

# Oregon Dairy Air Task Force

## Meeting # 4 – March 18, 2008

DEQ Headquarters – EQC Conference Room – 10<sup>th</sup> Floor  
811 SW 6th Avenue, Portland OR 97204-1390

### Meeting Notes

#### Task Force Members Present:

Dan Bansen, Forest Glen Dairies  
Jeremiah Baumann, Environment Oregon (arrived late)  
Andy Ginsburg, DEQ Administrator  
Lisa Hanson, ODA Deputy Director (left early)  
Betsy Johnson, State Senator (left early)  
Dana Kaye, Oregon Chapter American Lung Association  
Kendra Kimbirauskas, Friends of Family Farmers  
Dr. Jim Males, OSU Department of Animal Science  
Dr. Jim Moore, OSU Professor Emeritus  
Marty Myers, Three Mile Canyon Farms  
David Nelson, State Senator (attended periodically by phone)  
Gail Shibley, ODHS Environmental Public Health Administrator  
Mark Wustenberg, Tillamook County Creamery Association

#### Task Force Members Absent:

Deborah Boone, State Representative  
Jackie Dingfelder, State Representative

#### Presenters:

Justin Hayes, Idaho Conservation League (by phone)  
Jim Krahn, Oregon Dairy Farmers Association  
Paul Martin, Western United Dairyman  
Bob Naerebout, Idaho Dairyman's Association (by phone)

**Facilitator:** Sam Imperati, Institute *for* Conflict Management

#### Others in Attendance:

Len Bergstein, Three Mile Canyon Farms  
Larry Calkins, DEQ Eastern Region  
Carrie Ann Capp, DEQ  
David Collier, DEQ Air Quality Division  
Doug Crow, Columbia River Gorge Commission  
Melissa Egan, ICM  
Kathy Fieldstad  
Ray Jaindl, ODA  
Gregg Lande, DEQ  
Wym Matthews, ODA CAFO Program  
Bob Oleson, Friends of the Gorge  
Paul L. Smull  
Jeffrey Stocum, DEQ  
Paul Koprowski, US EPA

## **Welcome, Announcements and Agenda Review – Sam Imperati**

Sam welcomed everyone to the Dairy Air Quality Task Force meeting. There was a full schedule for the day, including three presentations. We went around the room and introduced ourselves.

## **Idaho Experience on the Ground - Bob Naerebout and Justin Hayes**

The Task Force had presentations from environmental and dairy industry leaders in Idaho to learn about the successes and pitfalls of their experience in a similar process. We began with Justin Hayes, Program Director for the Idaho Conservation League. (*jhayes@wildidaho.org*) He works on variety of issues, they are the one-stop-shop for conservation issues in Idaho. Several years ago, they began to look at air quality issues. This spawned a lawsuit targeted at ammonia emissions from dairies. One positive result from this is that the Idaho Conservation League got together with dairies and the Idaho DEQ in an effort to solve some problems.

In Justin's opinion, there are some strong components to the Idaho rule, and some points where it falls short. The operational and structural BMPs are generally good. The weak part of the program is that there is no way for them to determine scientifically the exact numbers at which compliance standards/thresholds should be set or are being met. In other words, there was a fair amount of guessing due to the data that was available at the time.

Going forward, Justin feels they need to reassess to see if the thresholds are accurate. He believes they can find ways to make further improvements without being draconian toward the dairies.

Bob Naerebout, Executive Director of Idaho Dairyman's Association, spoke to us next. He is Jim Krahn's counterpart in Idaho. He is impressed with what we are doing in Oregon. In his experience, it is important to build relationships. It helps to work on issues together, to be proactive rather than reactive. He thinks it is good to look at mistakes others have made. For example, we can all learn from California and their widespread use of digesters, which as it turns out, may actually increase emissions.

This is emerging science. Bob looks at ways to give his dairies more points; Justin tries to give them less. That is how the game works, but we are also all trying to contribute to the development of better science. Naerebout feels you have to develop flexibility and responsibility. In Oregon, you have to look at the cumulative affect of all animals in the air shed. It is essential to make BMPs affordable so you do not drive out small producers who cannot afford to be compliant.

## **Discussion**

*Betsy Johnson:* Justin, you mentioned when developing the Idaho rule, it was based on guessing as opposed to good science. That is problematic, and she wonders if there were problems when it comes to implementation?

*Justin Hayes:* we did our best with the available data. Bob and he have both said they would like to see the numbers move around, become more accurate. They were in uncharted territory.

*Bob Naerebout:* we worked with academia and industry, but BMPs are a moving target. Have to be responsive to emerging science. There is a host of studies going on right now; the EPA will be coming out with their numbers. Once you have a number, its great to know that, but what are you going to do with it?

*Jim Males:* Bob, you mentioned a study on methane digester pre- and post- ammonia emission, how much does that study cost?

*Bob Naerebout:* the study was paid for by dairy industry, about \$180,000. It was conducted by the University of Idaho. In addition, they bought equipment through the Department of Agriculture, which awarded a grant. The equipment cost about \$200,000.

*Jim Moore:* the technical report you have, source?

*Bob Naerebout:* it came from the American Society of Agricultural Engineers. He can get the reference.

*Jim Moore:* you said you were going to spend \$300,000 evaluating BMPs. How will you select and monitor?

*Bob Naerebout:* from our legal defense research fund, what we do not spend on legal costs, we spend on environmental research. Researchers present their proposals, which are then ranked and selected based on available funds.

*Justin Hayes:* that is what Bob is doing on his own. It is not being done because they are mandated; it is a proactive thing the dairy industry is choosing to do.

*Mark Wustenberg:* question re: confidence of assessment of dairies re: 100 ton rule.

*Bob Naerebout:* this is an emerging number also. He would say now that the number on open stalls is too low, and the free stalls number is too high. The science needs to catch up.

*Justin Hayes:* better equipment and more studies will lead to new thresholds, but at the time, we did the best we could.

*Bob Naerebout:* that is why you all should build in flexibility now in your process, to make it easier to adjust BMPs within the rule.

*Betsy Johnson:* what is the willingness for both sides to come together? How willing is anyone going to be to give something up once it is codified by rule?

*Bob Naerebout:* he has had no dairy producers walk away from the table. His board members and producers do want to address the environmental impacts of their dairy operations.

*Betsy Johnson:* has there been a gentlemen's agreement for no lawsuits while everyone is still at the table?

*Justin Hayes:* not specifically, but there is an interest in staking out territory and finding out a way to get along. There will likely always be the tension you have identified, and

we do have a long history of throwing rocks, but it is not always the most constructive thing. We have not put any tools down and sworn to never use them again, but are we are engaged in a more efficient process.

*Bob Naerebout:* there was the methanol lawsuit, and that money went to legal fees and it could have been spent on research. So, yes, we still throw rocks.

*Andy Ginsburg:* question about goals of program. Was there a specific thing you were concerned about, such as workers, neighbors, or particulate matter?

*Justin Hayes:* all of the above. People generically talk about the odor problems. From a legal perspective, ammonia was a handle they could grab. We still think that controls that benefit ammonia reductions can lead to other benefits.

*Andy Ginsburg:* from an Oregon DEQ perspective, we are interested in ammonia, as well as methanol. Is the interest there in Idaho for toxic air pollution?

*Justin Hayes:* yes. There are regulations, which address that.

*Andy Ginsburg:* when you developed point system, did you consider how BMPs affect other things? Marty Bauer said the intention of the rule was strictly about ammonia. Are you looking to expand that in future iterations of the rule?

*Bob Naerebout:* there was no need for us to address the two issues because we are already highly regulated.

*Justin Hayes:* when we talked about individual components, I do not recall any that we said, it might have a negative impact on X, but then we did it anyway.

*Bob Naerebout:* a good example is the flush system. It reduces methanol.

*Lisa Hanson:* question about BMPs and their impact.

*Justin Hayes:* doing air quality monitoring, trying to isolate BMPs that reduce emissions. Justin brought up copper sulfate, used to keep the hooves hard. That is positive for the health of the animal, but they are trying to take the copper out because is not good for the soil. Everything we are doing in research now is looking at increasing the effectiveness of BMPs.

*Kendra Kimbirauskas:* one tip was not to put BMPs in place that force out small operations. Her question is if Idaho has accomplished that, or, are your Idaho BMPs cost-prohibitive for the little guy? Does the State of Idaho have grants to help small producers?

*Bob Naerebout:* there are no dollars for the small operations. We would have to try to help them through the Natural Resource Conservation Service (NRCS). His concern with small producers is two-fold. 23% of their members are small dairies. Most management BMPs are do-able. As more and more practices are identified, then it will help the smaller producer reach the threshold.

*Justin Hayes:* remember that the thresholds are such that most of the small producers are not in the program. You have to be over 100 tons of emissions per year.

*Bob Naerebout:* we believe that at some point, the program will impact anyone who has a cow, so we do have this issue in mind.

*Justin Hayes:* does not really get into ambient concentration. If you are above a certain threshold, you are in the program. The BMPs are not intended to keep operations below 100 tons, just if you are above, you are in the program.

*David Nelson:* poultry and hogs are different; please explain.

*Bob Naerebout:* cows are ruminants, poultry and hogs are not. The different digestive systems create different emissions.

*David Nelson:* the trend with dairy farms in Oregon is that they are getting larger.

*Bob Naerebout:* yes, we are seeing that, as well. The number of dairies goes down, but number of animals goes up. We do not want to force operations out due to regulation.

*Justin Hayes:* from environmental perspective, it is not the case that the environmental community is creating a body of regulation that is forcing out the little guy. The global marketplace and economic influences have quite a lot of impact on what you do with your herd. The environmental community is not at all targeting dairies of a certain size, but rather the practices by any of them that have negative impacts on the environment.

*Bob Naerebout:* take the nutrient management plan, for example. You have to have the ability to hold 180 days of manure. My smallest dairy is 10 cows. The environmental regulations we put in has an economic impact on smaller operations.

*Dan Bansen:* how many dairy cows in Idaho?

*Bob Naerebout:* about 520,000 – total. 370-380,000 in Magic Valley, roughly half of all Idaho dairies are in Magic Valley. In 2000, we produced 7.2 billion lbs of milk. In 2006, we produced 11 billion lbs. That is extremely rapid growth we are trying to manage.

*Marty Myers:* to add on to Dan, how many square miles?

*Bob Naerebout:* six counties, unsure of the square mileage.

*Andy Ginsburg:* implementation question. For dairies that are part of program, what kind of outreach and technical assistance do you provide? What kind of compliance inspections?

*Bob Naerebout:* DEQ has oversight and ISDA is out in field checking on compliance twice a year. Questionnaires and compliance forms are sent out to instruct people on compliance. Then, there is individual assistance available. The University Extension Service is very helpful.

*Andy Ginsburg:* do you do any outreach to dairies below the program threshold?

*Bob Naerebout:* it was made available, but does not know of any dairymen who were under the threshold that volunteered.

*Sam Imperati:* were there other options that you were considering, other than this plan?

*Bob Naerebout:* no, he cannot think of any other route than implementing BMPs.

*Justin Hayes:* we did not have to settle this lawsuit; we could have just kept our foot on the pedal to see what happened. As the state's leading conservation group, we are decidedly not an anti-dairy organization. We had motivation to engage and stop litigating.

*Sam Imperati:* why did you decide to have the BMP program involved with state agencies and rulemaking?

*Justin Hayes:* a voluntary program would not have been sufficient for our needs. He feels he has a good relationship with Bob, but at the same time, does not want a voluntary-only program. Feels comforted by the regulatory framework and compliance paperwork. It might have worked, but feels it would have been less efficient as a program and more difficult to negotiate.

*Bob Naerebout:* dairymen as a whole do want to be good stewards of the environment. Our association came out openly opposed to putting in a new power plant in Magic Valley, so we do things that surprise the environmental community.

*Sam Imperati:* this group has talked about the quality, quantity, and applicability of the currently available research. To what extent was the research you relied on peer-reviewed? Based on the level of science you had available, how did you manage that?

*Bob Naerebout:* we had good access to the University, so we hoped it was already peer-reviewed. The research going on now will be. Also, Justin's group never threw in anything they considered hokey-pokey.

*Sam Imperati:* any questions from the staff or audience?

*Kathy Fieldstad, from the audience:* she is a small businessperson and lives in Lake Oswego. She is trying to educate herself on these topics. She is concerned about where we are at regarding the state of the art of research.

*Justin Hayes:* Bob is correct in saying this is an emerging field. Questions are being asked to which we do not know answers, and better equipment is being developed. There is no definitive white paper on this yet. Again, you need to craft a program that has flexibility built-in.

*Bob Naerebout:* if you fail to look at total environmental impact of a BMP, then you may have problems.

*Justin Hayes:* the digester is a good example. Four or five years ago, the digester was the solution, but what has turned out is that you swap one benefit for one significant detriment. The giant lagoons have created odors that even dairy people are not used to.

*Paul Koprowski:* what is the threshold for the number of animals that you use?

*Bob Naerebout:* Open lot – 4500; free stall, scrape – 2700; free stall, flush - 1678

*Sam Imperati:* what data did you use?

*Bob Naerebout:* document referred to earlier in response to Dr. Moore’s question. Matt Thompson is the consultant we used.

*Andy Ginsburg:* the 100 tons applies only to Idaho, it does not apply to Oregon unless that is something we decide.

*Kendra Kimbirauskas:* question about the 100 tons number – is it truly arbitrary?

*Bob Naerebout:* yes, it is arbitrary, but it is in the statute.

*Sam Imperati:* do you have any recommendations for us?

*Justin Hayes:* thinks Idaho DEQ has a pretty good negotiated rulemaking process. If all parties participate in good faith, you are not going to win everything you want; but it is an exercise in trying to find a solution you can live with. Everyone needs to come out in some way a winner. If not, we would have probably just had more litigation and no good conversation.

*Bob Naerebout:* determine if you are doing this because you want to regulate or because you want to protect the environment. There is a difference. Develop a working relationship. He feels we are required to look at the issue from the other’s perspective. Recognize that the dairymen want to be good stewards. There will be bad apples, but mostly everyone wants to protect the environment.

Sam thanked Justin and Bob for their insights and contributions to our process. We took a break and then continued with Paul Martin’s presentation. This was a change in the agenda, moving ODFA to this afternoon.

### **California Experience: Overview and On the Ground - Paul Martin**

Paul Martin is with the Western United Dairymen, the dairy trade association in California. He is the Director of Environmental Services. (*paulwud@callatg.com*) Paul presented a PowerPoint, “Update on California Dairy Air Quality Regulations.” He began with some brief facts about San Joaquin Valley dairies – 1500 dairies, 1.5 million cows, ~30 new dairies have been proposed, and ~ 40 have request permits for expansion. They do not see dairies with less than 2,000 head being proposed in California.

Paul identified a barrier he has experienced in his work, which he framed as the stereotypes of an “east coast” mentality when it comes to air quality research. He feels much of the available research is not well related to issues we face in on the west coast.

Currently in California, any VOC emissions over 2 lbs a day are regulated. Dairies were exempt for a long time; EPA put a stop to that. That created the need for the legislation; the result of it was SB 700. It was to resolve a conflict between state and federal law.

California has 35 air districts and each is individually permits air pollution sources. The San Joaquin Valley Air Pollution Control District is eight counties grouped together.

Another problem folks face when addressing these issues is that most of the statutes on the books previously had been for “smoke-stack” type operations, not live animals.

In their program development, they used the term “Conservation Management Practices” instead of BMPs, acknowledging the fact that what is best for one operation is not necessarily the best for another, and that the main goal is conservation.

Folks in academia and industry generally agreed they could assign Emissions Factors to cows for discussion purposes, but then SB 700 came into play and everyone was stuck with EFs that they did not fully agree with. Also, the state of the science, as has been said by Mitloehner and others, is moving away from EFs because they are unreliable and not constant. You want to have your regulatory program set up so that when something new comes on line, you have the option to provide alternative mitigations. Paul is very interested in and supportive of new technology and advises us that we do not want unnecessary barriers to implementation.

Paul notes that it seems like the Idaho industry and environmental groups work together – in California, they are not quite there. In his opinion, a lot of it is based in social justice issues. He observes that it seems to be as much a plea for recognition as anything else. It is very hard for small community groups to get access to grant funds. They do try to help them. The dairy rules are rigid. New dairies are subject to New Source Review; have to pass a cost test, health risk assessment, and ambient air quality analysis. It has to be in compliance.

The intent of BACT (Best Available Control Technology) is to drive technology.

Health Risk Assessment – he has never put a slide in his presentation to address this issue because they have never had a dairy fail on this count. He noticed we have health risks to workers on our plan, and noted that it has never been a problem in California, although he acknowledged that indoor air concentrations could be a problem.

How is it going? The process was rocky at first, and then a new executive director at SJVAPCD made progress and built legitimacy with the dairy industry. Outreach went well. The CMPs were reasonable and producers could believe in them because they were involved in the development. Self-directed compliance got them further than a regulatory-only program. With enhanced awareness, there comes a pride in participating in making things better. Heavy handed, command and control regulations inhibit progress. The compliance checklist that producers have to keep has been helpful. It is thorough, but they try to make it not overly burdensome and do-able.

Rough spots? Some things were overlooked (emergency generators) and forms were confusing. The one single thing that holds permits up is agreement on the BACT. The interaction between rules has caused us some difficulty.

Agriculture is different from other industries and dairy is different from the rest of agriculture. If you give producers sound and valid science, they will respond to the needs that are identified. Avoid taking positions and stay focused on the goals. EFs per cow are not quite right anymore, EFs per unit of milk is getting closer. We have to prove

to the public that what we are doing with BMPs is working. He wishes that they had taken the legislation and plugged it into the existing system to basically model the outcomes on an existing dairy. They did not have time, and he wishes they had. He likes to use the phrase net environmental benefit – cannot get all the benefits you want, but can try to get overall gains.

*Marty Myers:* noticed you have about 40 dairy permits in the hopper. How many do you think will be permitted?

*Paul Martin:* Many folks bought land years ago with the intent of building a dairy. They own the land; there is no question they will go ahead. We will lose a lot of small dairies due to the water rule; they cannot survive. Whether we like it or not, the dairy industry responds to the same economic conditions as the rest of us.

*Marty Myers:* question about health risk assessment, that you have never had a dairy fail. Has that been challenged?

*Paul Martin:* no, it has not been challenged. It has not been an issue for us. The air district monitors it.

*Andy Ginsburg:* BART, BACT – can you elaborate? Thinks of them as processes you are compelled to go through. As opposed to the Idaho approach, where they have a menu and operations pick from the menu.

*Paul Martin:* their point was that it is achieved in practice. They said, no, they do not agree. When you get into the lawsuit, it boiled down to “is a cow, equipment,” which was beside the point of the litigation in the first place. The desire to get really technical has to be moderated. One of the first BACTs to emerge is to totally enclose and burn the emissions. This process overlooked the NO<sub>x</sub> and natural gas problems. So, this is why EFs have had to go by the wayside and focus on reductions.

*Andy Ginsburg:* one size fits all?

*Paul Martin:* no, there are different systems, flush: scrape, corral, and we work with them all. BACT is negotiated with the air district. A new technology called “processing pits” was submitted to air district, and this process ran into permit violation issues. The dairymen had to explain that it was a “pump station,” which did not violate the permit. Thus, the permitting hold up was removed.

*Lisa Hanson:* takeaways or lessons?

*Paul Martin:* you need to have accurate assessment of air quality issues and bring producers in the room and get their input on what can be done about it. Also, semantics play a role in clear communications and negotiations in selecting CMPs/BMPs.

*Dan Bansen:* back to Marty’s question. To get 40 permits through the system, how long do you expect it to take?

*Paul Martin:* 3 - 5 years.

*Dan Bansen:* there are approximately 3 million cows in SJ Valley, milking and dry?

*Paul Martin:* it Nutrient Management Planning is codified in the law that you have to hit 1.4–1.65:1 ratio of nitrogen in soil to crop nutrient uptake. It is very difficult for agriculture to hit the ratio without large land areas. Paul does not see the growth in California continuing at the 3% rate that they have been experiencing.

*Marty Myers:* any additional regulations on nitrogen emissions from other sources?

*Paul Martin:* has always questioned this, why are we regulating manure when we are not regulating chemical sources of nitrogen? Dairy takes the heat, but there are a lot of other sources.

*Gregg Lande:* is interested in more of health risk assessment. You are concerned about VOC and PM10. What about ammonia, hydrogen sulfide, others?

*Paul Martin:* yes, we look at those, and it is done by modeling. If you want more detail, Paul refers us to the air district. It has not been an issue, so he is not aware of it. In the west, we have mostly open lots, as well as different species than you find in the east.

*Gregg Lande:* Dr. Mitloehner talked about it being an ammonia issue at first, and then changed to VOC. Wonders why ammonia went away?

*Paul Martin:* the primary answer is that ammonia is not the limiting chemical in fine particle formation, NO<sub>x</sub> is. We will make far more improvements with NO<sub>x</sub> controls. That being said, the air district did an analysis, which found that the CMPs had a profound effect on ammonia.

*Larry Caulkins:* impressed with Idaho's presentation on funds for research. Wonders about California research.

*Paul Martin:* there are several projects happening right now, among them is Dr. Mitloehner's work, including the NAEMS study, a couple studies on flux chambers, and canister studies on ambient air. The dairy industry has purchased some equipment to do add-on studies.

*Sam Imperati:* other than NAEMS, who funds?

*Paul Martin:* USDA grants, Air Resources Board, the Air District, Universities with internal funds, and the Agricultural Institute have some research funds. Earlier, there was congressional funding. There is the Environmental Justice Fund, which collects from producers from their co-operatives for this fund, and tries to leverage with matching funds. Basically, all partners involved are stepping up with money.

*Kathy Fieldstad, from audience:* what takes 3 - 5 years?

*Paul Martin:* Local land use process is the usual first barrier unless zoned for agriculture. Other counties have programmatic Environmental Impact Reports (EIR) requirements, and if you meet the standards, you are OK. This was the primary point of litigation. Dairy consultants have done a much better job of writing EIRs, so this is smoother now. The real air hang up that can take over a year is "What is BACT" – a lot depends on the consultant producer uses; some help streamline and some seem to get involved with a drawn-out process.

Sam thanked Paul for his presentation. Next, we moved on to Jim Krahn's presentation on the Oregon Dairy Farmer's Association.

### **ODFA Concept Presentation – Jim Krahn**

Jim's presentation was titled "Northwest Sustainable Dairy Program." It is a partnership program between ODFA and Washington State Dairy Federation. They joined forces because of similar milk markets, producer issues, and regulations. They developed self-imposed industry standards/BMPs concerning milk safety, environment, animal care, labor, and efficient use of energy. Dairies of all sizes are involved. It is the only kind of program like it in the nation.

Their intention is to look at the entire environmental footprint. He does not really care what emission level we are at; feels that being bogged down in the battle over whose science is correct misses the point of dealing with reductions. A demonstration of how seriously this issue is taken among their members is, at the recent industry convention, they agreed to increase their fees to fund research.

Oregon Dairy Industry is moving forward with their program. The two-state BMP program, for which Kathryn Higgs was hired, provides education for producers and public, as well as funds for research. Jim feels that this Task Force will not be meeting its challenge if we do not recommend more funds for research.

Jim walked us through examples of BMPs. His goal is to reduce the overall footprint concerning air emissions. There are costs and impacts to weigh on all sides.

Challenges to develop a program that:

- Has a positive impact on air quality
- Does not negatively impact water quality, employee health, animal care (cross media impact)
- Is financially feasible
- Producers see the benefit of
- Can be quantified
- Looks at mitigation (technology or management) from a research perspective to determine what BMP has the largest impact. (Note: there are probably no dairies in the state that are not using the MUN process – not because of air quality, but because of money. This is an example of the overall management practices of dairies advancing.)

### **Working Lunch: (JM)<sup>2</sup> Check-In on the Supporting Technical Document – Jim Males and Jim Moore**

Jim Males and Jim Moore gave the Task Force an overview tour of the new draft report (a.k.a. the Executive Summary). (JM)<sup>2</sup>'s comments came in two flavors – style and substance.

*Betsy Johnson:* missed last meeting, please explain where we are.

*Sam Imperati:* perfect segue. A decision was made at the last meeting to create a report more useful for a legislative audience. So, we will end up with two reports, so to speak. A shorter document similar to an executive summary and a much longer supporting technical document.

*Jim Males:* the major suggestion is from Moore, and that is that this should be divided into two parts. We were having problems with what information was specifically dairy and what pertained to all animals. Referring to CAFOs as all the same is not accurate. Want to end up with one that tells us about the state-of-the-art on dairy air quality and then others, swine and poultry. Trying to make the point that dairies need to be separate, which also meets our charge as a Task Force.

*Jim Moore:* made comments about references, but before carving up the report, he wanted to check with the Task Force.

*Betsy Johnson:* appreciates a report that is concise, pithy, and free of extraneous information. Also, very much likes separating it by species.

*Jeremiah Baumann:* agrees. Occurs to him that it is difficult to flip between papers, would like everything pertaining to methane, for example, in one area.

*Jim Moore:* agrees, but the dilemma is to divide by animal species, or by emissions. Applauds anything to make it crisper, and seems to him you could do this by air quality.

*Betsy Johnson:* makes a case for species because we are charged with dealing with dairies. Makes it easier for legislators. Any document you get, you flip to the index and see what pertains to your district. Helping legislators with this is a good idea.

*Sam Imperati:* would like to have (JM)<sup>2</sup> and staff gather and discuss.

*Jim Moore:* to get at Jeremiah's point, we could have an index that points people to ammonia wherever it occurs in the report.

*Jim Males:* there are worker safety things to be concerned with.

*Andy Ginsburg:* likes segregating by species in the Technical Document, and the Summary, which will be this Task Force's actual report, and then the Executive Summary.

*Marty Myers:* where are we going to incorporate the testimony we have from science and industry leaders? Especially interested in the part where in California they have never had a permit turned down for worker safety. Some of this has been over the phone, how will it be recorded?

*Betsy Johnson:* take away she has is under the heading of subjective agreements, such as the California and Idaho industry and environmental folks trying not to sue each other. Listening to the presenters this morning, they have principled differences, but are working collaboratively. In the legislature, things get polarized very quickly.

*Jim Moore:* seems to him the presentations will be in the back.

*Sam Imperati:* perhaps an appendix with their comments and PowerPoints.

*Marty Myers:* are we going to come to some conclusions? What is the process to get there?

*Sam Imperati:* perfect segue to the Working Draft Oregon Dairy Air Quality Task Force Report (a.k.a. Executive Summary). Ultimately, it will be the report with its own two-page Executive Summary and Table of Contents. We will go through this document at the next meetings on the various findings, asking for specific feedback. Today's work will largely be around the chart on page 8 – Assessing the Problem. Also, we will be looking at the chart on page 10, trying to get to the approach we will recommend as a Task Force: voluntary, regulatory (administrative rule) or legislative.

At this point, the Task Force took a quick break.

### **Approval of 2/20/08 Meeting Notes – Sam Imperati**

Sam asked if the Task Force approves the notes from the February 20, 2008 meeting. There was only one change, submitted by Kendra, adding clarity to one of her comments. The notes were approved with that change.

### **Discussion and Q and A with Jim Krahn**

*Jim Krahn:* we began this process way before the Task Force started. The PPT is what the industry has decided it is going to do.

*Kendra Kimbirauskas:* how does the association plan to enforce the program?

*Jim Krahn:* talked about a number of options, including having slightly different standards depending upon size. About 90% of milk is operated by co-op; we have had conversations with the co-ops, also with animal welfare. In the California model, every producer is sent a checklist. We hire an intern in the summer to go out and check if the lagoon cover is on. This could be done through cooperatives; maybe they will do random checks. We do not have anything in place yet.

*Kendra Kimbirauskas:* how do you get the outliers to implement BMPs?

*Jim Krahn:* what we do is move the 90% who are agreeable forward and those who do not want to comply will be very exposed. Experience shows him they will go out of business. As we saw with the CAFO program, some will just fall by the wayside. Many of the BMPs are already being done by the successful operations. At his industry meetings, he is finding producers are on board.

*Andy Ginsburg:* sounds like you are still formulating how this is going to work, but once you get your list of practices, what kind of outreach and assistance will be made available? And what kind of recognition (for marketing) do dairies get for opting-in? A certification?

*Jim Krahn:* milk is not priced this way, so he is not sure that a certification is relevant.

*Andy Ginsburg:* thinks that the recognition piece is important. If a consumer sees "Produced by a Clean Air Dairy," they might select that product.

*Mark Wustenberg:* customer expectations are changing radically and it is the distributors that are demanding change.

*Jim Krahn:* anybody we can partner with to help on the education piece, he is open to it. Knows it is not easy but a very important part of it.

*Kendra Kimbirauskas:* she worries about a “green tag” program for milk products. It does disadvantage the little guy who does not usually have the capital to do mitigation programs.

*Jim Krahn:* they have had many discussions about this because he shares those concerns. The 50-cow guy has just a little less to do than Marty does. The key is that if you base this on management rather than technology, then everyone can do this. The next time the dairyman makes upgrades, with the education and general advancement of the industry, even the small guy will make better decisions.

*Lisa Hanson:* if you change your focus from EFs per cow to the footprint or impact, do you think you can get this from management?

*Mark Wustenberg:* he struggles with the fact that any of these technologies will have some good and some bad outcomes. How do we set these priorities as we move forward? Have to get to the nugget of what we are trying to solve. Ammonia? Methane?

*Jim Moore:* in figuring out what we want to achieve, he expects this list to get more precise over the years, as we watch California, Idaho, and our own implementation process. As to Kendra’s point, some of them cost dollars and some of them cost hours. You may have to get up earlier.

*Andy Ginsburg:* that is why he keeps asking the question to Idaho if they just looked at ammonia or other pollutants, he is trying to learn from what has been done.

*Jim Krahn:* Idaho did what they did because of a lawsuit about ammonia. They had no data, and basically, they made it up.

*Andy Ginsburg:* you have said you are going forward regardless of the Dairy Task Force. So, we can look at this as something to endorse or as a complementary program. Andy is trying to figure out if he is comfortable in endorsing it. How open is the industry to public input? Would you consider any public involvement in reviewing effectiveness or inspection data?

*Jim Krahn:* one of the key people in looking at air emission sections has been Mark Riskedahl – Jim purposely sought him out. People have to understand the program to make sure it is valuable. They use the word voluntary, but it might not be exactly what it means. There is a little hitch in the get-a-long!

*Jim Males:* OSU Extension and USDA NRCS cannot be involved in a regulatory role.

*Jim Moore:* likes public input and comment, but needs it to be informed by science.

*Jim Krahn:* as long as everyone has the same goals, the genuineness of people at the table is what counts.

*Marty Myers:* does not want to lose sight of the fact that a lot of dairies are using animal-based nutrients by generating crops instead of importing feed, which would use fossil fuels. Reminds us to look at global impact, not just the little box that is a dairy.

*Gregg Lande:* all dairies, what about future dairies?

*Jim Krahn:* every new dairy will qualify and be able to utilize BMPs for their economic incentive, with the air quality benefits as part of the process.

*Mark Wustenberg:* an example of this also relates to animal health – do things for animal health and there will be trickle down benefits to air quality.

*David Collier:* wonders what the timing is.

*Jim Krahn:* you will have to wait a couple years to see benefits. Once we have put this into place, we will do an assessment on dairies to get baseline, then again in a couple years, to see what has happened. There will never be a deadline; we are going to have to work into it. We do not have the personnel to get everyone involved on day one.

*David Collier:* folks in Washington?

*Jim Krahn:* they are getting on board, hiring someone to work with Kathryn. The USDA grant is a two-state deal.

*Lisa Hanson:* so, no deadline, what about benchmarks? Seems to her this will be a program with constant evolution to incorporate new technology.

*Sam Imperati:* to be the devil's advocate, you referred to the success of the CAFO program, but they had a hammer that you do not.

*Jim Krahn:* At first, they did not. CAFO was loosely run, and has evolved over the last 15-17 years.

*Andy Ginsburg:* good thing for this Task Force to keep in mind that this will likely evolve.

*Gail Shibley:* what is the objective? To get under some identified NO<sub>x</sub> level? To make this issue go away? Before she could say, yes, wants to know what success means for them?

*Jim Krahn:* difficult to determine. If you listened to the presentations this morning from California and Idaho, what they were hung up in was the details. We want to reduce our emissions footprint; he thinks this is as specific as we can be. Need to leave room for the science to evolve.

*Gail Shibley:* and reduce emissions per CAFO, per cow, per gallon of milk?

*Jim Krahn:* slim down the piece of the pie that dairy operations contribute to the overall air emissions.

*Sam Imperati:* say you got this list of BMPs, did an inventory of dairies, developed a big grid of what is the status quo, and then you could say that right now you need X BMPs. If we are going to do 110% of X, then you are reducing your emissions. What kind of process are you going to do? If we get more cows, then are we going to make a dent?

*Mark Wustenberg:* my primary interest is that he has access to market and gets all the value he can for his producers. Increasingly, he gets questions on these things. With one of his customers, they are going through a whole sustainability scorecard. There are no numbers, but it is implied that you are in competition with others, which is different from just meeting some arbitrarily chosen numbers. They had no input as to what they were being asked; his customers defined sustainability, and have made them work with it.

*Jim Krahn:* has to look 5 and 10 years down the road, be responsible, so we are allowed to still milk cows. These things become very important as we have more urban/rural interface issues.

*Jim Moore:* if you look at the sheet of BMPs from Troy Downing of OSU Extension, he does not think you are as far away as you think you are. If you use these numbers, while they are soft, they at least give you a yardstick.

*Jim Males:* from Kathryn Higgs' Master's thesis, we learned that in Oregon, we were feeding about 50% too much phosphorous. After this came out, you can go back and look at those operations that made the changes and measure impacts that way.

*Jim Krahn:* even though in these conversations, we focus on what we do not know, there is a lot that we know.

*Gregg Lande:* you mentioned educating the producers; you also mentioned educating the public. What is happening there?

*Jim Krahn:* Kathryn, he, and Mark Riskedahl met to discuss this. Given the audience, he is not a big fan of having everything just on websites. They are looking at other methods as well.

*Wym Matthews:* concerning cross media impacts, there are regulatory cross media impacts we should think about, specifically BMPs for air, which are already in operation for water quality. The permit is based on water, so there is already a fair amount of regulatory control based on water.

*Carrie Ann Capp:* public involvement question.

*Jim Krahn:* Mark Riskedahl is the main person involved at this point.

### **Gorge Air Project: Regional Ammonia - David Collier, DEQ**

David presented a brief summary of the Columbia River Gorge Air Project, which addresses air quality and visibility in the Gorge. The processes are similar in that we are looking at what is really driving the problem. Oregon is geographically different from California; we do not have the ozone problems. We had a public meeting in Hood River two weeks ago to share information and gather public input on a proposed strategy to improve visibility in the Gorge. DEQ has been working with the Southwest Clean Air

Agency of Washington. For more information, please see the website:  
[www.gorgeair.org](http://www.gorgeair.org).

Chemicals of concern:            Ammonium sulfate  
   Ammonium nitrate  
   Organic material  
   Elemental carbon

What they are realizing is that they need to look at ammonia. The Forest Service is very interested in the high nitrate signature in the eastern part of the state. They do not have answers yet.

*Andy Ginsburg:* do not know the sources of the chemicals we see in this data, but these are the chemical we are seeing and concerned with. This is all available on the regional haze website.

*David Collier:* there was a monitoring study, to try to get as comprehensive a look at haze for all emission sources in the area. The study evaluates a summertime event (west winds) and wintertime event (east winds). They then created a model based upon monitoring data. The results surprised them as well as the scientists:

- In summer, 59% natural sources and sources beyond our jurisdiction, 41% man-made and in our jurisdiction sources
- In winter: 28% natural sources and sources beyond our jurisdiction and 72% man-made and in our jurisdiction sources

The Gorge study takeaways are that ammonia plays a key role in haze chemistry; and that there are many sources of ammonia, including agricultural fertilizer use, transportation, and regional animal feeding operations, including dairies. From David's perspective, we have to put our energy and resources into understanding ammonia. A bi-state program is needed because it is a regional problem.

*Sam Imperati:* questions or comments?

There were none, and we took a break.

## **Public Comment**

Sam noted that there were four members of the public here today wishing to comment: Doug Crow of the Columbia River Gorge Commission, Kathy Fieldstad, Bob Oleson, and Paul L Smull.

### **Paul L Smull**

Paul has been fighting air pollution for more than four years. He has fought with environmentalists, the Department of Agriculture, the DEQ, and the health departments. He has always felt that DEQ should take care of all this air pollution. We had clean air and clean water acts, but the state of Oregon has watered them down.

Paul then introduced himself as a 77-year old Korean War veteran. His wife and he built his home and lived there for 40 years until a dairy came in. He grew up milking cows; a

dairy is nothing new to him. He is still a farmer and his son is a farmer in Hermiston. He knows it all like the back of his hand. When he came back from Korea, he got an electricians license and became the head electrician for Willamette Industries. The federal government should have the standards. He feels bad for this group, struggling to figure out standards. It should be put back on the federal government and the DEQ. There should be time limits on folks cleaning up their mess, not just say it is all right because it is agriculture.

He had to sell his place; he could not stand it. The stress of fighting these problems, maybe it did not cause it, but it has contributed to his heart condition. He is glad to see this meeting and appreciates everyone's time.

### **Bob Oleson**

Passed.

### **Doug Crow, Columbia River Gorge Commission**

He was appointed by the Oregon governor to be on the Columbia River Gorge Commission. Doug thanks David Collier and the DEQ for the work they have been doing on air quality issues. The Commission had a mandate, it is a bi-state compact. We are required to protect recreation, which has replaced the extraction industries. We are required to protect natural resources and cultural resources. The Yakama Nation is particularly concerned about rock art, native plants that are either sacred or food sources. Then finally, there is the economy. Like you, we are supposed to balance all these with economic interests. Along with recreation, we have a big agriculture sector, including dairies and orchards. Another interested party would be the watershed councils in the Gorge. They represent a combo of residential and farming interests. As far as where we stand on air quality, we have been monitoring for about 15 years, total. Action is coming soon.

*Sam Imperati:* by the end of the summer, we will be reporting to the Gorge Commission on strategies and recommendations.

*Doug Crow:* it is a unique body, a unique way to go about regional planning.

### **Kathy Fieldstad**

She is a concerned citizen and business owner. She has questions of clarification on units of measurement used. What is the definition of head count and what is a dairy operation? She wants clarification and wants to add that the document would benefit from including these definitions.

*(NOTE: Tape recording did not include public comment – forgot to turn it back on.)*

### **Task Force Discussion on New Draft Report, Discuss Options for Recommendations**

*Sam Imperati:* is there anything that any members of the Task Force need to hear still? That is to say, if X does not happen, you cannot consider this process fair and complete.

*Kendra Kimbirauskas:* feels we have not had a balanced look at public health.

*Sam Imperati:* recommendations?

*Kendra Kimbirauskas:* she sent some a while ago.

*Sam Imperati:* can we talk off-line to get the names of the people you recommend? Is there any other raw data or questions?

*Jeremiah Baumann:* to what extent does tackling one source of ammonia have repercussions elsewhere?

*Sam Imperati:* comments?

*Mark Wustenberg:* cross-species keeps coming up. Feels we need consensus that there really is agreement on the difference between species.

*Sam Imperati:* restated, what is the current state of understanding concerning the different species?

*Gail Shibley:* If the question is, does a pig vs. cow emit different VOCs or different amounts? Or, is it that the same unit of the same element affects humans differently?

*Mark Wustenberg:* hydrogen sulfide does, as Kendra said, impact human health. He means that if we are talking about human health impacts, data from different species is relevant.

*Dana Kaye:* is the way to take that data and determine which does crossover? She has been convinced very clearly that cows are different from swine, but she is still interested in knowing about the impact on a human being.

*Mark Wustenberg:* senses that those of us who are more familiar with agriculture are making a distinction. That is does not seem to be everyone's understanding.

*Jim Moore:* health effect on someone who works 8 hours for 6 days in poultry cannot translate this to same worker in a dairy because the environment is different and the gases are different. The air quality in a poultry operation is one thing; the air quality in a dairy is another.

*Andy Ginsburg:* thought we were going to handle this by the (JM)2 recommendations, keep the other agriculture/CAFO in a separate section, with the cross-reference in the table of contents. Not mixing - not leaving it out. Hopes we are trying to figure out how to reduce emissions.

*Jeremiah Baumann:* on the work plan, we are done with parts 1 and 2. We need to proceed with the rest.

*Kendra Kimbirauskas:* not trying to go back, she is simply proposing that the one major hole is the public health piece. She knows some universities are looking at this question. She thinks we could have a presentation from a human health expert.

*Andy Ginsburg:* does not think there is a need for this Task Force to debate whether or not these pollutants have health effects at high enough concentrations. He thinks we can just postulate that. At a dairy, we can say ammonia in high enough concentrations can have impacts.

*Kendra Kimbirauskas:* still thinks we need a presentation.

*Sam Imperati:* we did ask Gail to research this, she did provide info, and there is a paucity of info on dairies.

*Gail Shibley:* that is true. She tends to be a stickler about the Task Force's charge and what does the statute says. She is also mindful about how much work there is left to do. She is sure that we could have a truly fascinating discussion in the Task Force, but she wants to see it in the report. The biggest charge we have is to examine air quality. We should be studying and addressing NO<sub>x</sub> as it impacts human health. She would be OK about having another presentation, and she thinks the report can be restructured and rephrased.

*Andy Ginsburg:* if someone has done a risk assessment of ammonia or other pollutants with real emissions from a real dairy with the real dispersion that occurs. His gut tells him that it is way below human health thresholds.

*Sam Imperati:* at a minimum, Kendra, Gail, and I should huddle. If it is necessary, it should not be hard to get an hour presentation.

*Andy Ginsburg:* concerning Jeremiah's comment about trade-offs; to clarify, do you mean looking at implementing control measures, and if you do BMP X, does it also impact chemical Y?

*Jeremiah Baumann:* yes, the intention is to avoid making another problem worse.

*Andy Ginsburg:* say we decide we want to address ammonia and also not make greenhouse gases worse. We would want to put some criteria around that. Every BMP is different; every farm is different. It might be useful if you went through the Idaho list, and also try to assess the BMPs for their affects on green house gases. Sometimes BMPs do work exactly opposite of their intended purpose, as Dr. Mitloehner said.

*Jim Males:* one example is methanol – flushing reduces methanol, but it results in much greater odor.

*Sam Imperati:* to guide us in discussion, let's address "C. Determine the problem(s) to be solved." (JM)2 will work with staff to go over the supplemental technical document, so what comes next is on page 8.

*The Task Force took a break and then continued with discussion.*

Returning from break, Sam suggested David guide us through the Grid on page 8 of the new draft Executive Summary, which displays pollutants and their potential impact on animal health, worker health, neighbor affect, air shed health, regional welfare (visibility), global affect, and AQ permit. We want Task Force reactions and opinions, and then, we will do the same with page 10 and 14, so we can figure out where we need to do more off-line work.

*David Collier:* explained that it is a spin-off of a table done by the National Academy of Sciences. We are still trying to figure out whether this table will be useful to you. Trying to focus on where we will put our energy when developing a BMP program. Do not want to design a program that has negative trade-offs. While much of implementing a BMP will be case-specific, we are just trying to begin describing where our priorities are.

*Jeremiah Baumann:* this is a good first start as a general way to categorize what the issues are and where to spend our time.

*Gail Shibley:* you are right; this is somewhat an impossible task because everything is so individualized. The frame of the whole table is potential exposure at a level of concern.

*David Collier:* another issue that folks have brought up is the word “potential.”

*Kendra Kimbirauskas:* understands the language issue with the boxes, and would like to add that she has concerns about the “Neighbor Affect” column due to a variety of definitions of neighbor in different areas.

*Andy Ginsburg:* Gail had a good suggestion about changing the current “potentially significant” and “likely insignificant” to “more likely” and “less likely.” For the sake of this conversation, so we do not stumble on the words, can we just pretend the chart says more/less likely?

*Jim Moore:* but it seems like we are extrapolating because this table is not based on Oregon dairies. He refers us to a similar table in “*Air Emissions from Animal Feeding Operations: Current Knowledge, Future Needs.*” (See page 36 in the Executive Summary, at [http://www.nap.edu/catalog.php?record\\_id=10586](http://www.nap.edu/catalog.php?record_id=10586)) The report uses, in ranked order of importance, Major, Significant, Minor, and Insignificant, to communicate what we are trying to communicate in the chart. He is not comfortable with too much extrapolating.

*Andy Ginsburg:* the fact that this table looks a lot like that table is not coincidental, but they are not the same. The table we are making is an assessment of what this Task Force is charged with.

*Jim Moore:* we can put it into a reference and bring it back, but we cannot lift material. Need to change the title and people need to get and give credit appropriately.

*Andy Ginsburg:* in the end, the table needs to represent the committee’s findings on the problems we are trying to solve. We need to assess each of these, determine if it is a problem, and if so, determine the extent to which dairies contribute. We have to get past this point and be clear about what problem we are trying to solve.

*Sam Imperati:* edited the text to reflect the conversation: “The Task Force would like to focus its efforts over the next several years on improving air quality for the topics noted. Science is evolving. Add what this table is not. Not checked does not mean ignore forever. Footnote discussion or clarity and qualification.)

*Andy Ginsburg:* wants to have footnotes on each of these with the reasons why we assess one way or another.

*Sam Imperati:* so are we suggesting using Xs to indicate significance or interest?

*Andy Ginsburg:* feels like Xs gets at what we need to get at.

*Sam Imperati:* Gail, do you feel there is added value to the verbiage you proposed?

*Gail Shibley:* wanted to clarify “potentially significant” and “likely insignificant” as the current chart shows, at least they need to be consistent. She is fine with the X.

*Jeremiah Baumann:* X = priority issue based on current science.

*Andy Ginsburg:* Gail, yet another excellent contribution to our discussion! As I was saying, we need to be clear that this chart is based on Task Force deliberations and presentations; this is what our findings are.

*Andy Ginsburg:* if we are concerned about ammonia impact on neighbors, then we target the program on only those farms. If we are concerned about regional haze, then we might design a completely different program. Still the same BMPs, but a different approach for implementation based upon the reality on the ground.

*Sam Imperati:* proposal: he will send you a new and improved version of chart. Each Task Force member will check the boxes you think appropriate, along with any footnotes. Sam will mush all this information together. This will be an informal survey. A triage process like this might help us maximize our time.

*Kendra Kimbirauskas:* trying to wrap her head around it.

*Sam Imperati:* thinks we are getting wrapped around the axle with too many specifics. You have a sense of the politics, science, your own interests, and opinions. This is what you would base your responses on.

*Andy Ginsburg:* Kendra brings up a good point, suggests X goes in those that we identify as problems. Then a \$ on those that need further information and/or research.

*Marty Myers:* so marking a box means we think a BMP is a viable solution?

*Sam Imperati:* now we seem to be getting back to the previous language we were trying to get away from.

*Jeremiah Baumann:* know enough to say it is a problem we need to do something about. Keep it at problem definition, and then, later see what we can do something about it.

Sam Imperati: Led discussion on the goal proposing, “reduce emissions from dairies.” There was general agreement.

*Sam Imperati:* brought our attention to section IV. Sam then asked Andy to walk us through the chart on page 10.

*Andy Ginsburg:* the flow chart shows us options to consider at for the outcome of this process. Andy went over the difference of approaches and the programmatic framework that would likely go along with choosing one approach over another. For example, if the Task Force chooses to recommend regulatory action, we would also want to decide if the corresponding framework should involve a new source review, a series of emissions standards, and /or a menu of BMPs like Idaho.

If this Task Force recommends a regulation, it could be adopted with no further legislative activity. There is federal new source review for anything under the purview of the Clean Air Act; there could also be a state new source review, which would necessarily have lower triggers than the feds, as the federal trigger is too high for dairies to qualify. The logic for this is that when a new facility is being built, that is the best time to think about pollution control, rather than retrofitting. It could be established that all new dairies are subject to it, or just dairies of a certain size.

Emission standards: it is in there to describe how it will not work. At a pulp mill, you can monitor the stacks, on a dairy or any agriculture operation, as has been reaffirmed by numerous sources; it simply does not work as well because most emissions are fugitive. It is a standard more applicable to industry. You cannot monitor in real time, which is why California and Idaho went the ways they did.

Menu of Best Management Practices: the options were meant to be illustrative, not exhaustive.

*Jim Krahn:* the more complex you make it to determine who is in and who is out, the more difficult oversight is, the more confusing it is for producers. Just something to think about.

*Andy Ginsburg:* thanks, that will all be considered when we go through the matrix-triage process Sam recommended. SB 235 gave the Task Force the ability to establish new rules. Funding recommendations absolutely must go through the legislature. This could be on specific categories – human health, a baseline of BMPs and what is currently out there, funding for monitoring, funding for ODA to see if monitoring is happening (thus not commandeering one of their water quality staff for this program), funding for DEQ to get an expert on staff, and funding for small producers are just some examples. There are many possible recommendations for funding that we could make to the legislature. A final recommendation from this group could be a combination of these options. After quite a bit more conversation, people might want to put packages on the table with recommendations.

*Sam Imperati:* any options that are missing?

*Gail Shibley:* voluntary piece. You have industry run, 3<sup>rd</sup> party run. DEQ also does things like this; why not have them as an option? (State-run)

*Andy Ginsburg:* sure, we could with a new FTE.

*Jeremiah Baumann:* can we have a non-mandatory state-run regulation?

*Andy Ginsburg:* it is possible. If you truly made it opt-in, then all of the procedures and criteria would be published in Administrative Rules, and then, public and industry could provide input before it was adopted.

*Jim Krahn:* Andy, what is the feasibility from a financial perspective that any of these would be able to work?

*Andy Ginsburg:* if any one of the agencies were to take on anything significant, we would need staff. We are planning to have a placeholder budget line for this task force

and a placeholder for legislative work. We have to submit our budget proposals and legislative concepts for 2009 within a month, so we are trying to plan ahead.

*Jeremiah Baumann:* does not know enough about current water inspections, and we are told that some of the BMPs are the same, so could there be overlap in using agency resources/staff?

*Wym Matthews:* we are stretched on water staff, but it possibly could be incorporated.

*Sam Imperati:* concerned about how to move this discussion forward in a more concrete way. We have three more meetings and we need to start moving forward.

*Kendra Kimbirauskas:* could we agree to take what we have learned, take some time to think about it, and get on a call in a week or so?

*Jeremiah Baumann:* feels like we need to have a conversation between problem and policy, but some discussion based on the actual on-the-ground options.

*Sam Imperati:* we can do it Jeremiah's way, or figure out recommendations, and then work on implementation.

*Jim Males:* what we are really talking about would be nice to address. Not all of us in this room may agree that ammonia is really a problem, but there are BMPs that can address it.

*Sam Imperati:* going back to Executive Summary draft, page 14, is a chart of advantages and disadvantages. There are a couple possible ways to prime the pump, off line, you could all think about them and fill out the chart.

*Jim Krahn:* he cautions us that as you look at many of these things and the desire to get specific, after all he has been through, getting specific may not be achievable. The more complex and specific you get, you will get off track in developing a program.

*Sam Imperati:* suggests we prime the pump off line. Everyone will get an email in the next couple of days, with two charts to fill out and send back to him. He will assimilate all the info, mush into one document, and then, hopefully at Tillamook, we will get right into discussion, and as Andy alluded to, hopefully, some packages will emerge.

*Andy Ginsburg:* going back to Jeremiah's question, is there something that can be done with a BMP on all of these chemicals?

*Dan Bansen:* as a dairyman, he believes you can impact a lot of change on these, but every expert gives us different answers.

*Andy Ginsburg:* given the caveat Dan just said, he still is interested in eventually going down the list and hearing about that.

*Dan Bansen:* agrees, just trying to point out that everything is such a moving target.

*Sam Imperati:* if our recommendation is very specific, we will have to deal with this in a very specific way. If our recommendations are on a broader level, we do not.

*Jeremiah Baumann:* he was trying to get at finding about the BMPs that are ubiquitous in the industry, those that do not cost much, and those that everyone is already doing.

*Dana Kaye:* when you come up with that, whether they are doing BMPs or not, there has to be an evaluation.

*Jim Males:* an option that could be added to the flow chart page is that ammonia is a potential air emission that is of interest. In order to know where we are, we need baseline monitoring, some BMPs put in place to see effectiveness, then in 2 or 3 years, the “Daughter” Task Force, comes along to assess impacts.

*Andy Ginsburg:* this could be included into the package recommendation.

*Sam Imperati:* depending on when you all get your homework back to me, it may be that you can come to the next meeting with some concepts surrounding packages.

*Jim Moore:* looking at the Air Emission Control BMPs list, it is all about ammonia, but he would like to know what the other outcomes and impacts are.

*Jeremiah Baumann:* we have this for ammonia; do we have anything for methane?

*Jim Moore:* just wants to know if this info is available re: BMPs and other specific chemicals.

*Gregg Lande:* asked Dave Dishman, not sure if there was information on specific chemicals.

*Jim Krahn:* thinks this list does not exist, it would be nice if it did.

*Jim Males:* what I heard Jeremiah asking is can we impact methane, and the answer is not much. Diet, antibiotics, which he does not see us recommending.

*Jeremiah Baumann:* not ready to say we should regulate anything before we have info on BMPs by pollutant.

### **Next Steps, Next Meeting Preview, and Evaluations – Sam Imperati**

Everyone will receive an email with homework assignments. Please complete and return to Sam as soon as possible. The next meeting is in Tillamook. Sam will also put out an email to see what everyone’s plans are. Task Force Members were asked to complete meeting evaluations and thanked for their participation.

Meeting adjourned.

Please see next page for meeting evaluation results.

