for project management purposes, we must stress the need for finality. Mr. Johnson indicated that we have constructed certain artificial deadlines to try to move things along, but there would be opportunities to update and revise materials until the GEIS was published. He also pointed out that we were not going to change the TWP's. Those documents were/are produced under contract to provide unbiased technical information. Contractors appear before CAC at least twice to elicit comments on their work, but once the TWP is finalized there is no change to these. The conflicting desires between coming to final conclusion and being able to talk about things further is creating a dilemma. Mr. Johnson said he will try to be open to discussion, but as we approach the end we will need to agree to things, including how we reach consensus when we don't have complete agreement or an acceptable quorum of CAC members. We will need to revisit this issue and our ground rules at the March meeting.

Ms. Henderson raised some key issues for Human Health. One regarded developing flexible incentives for air quality control. She raised the question, "Do we jeopardize local control, if we endorse flexible incentives?" In Europe, veterinarians are the only

ones permitted to purchase large quantities of antibiotics. She endorsed using a similar approach in the United States. She also endorsed the ISO-9000 approach to animal production, using the certification process to control concerns like BSE and other diseases in animal production facilities. She also expressed her concern about one member disrupting the consensus process and reversing their previous statements. Mr. Hart pointed out that we have ground rules and these personal attacks were inappropriate.

Mr. Larry Schultz indicated his fundamental concern about the adequacy of the present feedlot regulatory system. Mr. Johnson indicated that this was an important parking lot issue that would be investigated as part of the GEIS process. The Role of Government TWP will look at MPCA program adequacy as part of their charge. Ms. Sabel and Mr. Schultz agreed that looking at this topic in the Role of Government was a reasonable place to do this evaluation. Ms. Sigford expressed her discomfort that EQB staff short-circuited the CAC's choice of discussion topics by going to animal welfare after lunch instead of back to air quality. She felt that we were close to decision and that the synergy was ruined by Mr. Johnson's modification of the schedule. She lodged a strong complaint against this action. Ms. Henderson stated that she thought our good work got sabotaged today.

Mr. Lisell stated his goal and vision was to resolve odor and health issues without having all the answers. He was frustrated that we could not even agree to require the quick fix of a straw cover to help neighbors deal with odor problems. Even if we don't have all the answers why can't we try to do a little fixing with what we know works. Mr. Hart indicated he was reluctant to come to any agreement with only ten of the twenty-five CAC members still present. Mr. Lisell said, "then one effective strategy at CAC was to walk out so a vote could not be taken." Mr. Johnson apologized for the unintentional offense. He took executive privilege and modified the order of discussion to take advantage of Dr. Blaha's talk and perspective with the need to move ahead on the far overdue animal welfare topic.

Mr. Peterson summarized the CAC accomplishments he witnessed during the days meeting. He observed that in many areas CAC was close to agreement. There was some semantic discussion over, "Is anything done?" Ms. Sabel indicated that she was more comfortable with the process we used on Air Quality compared to what was done with Human Health. She said that when doing Air, what we did felt closer to being done. We just needed more time. In the Human Health area, she felt the process was less complete.

Mr. Johnson did a brief introduction of Debra Elias Morse, who stopped by to reintroduce herself to CAC. Ms. Morse is working with the University of Minnesota as a technical writer and an assistant project manager on the U of MN TWP's. She is also the primary

author of the Description of Animal Agriculture TWP. Also she is providing technical writing expertise on draft the GEIS and summarizing TWP documents.

Mr. Peterson did a quick CAC check in around the table. Mr. Lisell indicated that when we got to recommendations to the Legislature. These would need to be reduced to one page. Mr. Larry Schultz suggested a staged approach distilling the information down several times to allow a reader to cover it in as much or as little depth as they wish. He also asked about the ground rules when a limited number of CAC members were present. He felt it was appropriate to inform CAC members that a quorum was made up of those members present and binding decisions could be made without all members present. Ms. Sigford said we needed to get a better grip on what we can accomplish in a meeting. We will need to limit outside speakers or hold longer or extra meetings to give issues the time these deserve for a fair hearing and debate. We need to finish one item before abruptly moving on to another topic. Mr. Mark Schultz indicated that he was frustrated a number of times over the last two days. He like many of our group has lots of other things to do. He did state that he trusted CAC to thoughtfully develop wise recommendations from their deliberations.

Ms. Henderson stressed the importance of having periodic consensus check-in to identify topics we agree to. She felt the discussion of animal welfare was useful and productive. She regrets that we could not come to closure. She was gratified by the group activity in air quality building and refining the policy recommendations. She said she was not discouraged with the results she was discouraged with the process. Ms. Sabel said she liked what we did in Air Quality because Mr. Peterson was constantly checking in , are we done with this, can this and this be combined. She found the process productive. She wanted to see more of this process type in the future. She thought using the computer was all right as long as we had the items on the board too. Ms. Sabel said we need to get to closure on some things. Mr. Sullivan felt that we have moved ahead on air quality and he preferred that process. He felt the animal welfare discussion was a monkey wrench that diverted the process. He also strongly supported the periodic check-in to establish consensus along the way.

Mr. Johnson indicated he was closely listening to CAC's comments while trying to respond to time pressures from EQB and the Legislature. He indicated that he would modify the process but it may mean cutting off or suppressing some debate on topics. He indicated that because of the numerous cross-linkages between some topics there would always be an opportunity to make minor modifications of the GEIS until the very end, as long as we could agree in principle to major areas. Ms. Sabel offered the optimistic perspective that reopening issues strengthens our understanding and work products. Ms. Palmer asked what we could realistically expect to produce for the Legislature for this session. Ms. Henderson stated that in her opinion we were under no obligation to produce anything this year. Mr. Johnson indicated that while she was technically correct,

the Legislature has very high expectations. They already allocated the money. CAC has been working for two and one half years. There are a number of feedlot issues being talked about this session. They are seeking any preliminary products or data to help inform their decision-making. Ms. Palmer thought we got a lot done, but it was messy.

Mr. Just believed that the Legislature has realistic expectations that CAC will produce results to help them. The inventory of livestock agriculture, the Literature Summary, various TWP's and any recommendations we can provide. Animal agriculture is a tough issue that keeps coming up. The Legislature has great expectations for the GEIS.

Ms. Sabel asked that the GIS Inventory staff appear to next meeting to discuss their process. She also reminded CAC that the EPA representative, Steve Jann, would appear at the March CAC meeting in the morning. Ms. Henderson had heard Mr. Jann speak and strongly recommended CAC hear his presentation

4:45 Summary/Checkin

5:00 Meeting Adjourned