



329 North First Street, Yakima WA 98901
Phone: (509) 834-2050 Fax: (509) 834-2060
Website: <http://www.yakimacleanair.org>

Agency Response to Comments and Questions Regarding the Final Report of the Air Quality Management Policy for Dairy Operations Pilot Research Project

During the Study Session of the January 12, 2012 Meeting of the YRCAA Board of Directors (Board), the acting Board Chairman asked for comments from the public and the regulated industry regarding the Final Report of the Air Quality Management Policy for Dairy Operations Pilot Research Project. Nine individuals from the public commented and one individual from industry commented. Although the intent was to hear comments about the report, the vast majority of comments were not specific to the report or the pilot project. It is not the position of this Agency that comments which receive no response are unimportant, just that they are not specific to the policy or the report.

The purpose of this document is to provide YRCAA (Agency) responses to those comments regarding either the report or the pilot project. Commenters and their comments are presented below, in order of appearance, as transcribed from the audio recording of the meeting. Jean Mendoza's written comments are retyped to allow for insertions of responses. Agency responses are presented in italics.

Assertions

The following assertions of fact will be referenced by number in the responses:

1. Funding for the project was made available from two sources; Agency funds in the amount of \$15,812 and grant funds in the amount of \$21,400 from Washington State University (WSU). The amount from WSU was a subcontract amount derived from a \$30,000 grant to them from the Washington State Dairy Products Commission from which \$3,000 was retained by WSU for administration and \$5,600 was retained for the project work conducted by Dr. Pius Ndegwa. The total funding for the project was \$37, 212.
2. The purpose of the project was to test the feasibility and effectiveness of a policy. The policy identified a set of Best Management Practices (BMPs) known to be effective at mitigating emissions of specific air pollutants common to dairies. A report was furnished to the Board which contained an executive summary, background, a description of the work, a description of dairy participation and site visits, compliance assistance documents, findings, conclusions and recommendations to the Board.
3. A BMP Score Sheet was developed based on prior scientific research conducted on the effectiveness of BMPs at reducing specific air pollutants. The purpose of the score sheet, to be completed for each dairy, was to give dairy owners and farm managers an idea of how effective each BMP is at mitigating specific air pollutants within each farm system by assigning a score to each BMP. The scores were assigned based on the known effectiveness of a BMP and its degree of implementation.
4. Air emissions from dairies are fugitive (cannot be readily passed through a stack or control device) emissions and no economically feasible monitoring method exists to accurately measure them. Consequently, no monitoring was conducted. Rather, BMPs with known measures of effectiveness were verified and evaluated for degrees of implementation. This data will be used to input emission estimation methodologies being developed by EPA and then emissions can be modeled both on and off the dairy.
5. Hydrogen sulfide (H₂S) is the primary odorous compound emitted at dairies. It is regulated by OSHA and has a permissible exposure limit (PEL) of 20 parts per million (ppm) ceiling concentration and a peak exposure limit (STEL) of 50 ppm for no more than 10 minutes if no other measurable exposure occurs. The PEL of 20 parts ppm is **2,500** times greater than the

detection threshold of 8 parts per billion (ppb) and the STEL is **1,250** times greater than the detection threshold. Therefore, it should be well understood and accepted that, although an H₂S odor is annoying, H₂S is not considered a safety and health concern until it reaches levels established by OSHA.

Louie Aguilar

171 Pleasure Ln., Toppenish – Good afternoon, my name is Louie Aguilar and I live in Toppenish. And ah, this is the first time I have seen your document. So, fortunately, I have not dug into the details but I was just happening to be reviewing page 4a, that is titled “odors”, odors. And, I have an elderly mother that lives in Sunnyside, she is going to be 90 in March, and when I go and visit her I still smell all kinds of dairy smells. So my basic question is this, based upon this Best Practice Policy, that you guys have implemented, and the action you guys propose to take, I’m making an assumption, I’m making a big huge leap of faith, for this Board, that when I go and visit my mother in the future, that the smells are no longer going to be there in Sunnyside. Or, am I more likely, that this Policy is just strictly another procedural step to try to put things in action and place that maybe in 15 or 20 years that Sunnyside will finally be able to smell better. So, I would just like some clarity around that. **Response:** *The BMPs proven to reduce odor and hydrogen sulfide (the primary odor compound), if properly implemented, will result in a reduction of odor, but not a total elimination of odor. See Assertion No. 5.*

Bill Lover asked: We appreciate your comments, and do you have any questions for any of the

Mr. Aguilar response: No, just directing at you, and hopefully you guys will come up with an answer and we won’t have to wait 15 or 20 years for Sunnyside to smell better. **Response:** *It is unknown how long it will take to result in a noticeable odor reduction.*

Rand Elliott thanked Mr. Aguilar ... and stated that we have no intention of getting into a debate here in the public comment time.

Jim Dyjak

15201 Hwy 24, Moxee, WA – I got two questions. First is a procedural question. I got my packet on Saturday, I read it on Monday. Other than being in this package, the Board package, was this public comment period published anywhere, or was did only the seven people that get the package know you’re were having public comment today? **Response:** *There was no intent to include a public comment period. It was the decision of the Executive Director to allow the public to participate in the study session.*

Patty Walker responded: No, it was posted on our website in our public notice, that there was, oh, what should I say, that we were being,..... making a presentation.

Mr. Dyjak: Right, but, it doesn’t say there’s a public comment. That’s what I’m saying.

Ms. Walker: No.

Mr. Dyjak: So, what about the hundreds of people that are watching this, and the thousands of people that live in the valley? Only the seven people that get the package know there’s a public comment.

Bill Lover: But if they got a city packet, which is a number of them, they’ll see that I’m on there and they will see the time and date.

Mr. Dyjak: But that doesn’t do any good for the public. See, all these people here, we did this by phone. Because the public, all the people living down there doesn’t know it’s going on.

Mr. Rand Elliott: Point taken Jim; and we have public comment period every time we meet, so,.....

Mr. Dyjak: No, I mean on this subject.

Mr. Elliott: You can comment any time you like on this subject.

Mr. Dyjak: But, you're going to vote on it

Mr. Elliott: No, we're not votin' on it.

Mr. Dyjak: I mean next month.

Mr. Elliott: We might.

Mr. Dyjak: And, my comments on this is, uh, I gather from reading the package and watching the slides that were presented last month, that if you follow,..... that if the dairies follow the BMPs they get a higher score. The more they do the higher the score. **Response:** *Yes, the more BMPs implemented at higher degrees of implementation results in a higher score.*

So, the question is, for example, if I'm reading the BMPs right and everything, say he is removing the manure from his pens, the more he does it, the higher his score goes, from zero to five, I guess. So, the question is then, what if he stockpiles what he takes out of the pen, and stockpiles it on the dairy? **Response:** *In terms of emission reductions, it depends on the BMPs implemented to what degrees.*

Or, if he uses a vacuum truck and then goes and spreads it out on his drying pen next to somebody's house. Do you now give him negative points? **Response:** *No negative points are assigned. The negative is expressed by the absence of positive.*

Because you moved it, you didn't alleviate it, all you did is move it from one place to the next. Same thing, ah, if he takes it off the dairy, like the DeVries Dairy to me, across the street and puts it in an orchard, a hops field; all you did is move it to somebody else's neighborhood. Should they be not included in this program too? Especially when it comes to plowing it under, because really all you did is move it. He's going to get points for doin' a good job when in reality he didn't. He just moved it to somebody else's neighborhood. **Response:** *For any person or business, transfer of ownership of any product or byproduct assumes transfer of responsibility for that product or byproduct.*

And, the last question I get is, ah, no scientific instruments were used in this project. So how do you know, I'm not going to get PM2.5 or 10, which carries, you know, poop, odor, and all that? **Response:** *See Assertion No. 4.*

Cause, I want to quote Mr. Pius email, of April 12, 2010, to Gary and George, "We just completed the National Air Emission Monitoring Study from livestock operations. I was the PI for the Washington dairy site located in the Mabton area. This project has provided us with the baseline emission data for dairy operations. There are two natural questions that follow the outcome of the NAEMS;"

1) "How much of these emissions go beyond the property line?" [Dyjak: So they get the study done on the dairy. But nobody,..... how do you know what's coming into my house?]

Response: *This can be answered by modeling, once we have reliable emission estimation methodologies. See Assertion No. 4.*

2) "What are the available Best Management Practices to mitigate the emissions?" **Response:** *Dr. Ndegwa's comments were in relation to following up the National Air Emissions Monitoring Study of Animal Feeding Operations and were not intended to inform this project. However, this project answered this question.*

So everything you did is on the dairy. It's going to work fine. They're going to get a score sheet that says they're taking it out. But, you never had a baseline to say what's on my side of the line, what's in my house. How do you know it's still gone? Thank you. **Response:** *See assertion No. 4.*

Karen Cook Gulley Wesselius

621 Gilbert Rd. Zillah - Hi. I'm here regarding the air quality in Toppenish. I've lived in Toppenish all my life. My mother has, her father has, and her grandfather has. We've lived here all our lives, and our health is starting to decrease in value. I have asthma, allergies, and this year during their air inversion in Toppenish I've had chest pains. I'm a very healthy woman, but the asthma is causing chest pains, sinus infections, and migraines. I believe it has something to do with the beef plant in Toppenish, and the smell and stuff they get to burn during this air inversion, where we don't get to burn our fireplaces our garbage, or anything else. They still get to burn all the stuff they want to at the beef plant.

Regarding the health of the family members other than mine, my daughter is suffering with problems, my sister, excuse me, my son's sister-in-law has reoccurring mono, which doctors want to say that it doesn't exist. My daughter is now having the same problem, and the other girl's sister who is 16, is having the same problems. We live within a mile-and-a-half of Washington Beef, or whatever they want to call it. Each time the EPA has charged them with some regulation faults, they have gone to the excess of selling the property to another company, each time the EPA says it's time for them to fix the problem. Every year, every five years, every seven years there's been a new owner of the company. They haven't seemed to fix the EPA problems there. They just seem to give it to the next owner. And, I'm wondering if the people in Toppenish, have you ever checked the Indian Health Clinic, or the other clinics on the asthma rate in Toppenish compared to the other places in the United States?

I'm believing that we have a problem stronger than you guys know. Because doctors say that this reoccurring mono does not exist. But why is it documented in these women living so close to this area? I may have something to do with the Toppenish Mural Society, and I'm not speaking for them. I'm speaking on behalf of myself. The air quality leaves something in the air that deposits on the murals. I've been the maintenance supervisor for over 20 years and I can feel the substance that is being left on the murals. That's a very valuable asset for our community and we would hate to lose it because of the air quality. Thank you. **No Response**

Gary Pruitt reminded everyone that this comment period is intended to be for comments on the report.

Jan Whitefoot

80 North Ave., Harrah –My name is Jan Whitefoot. I live in Harrah. And, I was at your last clean air meeting and I looked at what you have for your vision statement here, and it is, "To protect public health and safety from air pollution." And I'm here representing people, not just on the Reservation, but people in the whole Yakima valley. Um, I started researching after I read all that you had on the internet and I made a list of questions to ask you after I read your BMP, your score card. And I realized that you are making this whole score card based on the assumption that BMPs work, Best Management Plan for the public. **Response:** *Effectiveness of the BMPs evaluated in this project is known, not assumed.*

That's what they're talking about, is Best Management Plans. For the public's information, they are not enforceable under law. They have been in practice for 20 years in the Yakima Valley already, and this is where we've gotten with Best Management Practices. In part of the Best Management Practices also includes a Nutrient Waste Management Plan. That also has been in effect for years. That's where we have got following Best Management Practices is the mess we're in today. **No Response**

As I was doing research I find out that Yakima Clean Air Authority has received \$30,000 from the Dairy Federation to do this pilot study. We feel that on a WAC code 4(a) 28(b) under good faith of the law it's relevant to conceal all information. **Response:** *There exists no such WAC.*

It says that you took a donation of \$30,000 on the state website in order to do this pilot project. We feel as citizens this is not ethical. **Response:** *On average about 58% of our base operating budget is made up of money collected from regulated sources. See Assertion No. 1.*

We are asking you to start over this study. No environmental representatives were allowed to go to Work Shop meetings. **Response:** *We will not start the study over. There were three people with*

doctorates in engineering and environmental sciences and combined work group environmental work experience of over 150 years. There were two Board members and seven staff representing the public.

Why? Where did the money go that the dairy industry donated to Yakima Regional Clean Air? We consider this a conflict of interest. Here you have the potential polluting party giving you money to do the uh..... That shows bias toward the industry and lack of concern toward the public health. **Response:** *Funding for the project is as described in Assertion No. 1.*

Uh. Recently, in Federal Court in Yakima, Charley Tebbutt, a well-known environmental attorney, who has sued several dairies and feedlots, made the comment where the Farias Dairy was sued. And he read what you guys wrote on your website and he said what you're planning to do; "Bias toward,.... the purpose,.... proposed policy does nothing more than to allow the industry to avoid accountability by claiming they are heavily regulated, when in fact, the regulations are so vague as to be meaningless." We feel since air and ground water plans are included within the Best Management Practices and often cannot be separated in instances as aerated lagoons, we feel the recent case in Yakima Federal Court by Judge Suko is important because said manure management practices, Judge Suko said in that court they contributed to ground water contamination, in Federal Court. And I know you're going to say well this is air, but you can't separate a lagoon with aeration from air and water. So, we're asking. **No Response**

Okay, another thing we would like to address are the poop sprinklers. On the internet, on your site a citizen wrote in and said; "Why do you allow the poop sprinklers on the dairies?" **Response:** *Such sprinklers are not on our list of BMPs.*

And for the public that doesn't know, ah. I talked to a teacher that drove down West Wapato, what is a poop sprinklers? These are the big, giant sprinklers you see normal farmers putting water on fields. They put the poop in the sprinklers, it's not composted, it is raw manure. It landed on their car as they were driving by the school to work. Another example, I got a phone call a couple of days ago. Citizen says, "They have poop in the sprinklers They're running it out by my house on West Wapato." **No Response**

Bill Lover stated, "You are kinda shy, getting away from the study itself."

Ms. Whitefoot - okay. My point is, under Best Management Practices, the poop sprinklers are legal. It is shown in studies that they carry pathogens, diseases, and they go for miles. And so, on, on, your website, somebody says, you said, "Oh that sounds like a good idea of getting rid of 'em." So, why aren't..... **No Response**

Bill Lover - interrupted, You're going to have to stick with the policy issue at hand, not our website.

Ms. Whitefoot - well it was on your rough draft. Let's say, it was on your rough draft. They said why don't you; as part of this score sheet, how come, alright, poop, why are poop sprinklers not addressed? That's what I'm gonna ask you. Okay. **Response:** *See Assertion No. 2.*

Okay, another thing, at our last meeting we mentioned the study by Dr. D'ann Williams, from the prestigious John Hopkins University. She was a third party person, she was not affiliated with the dairy industry, she was not affiliated with Citizens Groups; she was from a world renowned scientific hospital known for its research. Okay, in there she took air samples within 40 homes near the feedlots and dairies here in Yakima County. She used scientific measurements. This was a peer reviewed acceptable science study, but yet it was pooh pawed last meeting saying that had holes in it. That study had holes in it. The next day the dairy industry quoted the same thing; "D'ann Williams study has holes in it." **No Response**

Okay, what we want to know is why are you not payin' attention to that study. In there they used viable instruments to measure pollutants from dairies that were inside people's homes. It had nothing to do with air or wind currents. So we want to say that this does not address,..... your Best Management

Practices do not address the pollution that are in citizens' homes; which you say is to protect the public health is your motto. Okay, and then you say you're going to use your eye sight as a mode to use as a measurement instrument. Last meeting you said that for your dairy score card. (Ms. Whitefoot stated, "Don't look at me like that Mr. Pruitt that is disrespectful." Mr. Pruitt responded, "Me, I'm looking....looking at my Board member and I'll look at him anyway I want to.") **No Response**

Ms. Whitefoot – We, it is not accepted by the public, it is not accepted by the scientific community to use eye sight as a scientific measurement. **Response:** *Visual observation is not only accepted by the scientific community, it is a critical part of the scientific process.*

RCW 70.94 states; "Clean Air is obligated to secure necessary scientific equipment to measure air pollution." There is the hound. The Monson Feedlot several years ago, **Response:** *Possibly a reference to 70.94.141 which states: " The board of any activated authority in addition to any other powers vested in them by law shall have the power to:..... "(5) Secure necessary scientific, technical, administrative and operational services....."*

Bill Lover – We never used the hound in this study at all. You're going to have to try and stay with this study.

Ms. Whitefoot – Okay. You made. I am. I am talking about your score card. Your score card is based on using eye sight for evaluation. That is not a way that the public should have to depend on as science. That is not science. **Response:** *See Assertion No. 3.*

Bill Lover – Well, that is your opinion and I.....

Ms. Whitefoot – Okay, but what I am saying is it has been used at the Monson Feedlot before. It has used, been used by EPA. EPA has used the Cerux Hound, the Jerome Meter. Why is Clean Air not using these as measurements for this dairy score card? And it says by law you are obligated to use the scientific equipment that is out there. **Response:** *See Assertion No. 3.*

Next, ah let's see. One thing too I would like to say about Karen, what Karen said about the air pollution. We've had horrible inversions out there in the Yakima Valley. One thing you guys don't understand 'cause you're up here on a hill and you are not out down there where that inversion is. Cows don't stop pooping during inversions. We still not only have, and unlike ah, you know, the trash burners, they don't have lobbyists. The garbage cans don't have lobbyists. So...., **No Response**

Bill Lover – You're really getting off again, Jan.

Jan Whitefoot – Okay, so the Dairy Score Card does not address what happens to public health or any way to change what is happening, with Best Management Practices during inversions. We're talking about air quality here. Voluntary participation has never worked with industry in the Yakima Valley. Nutrient Waste Plans are voluntary. Smell the air in Sunnyside. Spreading liquid poop pumped from the lagoon by tractor onto 40 acres while children are playing is considered good Best Management Practices. I've seen it in Sunnyside. I've seen manure trucks go by church. Oh, this is Best Management Practices that you are basing your score card on. **No Response**

Bill Lover – I'm trying to get you to what your question on it, though, so we can address what it.....

Jan Whitefoot – Okay, I'm letting the public know that Best Management Practices are a faulty foundation to build this whole score card on, they don't work. And this is why. It is legal to spread manure near schools. It is legal to spread it by your fence line. And, we are talking raw unpressed, unprocessed manure. Best Management Practices do not protect the uh, public. Another thing, I read one of the dust control plans for one of our, so called, high-tech dairies. They are allowed to re, when you see the word 'recycle manure', that means they are taking the poop water that they've washed

down the floors of their deals. Best Management Practices, oh, yes. **No Response**

Bill Lover – No, no, we’re not going to hear that. I want to get specific in this.....

Jan Whitefoot – Okay. Mr. Dolson

Bill Lover – We’ve only got so much time. I want to hear everybody, and I want to answer specific questions to this Policy. There’s probably time, or other times, to come here under public, uh ...

Jan Whitefoot – Okay, why

[Bill Lover and Ms. Whitefoot exchanged comments that overlapped and not able to distinguish to transcribe.]

Ms. Whitefoot – Why would you allow, under Best Management Practices, recycled poop water be put back into the sprinklers to be put back on the corrals? That is a Best Management Practice. That affects public health. See he’s listening but you are not. You don’t seem to be listening. **No Response**

Bill Lover – (chuckling) Oh, I am too.

Ms. Whitefoot – Okay, another thing that Gary said that was not true in the last meeting, and it is on your own website, is the dairy score card is not the first in the nation, the one you’re working on. We’ve talked to people in Idaho. Even on your website you said talk to the people in Idaho. He is acting like this is the first, it’s not. We’ve talked to the people in Idaho, and they said what it does is when a citizen calls in a complaint on an air quality issue, they’ll say, oh he has a five; he’s doing everything he is supposed to. Sorry, nothing we can do about it. But he’s okay. So what it does, it creates a paper tiger for citizens. It protects industry, and, does nothing to help the air quality improve. **Response: Idaho has a regulation, not a policy, which acts as a permit by rule to regulate ammonia.**

This as it is written, it should not go to the State Legislature. **Response: We have no intent to take the policy to the state legislature.**

Also, on the internet site you guys had a question that was sent in; it says, “Does the Clean Air Authority, or the EPA, currently have air monitoring at dairy sites? Scientific air monitoring?” And you guys put no comment on there. So, I would like to have that answered, where the monitoring is? Not just, the ones on top of the building in Toppenish, I am talking at dairy sites. **Response: We have no monitors at dairy sites. See Assertion No. 4.**

And, I would just like to note for the record, that EPA has notified us they did not take part in developing the score card that you are doing here. **Response: EPA was advised of our activities but was not asked to participate and did not participate in the project.**

Bill Lover – EPA doesn’t have jurisdiction here.

Ms. Whitefoot – They do if you don’t do a good job, see that is what the public is concerned about, that they could step in. And, and one big thing, my last thing is that the information that they’re gonna to put in these score cards. A lot of it will not be available to the public. So, it...what it does..., it perpetuates the pollution problem without citizens having access to the information. So you have two choices when you vote on this plan. You can either perpetuate the industry problem that is here, ‘cause this is nothing new under the sun, like the Bible says; or, you can stop and work with this honestly with people from the public and group, work groups that have, that live near these places, not just the dairies, and take another look at this and write a viable plan that would help support the health. **No Response**

Rand Elliott – Thanks, Jan.

Jean Mendoza

Members of the Yakima Clean Air Agency and Board of Directors, thank you for the opportunity to speak on this very important project. My name is Jean Mendoza, I am a longtime registered nurse and longtime resident of Yakima County. I am the Executive Director for the Friends of Toppenish Creek and am currently enrolled in a doctoral program in public health. I hope that my academic knowledge and community experience will be helpful.

I would like to make several points regarding the final draft of the Air Quality Management Policy for Dairy Operations Pilot Research Project.

1. First may I distinguish between reality and virtual reality? Analyzing numbers on a piece of paper is not the same thing as breathing polluted air 24 hours a day and trying to stay health and functional. We could not have this discussion in the middle of a feed lot. **No Response**
2. Children's lungs are not the same as adult lungs. They are not mature until the age of five. This means that air pollution impacts their lungs during developmental stages and can cause more serious damage to these very delicate tissues than it does in adults. **No Response**
3. There are communities in the Lower Yakima Valley where the average age is 30. This tells us that there are many children in the area where most dairies concentrate. The State of Washington has done a great deal of research on childhood asthma which is higher in our state than the nation as a whole. Children with asthma have shorter life expectancies, are more depressed and miss more school than their healthier counterparts. Their parents miss more days from work when they must stay home during sick days. **No Response**
4. We know that living to close to animals brings a certain amount of benefits and a certain amount of risks to people. Generally speaking factors that increase the risks include:
 - a. Health of the animals involved
 - b. Vulnerability of the people involved
 - c. Concentration of the animals involved – how many animals per acre
 - d. Virulence of the pathogenic micro-organisms involved/toxicity of pollutants involved
 - e. Length of contact between people and pathogens or pollutants and proximity – for example, who is exposed to more ammonia, an employee who works in a barn with high concentrations for 6 hours per day or a resident who lives half a mile away and spends 24 hours per day breathing polluted air.
 - f. Patterns of air currents
 - g. Ability to control insect vectors such as flies

No Response

5. The Oregon Dairy Air Quality Task Force calculated the amount of air pollution by ascribing an average amount of pollution to each dairy cow. This is one way to quantify pollution. Oregon also noted that in 2008 there were 116,335 milking cows in that entire state. The YRCAA report suggests there are about 120,000 dairy cows in Yakima County alone. This suggests that animals here are concentrated into a smaller area and this increases the risk to human health.

Response: Possibly, without effective best management practices to prevent emissions, especially for those living within that smaller area.

6. This study does not distinguish between PM2.5 and Pm 10. There is a big difference in how particulate matter of different sizes impacts human health. Generally speaking the finer particles penetrate deeper into the lungs. **Response:** *Agreed on all three points.*

These particles have a larger surface area and consequently carry more toxic chemicals and micro-organisms to the areas of the lungs where gas exchange takes place. **Response:** *Disagree that smaller particles have a larger surface area. Agree that, for a given mass, ten small particles have a larger combined surface area than one large particle. Agree that particles have the potential to absorb liquids, adsorb gases or agglomerate with other particles, including organisms.*

7. Please consider rejecting Appendix G from this document. **Response:** *The report is final and nothing will be withdrawn.*

This is virtual reality and not reality. It is inaccurate and misleading. **Response:** *It is an accurate representation of our findings and is only misleading if one doesn't understand it.*

As Dr. Ndegwa noted at the beginning of this project, there must be a baseline so that people know whether their actions make a difference. **Response:** *Dr. Ndegwa's comments were in relation to following up the National Air Emissions Monitoring Study of Animal Feeding Operations and were not intended to inform this project.*

YRCAA has long maintained that odor cannot be measured. Nevertheless this tool suggests that the BMPs under discussion can reduce odor by 24%. **Response:** *This appendix, not a tool, is a graphical, comparative representation of the data gathered and analyzed from first-hand observations of qualified experts, during the course of this project. The 24% illustrates that, of all the BMPs evaluated for all the pollutants targeted, 24% of the emission reductions were applied to odor, not that odor was reduced by 24%.*

Thank you so much for your time and consideration.

Sincerely,

/s/ Jean Mendoza

Jean Mendoza

Comments were continued during the regular board meeting. The public comment period was moved up in the schedule and allotted for continued comments from the topic in the study session.

Louie Aguilar – Toppenish (commented during study session as well)

From looking at the study, you know, you scientist and professionals, you guys do a lot of excellent work, and hard work, and very dedicated. It is not easy to resolve the issue of odor in the community and stuff. But, it seems to me that if you held these sessions in this pure environment that that we talk about, where the air is clear and we don't have a problem in the valley. If you held it in an environment where we're exposed to this all the time, that might put a different incentive for these committees to take those actions to ensure that when they go in a year or two, or five years down the road, that they are still going to the same area and holding those sessions, that you would definitely be able to notice that the air has changed, or the air environment has changed. Just a suggestion, I am sure that it's been suggested

before, but I mean we are sitting here in a beautiful room, air conditioned. We are not in the environment we are talking for air quality.

By my experience in 30 years in federal government, you have to put yourself in the position, in the environment, to get a true sense of how you are going to solve the problem. If you don't do that, we're isolated away from it. You have to go back into the exact environment where the issue is, where the problem is, and then work with the community, with the experts, with the dairy people and figure out how to solve it. Because when you have us and them, and we're not all on the same page, you know, we will be here 20 years from now discussing the same issue, as we have been 20 years prior, just a recommendation. **Response:** *Good insights and suggestions. Two work group meetings were held at participating dairies and two workshops were held in Sunnyside.*

Jerald Gefre -
16290 SR 24, Moxee

Good morning. I guess its afternoon, isn't it. My name is Jerald Gefre, I live east of Moxee, I'm a "down-winder" of DeVries dairy. "Down-winder" means anybody within three or four miles of it actually, 'cause the wind blows in all directions. One of the things, I want to go back to the beginning of this whole affair, and one thing that really bothers me is that there is no true citizen representation at these workshops. It seems strange to me in reading through some of the workshops reports is that uh, you know, it was suggested that maybe somebody like, uh, I can't remember her name, that Helen Reddout ya know, should be on the committee, or on the workshop. Be a representative of the people, and ah, instead of her, the next thing you know ah, Mr. Turner is on there. And everybody knows that Mr. Turner is a promoter of the dairies. So, to me, this ah, this whole thing you know, I don't have much confidence in it because there hasn't been any true representation of the people that are most impacted by the, ah, stuff coming off of these big huge dairies. **Response:** *Although it's uncertain what is meant by true citizen, by suggesting Ms. Reddout, we'll assume that you mean the minority of people who have voiced concerns about air emissions from dairies. It was the decision of the Air Pollution Control Officer not to include such a person because the intent of the policy-making effort to find solutions and not to continue to talk about the problem.*

Ah, what I would suggest to you guys is maybe you should get into an airplane in June or July and fly over one of these dairies and see what kind of odors that you get. You can't see it, but you fly over it and you'll find it. I have talked to some people have done it, and people puking, and this odor is not going away, it's coming down somewhere. It's not just affecting people that are right close. **No Response**

Another thing, you guys talk about Best Management Practices, there is something that is a lot better than Best Management Practices, ant that's BATs, Best Available Technology. And, I know that Best Available Technology is expensive, but I think if you go out and look at these dairies, you are looking at million dollar operations, multi-million dollar operations. You are looking at people that are making a good living, and I have nothing against that. But, those people should be taking care of business and they should be caring about their neighbors. And our public agencies, like this one, should be looking after those people, and they sure as hell can't do that by ah, ah, gathering together a bunch of the people, that are gonna, that are ya know dairy men, and taking the information from them as to how they should be regulated, and how they should stop this pollution, you know. And, this pollution is not just affecting us now, its' going to affect us down the road. **Response:** *Possibly the reference is to BACT, best available control technology, which requires a written determination in the process of issuing an order of approval for a new source. BACT for fugitive emission sources is almost always management practices.*

The other,....I only have one other thing and that is, ah, in looking through the papers that you guys gave out today, I don't see very much about what happens to this material once it comes off of the dairies. You know, ah, dairies are using farmers, other farmers, as a scapegoat. I mean, they are giving them the manure and telling them to get rid of it. And, there doesn't seem to be much, ya know, at the local, state, or federal level that is helping us on that matter on, you know, putting the responsibility of

spreading of this material. Thank you. **Response:** *For any person or business, transfer of ownership of any product or byproduct assumes transfer of responsibility for that product or byproduct. The vast majority of manure generated by dairies is applied to their own cropland.*

Asa Washines
4481 Jones Rd., Wapato WA

Hello, good afternoon, my name is Asa Washines, I am a member of the Yakama Nation, from the lower valley, West Wapato area, south side of Harrah. Um, this document which I, have gone through real briefly, kinda lacks the partnerships and working together with the Yakama Nation. As a jurisdiction, um I understand that you guys are only concerned with your jurisdiction the Reservation, which is Yakima County, but at the same time, ah, Yakama Nation, is Yakima County. So, that is one thing I hope you guys look into, as far as, um, working with this plan. Also at the same time, ah you know, I am not too sure where the Yakama Nation has its' own air quality standards, or where they are at.

Response: *Staff of The Yakama Nation Environmental Program have shown interest in our project and attended several work group meetings and one dairy site visit.*

But ah, this for a reference, maybe in the future, that when they do get a plan together, there are instances in the past, where the Reservation, um, supersedes the standards of the County or the city, at times, like there is a case in Out Creek, New Mexico where the city of, the city had lower air quality standards than the Reservation next to it, and they went to court and the city lost, and the city had to raise their air quality standards. **No Response**

And so, take that into consideration because once the Tribe, because I mean this is new, and I think, new to like a lot of government and all, the idea of air quality and what it means. And, so just, ah, really I think as a policy it needs incorporating and work with Yakama Nation. Ah, it could be a big plus, a stepping stone in the right direction as far as public relations and, I don't see that on this board, or the project team, and so that is kind of disappointing from a government standpoint. **Response:** *We have and will continue to make efforts to cooperate and collaborate with the Yakama Nation on air quality matters. It is important to us to recognize our separate jurisdictions while understanding that the air knows no jurisdiction.*

Um, that is my first observation. I might be back, I just got this, so um, thank you.

Bill Lover – Yes, it may be noted that we did have a member from the Yakama Nation at our work sessions and was invited to every meeting, and chose just to meet the meetings that she made. We also reached out to some of the dairies on the Reservation. In fact we had dairies that volunteered that were on the Reservation that, whoever was in charge of the air quality on the Reservation opted to not let them be part of the study session, or the study itself. I think in all good faith we reached out pretty good, and it is our standard practice since I have been on this Board to reach out to the Nation every time we can. We know that one air is all there is in this County it is not divided by lines, and we realize that. They have their own system and it is a good system, and we work as well as we can with them, and vice-a-versa, by the way.

Asa Washines – And, just, curious, do you remember the name of the individual who opted out to be a part of this board?

Bill Lover – It wasn't a member of this Board. I was on that study session myself, and I was an official member of the Board. Ah,

Gary Pruitt – There were several members involved, you know. And, I think it would, you know, I can answer the question right now, but it might be better if we did that in writing. We dealt with, I can just tell you the folks we did deal with; is ah Phil Rigdon, Rebecca Hawk, Elizabeth Sanchez, and Noel Saluskin. There may have been another one, but I think at least those folks, on and off were involved.

Asa Washines – As long as they were aware of this.

Gary Pruitt – Most definitely, we even appeared before the Tribal Council at one point and talked briefly about our project, but that was early on.

Asa Washines – And this proposal, ah, when you went before the Tribal Council, what kind of feedback did you get from them?

Gary Pruitt – Well, there was no feedback. We were asked questions, and we answered questions and you know we were essentially able to state what our purpose and intent was in terms of collaboration and cooperation.

Asa Washines – Okay, thank you.

Lavina Wilkins

502 Harrah Rd., Wapato WA

Good afternoon, my name is Lavina Wilkins I live on West Wapato and North Harrah Rd. I moved out there, had my home built for fresh air for my grandchildren. I raised all my grandchildren, and before too long all my children had allergies, before too long, even now I have asthma. Every morning you get up, you go out to the yard, to the fresh air, you smell cow manure. It's horrible. I'm raising a six-year old, she's six now, great granddaughter who has asthma as well. Now, she has to be on the machine twice a day, and I have an inhalant. **No Response**

This is I feel is from the dairy farms. There's one on the west side of me that's about two miles, and another on the other side, the south side of us. And then you talk about jurisdictions, ah, and like the gentleman says, air don't have jurisdiction. When the wind blows it goes all over. Eventually, it will be affecting the cities. The cities are affected by pollution. Years ago my grandfather had to go to DC just to get our rivers clean and sewer systems put in, that was years ago. So, I don't see, and the rivers run, the underwater currents run from the mountains and it's all affected. Common sense would tell you that. It's all affected by what seeps into the ground. I am just totally, totally, need to see a better plan, and to see more people involved whether they want to come or not, meetings should be mandatory, especially where the public is concerned, and the public's health. I know you can't make a rule like that but it would be good if people come together and talk about it. Our children are our most valued possession as far as I see as an elder. Through our children we survive, not only us, but everybody. **No Response**

Bill Lover – I am giving you a lot of latitude because we're into our general meeting, but we still are extending questions on this policy right now.

Lavine Wilkins – I see, well my question was about your policy that if you see the air it is ok. It's clean air by looking at it. This is your policy that you are pushing?

Bill Lover – Actually, it's a pilot project report that's in front of us right now.

Lavina Wilkins – Well, I can't for the life of me, see how you can see the air, unless it's so polluted then you can say, yes, it's not clean. Thank you. **Response:** *We have not and will not make any assertion that, except for visible emissions such as dust, soot, smoke, uncombined liquid vapor and some gasses, that visual observation is the correct means of determining the presence of air pollution.*

Steve George

Dairy Federation

Good afternoon. My name is Steve George and I am with the Dairy Federation. And, I'm not going to, I didn't come up here to try to reiterate the last speakers, I think ah, everybody gets their opportunity to say what they want, and that's all good and well. But, I would like to say a few things, ah, the dairy industry wanted to be, uh, was invited to participate in this program and did so voluntarily, and wanted to, ah, move forward in a proactive manner which I think they demonstrated and they did. Which I think they demonstrated, and they did. And, we appreciate the professionalism of your staff during this

process, and the professional people sitting right here and others that they worked with. I think that, um, through this process, ah, the seed is gonna be, and has been, separated from the chaff, and there has been a lot of chaff spread around here today. And um, we look forward to ah, to ah, continuing our efforts with your staff and, your agency, and ah, I think we all have the same goal in mind. Um, we want to move forward in a professional scientific manner. And, ah, anyway, in conclusion the dairy industry looks forward to working with your staff, the professional people they have involved, and um, I think we all have the same goal in mind. I think we have made great headway, there's a positive attitude out there with the dairy industry, and I think it goes, um, for the staff as well. And, ah, we thought it was a great program and we continue to look forward to working with ah, with everybody. If you have any questions I would attempt to answer them. If not, we will continue to work with you and your staff over the next few weeks to evaluate the proposal and, ah, I am sure we will have some further discussions. Thank you. **Response:** *Agreed*

Karen Cook Gulley Wesselius – Well, I wondered how much he makes a year working for the dairy company. Board stated this was not the appropriate forum. Ms. Wesselius continued, I just wondered because he doesn't seem to be helping us with the air quality. Or, not having a solution for us. He's just asking you to help the dairy people, like they said, they don't care about the health of the people in the valley. And, I'm wondering why they don't care, they live in the valley too. They should have concerns about their health also. **No Response**

Larry Fendell

1513 Roza Dr., Zillah WA

Larry Fendell – Reading all the information that they have compiled in the last year or so, there's definitely been a lot of work involved in the thing. It, ah, even though I don't agree with it. I guess the thing I have to disagree with mainly starting out is Appendix G-1. G-1 is their pie charts. I've read a lot of pie charts and stuff, but this is on ammonia and odor, and I went back over and looked and looked, and I couldn't find a baseline anywhere. And, this is telling me that they reduced ammonia 23% , and odor 24% , or vice-a-versa, whichever it was and everything. But, the study didn't start out with a floor. That's like saying my son grew six inches. Well how tall was he. I don't know. How tall is he now? Well, he's 6' 2". Ah, there's not any place for them to start from to get these kind of emissions controls that they have reduced in the one year. I live down there. I don't know notice 24%. **Response:** *This appendix, not a tool, is a graphical, comparative representation of the data gathered and analyzed from first-hand observations of qualified experts. The 24% illustrates that, of all the BMPs evaluated for all the pollutants targeted, 24% of the emission reductions were applied to odor, not that odor was reduced by 24%.*

It stinks. There's too damn many cows, is what there is, on a confined area. You start taking all this manure management that we are talking about, regardless of this plan, or their nutrient management plans. They account for 60,000 cows and 11 thousand acres. You take that, subtract their lots, their houses, their lawns, their driveways, and everything else, and you come out, you got over six cows per acre. At agronomic rates the nutrient management plans that I have read they allow about 80 some ton to the acre. Six cows produce about 150 tons, about 150 tons per acre, about 25 tons to the cow of waste, how can be that be agronomic rates. Mr. Pius, Dr. Pius said at a meeting he had down here at the Convention Center one time, and it really stuck with me because I thought it was funny. Because we all think that dairies produce milk, Mr. Pius said the main thing that dairies produce is manure, and that's true. It's 24 hours a day, seven days a week. It's always, it's a renewable resource. But we have just too many cows. Ah, we're talking about the dairy industries behind this. There was only eight people participated. There's, what, sixty some people in this valley? Sixty, eighty, I've heard all kinds of numbers. But there's a lot more than eight that participated. But the whole dairy industry, according to Mr. George, is behind this. Why didn't they step up then? **No Response**

Ah, this is the first in the nation. I've heard Mr. Pruitt say many times. Jim found one in Idaho. I found one in 2004 and 2005 was started in California. Same type of deal, manure management, best management practices and everything. So, it's not the first. What they utilized these for, they did in California and Idaho both, is to get more laws passed and is a propaganda tool. Full page ads saying

how they are cooperating with clean air, or this and that. **No Response**

Ah, one of the things that I take offense to is the trees. The trees they are talking about on the level, or the stage three, putting up to trees to help maintain this. It does stop pest and everything, but it creates problems for a lot of other people too. Because the mites, the aphids, and everything that lives in those trees. Why do you see the orchards cut them down after a while? Because, they can no longer spray 'em. And is the dairy going to spray all those trees, or is they just going to pass all those bugs onto the neighbors? **No Response**

Ah, I suggested this in the past, in fact last month, there is a report of a person running, a couple of days ago when the first day that they put the new burn ban on running manure through their wheel lines again. When there is an inversion and that manure's coming out that wheel line again, or a honey wagon, which happened at the bottom of my place, which is in a hole, it'll hang there till the cows come home. And they, they're just as detrimental to us in the lower valley as the wood smoke is in this valley, or in this Yakima area for hanging here. **Response:** *Agreed, any air pollution from any source is trapped during temperature inversions, unless ground level wind is present.*

Ah, anyway, my main concern is, they are talking about scientific this, Mr. George, Mr. Pruitt, and everything, there is nothing scientific about it. WSU was involved, Dr. Pius was involved in the Purdue Study. They had machines set up. They were taking readings and stuff just like the John Hopkins Study. As the law was read to you, it was there. They should have procured, and seeing Dr. Pius is involved in the thing, they should have procured a baseline so they could actually set things up at a later time. **Response:** *See Assertion No. 4.*

Mr. Pius is also stated on another occasion that running manure, the lagoon water and stuff, through their sprinklers, the circles, wheel lines and stuff, is the worst possible way to do that because it spreads so far in a breeze. People are talking about it was blowing out on the roads there's people down there that get their houses and stuff coated with the stuff with the wind blowing. Mr. Lovers' been to one of those people's places, if I believe. **No Response**

Bill Lover – I've also been to a few dairies.

Larry Fendell – Okay, but I'm just saying the people that had their pickups and stuff when the breezes blow from just across the road. So, anywhere as, a policy of any kind, this has got so many holes in it worse than a 50 year old bucket. So, it, uh,....That's really what I had to say. **No Response**

Jim Dyjak as point of order made a comment as part of the Regular Board Public Comment Period as follows:

Jim Dyjak – Last month a young lady gave a presentation that nobody could see. It wasn't her fault. I got a copy of the slides and listened to them so I could ask some questions. Ah, like on the AQM BMP Score Sheet, the total percentage by pollutant, for like particulate matter, 76 in the example she gave. If you can't see it, you didn't use test equipment, how do you get a 76? Seriously, how do you do it? If you can't see it, how did you get it? I mean, you can't see it, how do you know? **Response:** *See Assertion No. 3.*

Rand Elliott – I didn't write the number Jim, don't look at me.

Jim Dyjak – So, my suggestion was then, because Gary's quick answer was, well I won't understand the process, I don't understand the science. Well, if I'm in that mold, then there's a lot of people. So, why don't we have a couple of scientist come to the next couple study sessions and lets' start educating the public. How you got these numbers without any test equipment. I mean, it's like you said, you can't see it, you didn't have a baseline, but you got a 76 for a score. How did you do it? I mean, I'll be honest with you, I'm like a lot of other people, I don't see it. **Response:** *See Assertion No. 4. Also, please understand that the score sheet was developed as a tool to help dairy operators and compliance staff*

better understand where and how much a particular BMP reduced each pollutant in each system. It was not intended to be understood or used by anyone other than the Agency and the dairies.

Board asked Gary to respond.

Gary Pruitt – First of all, that is a compliance assistance document. It's a tool for both the dairy being inspected, and the compliance folks doing the inspection. It's not for the public. The public isn't expected to understand it. And, that it was developed in a collaborative effort between ourselves, and actually Nichole.

Nichole Embertson described the score sheet and how it worked.

Jim Dyjak – So all those measurements are for what's on the dairy.

Nichole – That's correct.

Jim Dyjak - Not what crosses the line into my house.

Nichole – No that's separate. This is just an evaluation of management practices on a dairy operation.

Jim Dyjak – So, that's what gets me. So, we don't have nothing, you have nothing on the study to say what is crossing the line into my house and my lungs.

Rand Elliot – That's not what the visual measurement is Jim.

Jim Dyjak – There's no measurement, you don't have anything to show what's on my side of the line. So this looks all good, it's all on the dairy.

Rand Elliot – That's what escaping the dairy in theory.

Jim Dyjak – Yeah, and the other thing is.....

Dr. Pius Ndegwa – Can I add something onto that? Well, ah, the assumption here I think, and it is a valid assumption, is that, ah, if you are reducing emissions at the farm level you also reduce whatever you experience down wind. So, that is the way that is kinda the way it is put.

Jim Dyjak – That's what I was getting at before, but we don't know what they were to begin with. But I understand you. And the other thing was, in the very beginning, when this started I was curious how one month you could propose it, and the next month have a score sheet. The state of Idaho has got a similar thing. Theirs is a little more extensive. Every question I gave you today the state of Idaho asked in their yearly report, 2008. So, this program is nothing new like they put on the slides saying it's the first in the nation. There all similar. They got a score sheet. **No Response**

No Responses from This Point Forward

Nichole Embertson – Actually, just to address that, again with the score sheet, the Idaho was just for ammonia. The uniqueness of the score sheet that was developed here was that it addresses multiple pollutants all at once.

Jim Dyjak – That's what I said, they pretty much are basically the same, but there are just more of them.

Jan Whitefoot – I want to address the public on this issue of where you said, Bill, that “out of the kindness of their hearts” the dairy industry is coming forward.

Bill Lover – I didn't say that at all. You are putting words into my mouth.

Jan Whitefoot – Okay, you’ve said they’ve come forward out of good faith. Okay,

Bill Lover – I certainly did.

Jan Whitefoot – Okay. For five years a bunch of us here in this room have been working with the EPA on the water quality in the valley.

Bill Lover – I was referring to this report. If you want to talk about my comments on this report, fine.

Jan Whitefoot – Okay.

Bill Lover – But, I didn’t mention water at all.

Jan Whitefoot – Quit interrupting me. Okay, the reason is you said they were doing a good job. I want to tell the public why they’re at the table now. They’re at the table because of 2.5 PMs in Yakima valley, are putting you at the EPA level. We’re not qualifying for clean air here. The only reason the dairy industry is coming to the table is because they’ve got reamed on the water and now they knew the air was coming. So they knew they better step up and do something, or the federal government is going to step in just like what could happen here. So, that’s why we’re asking, that’s why they’re stepping up now.

Rand Elliot – Thanks for the editorial Jan.

Jan Whitefoot – Another thing, I want to ask the scientist, what does ammonia look like?

Bill Lover – The questions will be directed at me, and I will decide whether,

Jan Whitefoot – Okay, okay, what does ammonia look like?

Bill Lover – Do you think that is an appropriate question Gary?

Jan Whitefoot – Because that is on the checklist and you’re going to evaluate it.

Gary Pruitt – It really isn’t – I mean, gaseous ammonia is invisible, alright? We know that.

Jan Whitefoot – What does hydrogen sulfide look like?

Rand Elliot – They’re all invisible Jan.

Jan Whitefoot – So, how are you going to evaluate those on your dairy score chart?

Rand Elliot – Jan, There was discussion.

Jan Whitefoot – Okay. That’s what was said in the last meeting.

Rand Elliot – We are looking at a visual evaluation of a management practice.

Jan Whitefoot – Without a scientific instrument.

Note: Audio-visual copies (DVD) of the January 12, 2012 Meeting of the Board of Directors of the Yakima Regional Clean Air Agency are available from: YCTV/Y-PAC, 124 S 2nd St, Yakima, WA 98901, (509) 575-6092. Copies may be available for purchase for a limited time following the actual date of the meeting.