

April 23, 2021

Jacob Berkey Washington Department of Ecology, Air Quality Program P.O. Box 47600 Olympia, WA 98504-7600

Dear Mr. Berkey:

This document will serve as comments from the Friends of Toppenish Creek (FOTC) regarding Ecology's proposed Yakima Regional Clean Air Agency (YRCAA) Rule Change - State Implementation Plan (SIP).

FOTC asks the WA State Dept. of Ecology (Ecology) to reject the YRCAA request for a rule change because the YRCAA, in fact, enforces neither the Federal Clean Air Act nor the Washington State Clean Air Act as required by law. Approval of a SIP for Yakima County would inaccurately signify that YRCAA actually follows rules and regulations. It does not.

Sincerely,

Executive Director, Friends of Toppenish Creek

3142 Signal Peak Road White Swan, WA 98952

# Yakima Regional Clean Air Agency & the Clean Air Act

Yakima County is home to 1/3 of all Washington dairy cows, about 100,000 milkers, that are concentrated in an approximately 271 square mile area in the Lower Yakima Valley (LYV). According to the WA State Department of Ecology (Ecology)<sup>1</sup>, livestock in Yakima County emitted 8,053.58 tons of ammonia into the ambient air in 2011. Ammonia is a toxic air pollutant under Washington law, WAC 173-460-150. Dairy animals also emit significant amounts of methane, hydrogen sulfide and volatile organic compounds (VOCs) which, among other adverse effects, contribute to odor.<sup>2</sup>

For over twenty years citizens in the Lower Yakima Valley (LYV) have complained to the Yakima Regional Clean Air Agency (YRCAA) about air pollution from concentrated animal feeding operation (CAFO) dairies in the area. For ten years the agency simply stonewalled.<sup>3</sup>

In 2010 the YRCAA initiated work on an Air Quality Management Policy (AQMP) for dairies. The YRCAA approved the policy in 2013 and rescinded the policy in 2018 due to concerns about use of the AQMP data to support litigation. There is no dairy policy in Yakima.<sup>3</sup>

Over the years the YRCAA has rejected three requests by citizens to ban spreading/spraying of manure during air inversions and burn bans.<sup>3</sup> In 2016 the YRCAA Board of Directors rejected a modest proposal to study ammonia in the ambient air.<sup>3</sup> YRCAA ignored research by the Friends of Toppenish Creek (FOTC) that documented high levels of ammonia at a home near LYV dairies.<sup>3</sup> The YRCAA has ignored research by John Hopkins University and the University of Washington that documents adverse health effects from dairy emissions in Yakima County.<sup>3</sup>

The YRCAA has rejected efforts to incorporate environmental justice into agency planning.<sup>3</sup> In 2017, at the request of the Yakima Dairy Federation YRCAA made changes to policy for public testimony before the board and essentially eliminated opportunities to educate the board about air emissions.<sup>3</sup>

WA State Dept of Ecology (2014) Washington State 2011 County Emissions Inventory. Available at https://ecology.wa.gov/DOE/files/ca/ca462fc4-dee7-4435-a2a6-e69081c8b0fc.pdf

Environmental Protection Agency (2001) Emissions from Animal Feeding Operations. Available at https://www.epa.gov/sites/production/files/2020-10/documents/draftanimalfeed.pdf

<sup>3.</sup> Yakima Regional Clean Air Agency - Citizen Testimony at Meetings of the YRCAA Board of Directors. Attachment B

In February 2005, then YRCAA Director Les Ornelas told a WA State University workshop of dairymen<sup>4</sup>:

Now, I receive the largest number of odor complaints currently for my jurisdiction against feedlots, dairies, other kinds of chicken farmers, and other sorts of activities like this. We have people in the field who have been trained to evaluate odors, to be able to discern from a level 1, 2, 3 or 4 (4 typically is the one that causes a gag reflex). We go out and respond to all these numerous complaints every year and we have not yet issued a citation to any of the dairy people on odors in Yakima County, even though we have hundreds and some years over a thousand complaints.

During the past 15 years nothing has changed. The YRCAA does not issue citations for odor and dust against Yakima County dairies.

How does the YRCAA manage to avoid this duty? The agency has a simple solution. When citizens complain they call us liars<sup>3</sup>. The reason no citations are issued to dairies is that all the complaints are considered frivolous.

# A citizen tries to obtain relief from the YRCAA<sup>5</sup>:

July 19, 2019 (Friday) at 7.35 PM citizen left a voice mail message with YRCAA.

CP says there's "Ambient cow pen dirt from Hornby west to Waneta and further. Particle dirt filling the air around us can be seen on video with lights. It smells like urine but you don't care about that."

**July 21, 2019** (Sunday) at 11:30 PM left a voice mail message with YRCAA.

CP says that "Foul cloud of ambient open pen dirt and lagoon storage. Strong smell of ammonia/urine permitting our property and home. Gagging, sinus headache and inability to breathe even with high power filtering system."

YRCAA recorded the calls the next Monday but did not investigate.

July 22, 2019 (Monday) at 11:15 PM left a voice mail message with YRCAA.

CP says that "The ambient pen dirt air was sucked into her home and her sons through open windows around 11:00 PM when she was cooling her house down with the evening air. Horrible dirty feeling ambient pen dirt willed with horrid ammonia and manure AND

No investigation.

<sup>4.</sup> WSU AD Workshop; Sunnyside, WA; 2/25/05 – Transcripts. Attachment A.

<sup>5.</sup> Friends of Toppenish Creek. Dec. 2019. Descriptive Analysis of YRCAA Complaint Reports for Odor and Dust. Attachment C

July 24, 2019 at 9:35 AM left a voice mail message with YRCAA.

After wonderful rain and thunder showers last night no smells! Wonderful sweet clean air! But tonight, Wednesday, 7/24/2019 9:25, windows open screen doors letting in fresh air until this very moment! Boom! Ambient pen ammonia stench coming in.

No investigation.

**July 25, 2019** at 8:00 AM left a voice mail message with YRCAA.

"Awoke to horrid smell of dead cow composting. Velduis Klompe CAFOs is composting turning dead cow compost and it's gross. The ambient air is bringing this cloud of stench to my property this morning! Go to sleep with smells of urine wake up to manure

No investigation.

July 25, 2019 at 8:27 AM left a voice mail message with YRCAA.

"Kelsey this has to stop! More and more ambient air full of CAFOs stench. I've written several complaints and no response from yrcaa! Come on you guys! Do your job. Kathy Rogers"

No investigation.

July 25, 2019 at 11:15 PM left a voice mail message with YRCAA.

CP says "Cool nights are once more and very appreciated. However, opening our windows and screened doors is a negative. The ambient pen dirt full of odor from the cafo open pens surrounding our home and the neighbors is restricting the enjoyment of fresh

No investigation.

July 26, 2019 at 1:20 AM left a voice mail message with YRCAA.

CP says "Awakened by stench from ambient open pen dirt infiltrating our home! Cool night, windows open, sleeping well, then BOOM, I can't sleep because I'm breathing in this heavy dirt, band like dust in my house. Our large Austin Air filters is always

No investigation.

July 29, 2019, no time recorded, left a voice mail message with YRCAA.

CP says "Kelsey, once more Klompe CAFO is composting and the ambient dirt from that is just nasty at my home. The wind was blowing from the east as well. I believe they've been told not to compost in the wind. Kelsey I have photos! This needs to be handled

The YRCAA initiated an "investigation" on **July 30, 2019** at 1 PM. This was their investigation:

Dairies and CAFOs in the vicinity of Hornby, Stove, Braden and Tear Roads were contacted and made aware of the complaints

# Reasons to Reject SIP Update for the YRCAA

The Friends of Toppenish Creek ask Ecology to reject the State Implementation Plan for Yakima County because the YRCAA does not follow the laws of the state, or even the agency's own rules and regulations. Specifically, YRCAA unfairly favors the dairy industry over all other industries in Yakima County and over the people of Yakima County. The YRCAA:

- 1. Ignores citizen complaints regarding odor, dust, and air pollution that threaten public health.<sup>7</sup>
- 2. Refuses to do the research that would clarify the impact of dairy operations on the health of citizens in the Lower Yakima Valley.<sup>8</sup>
- 3. Accepted false testimony from an "expert in manure management" who egregiously misinformed the YRCAA regarding health impacts of manure spreading during air inversions as they rejected a citizen petition to band this practice. <sup>9</sup>
- 4. Hired an agency director who lacks qualifications and fails to lead the agency .<sup>10</sup>
- 5. Allowed and continues to allow board members to vote on issues in which they have financial interests.<sup>11</sup>
- 6. Knowingly fails to regulate emissions from the 100,000 cows that are housed in a 271 square mile area in Yakima County.

Regarding Reason 1, please review the voluminous summaries of YRCAA Board meetings in which citizens explained to the YRCAA and the YRCAA Board of Directors how air emissions from dairies impact their health and quality of life.

Regarding Reason 2, please see statements from citizens<sup>12</sup> who offered their own research using an EPA approved monitor, the "Hound", as well as an FOTC conducted study of ammonia levels near LYV dairies. Please see statements from the YRCAA Board of Directors when they rejected a proposed \$14,000 study of ammonia levels in the LYV.<sup>8</sup>

- 6. Misinterpreted Rules & Regulations Attachment K
- 7. Yakima Regional Clean Air Agency Citizen Testimony at Meetings of the YRCAA Board of Directors. Attachment B. Public testimony regarding an AQMP for dairies. Attachment D. Pages 24 69.
- 8. Attachment B. pages 44, 45, 46, 47, 48, 49, 50, 52, 53. FOTC Ammonia Study. Attachment E.
- 9. WA Dairy Commission Literature Review. Attachment F. FOTC Response to Literature Review. Attachment G. Citizen Testimony at Meetings of the YRCAA Board of Directors. Attachment B. Page 27.
- 10. FOTC Letters to Ecology. Attachments H & I
- 11. Attachment B. Pages 27, 43, 44, 46, 48, 51, 52, & 54
- 12. Attachment B. Page 17

Regarding Reason 3, Dr. Nicole Embertson, hired consultant to the YRCAA, incorrectly:

- Concluded that there was no adverse impact on public health from manure spraying and spreading, in spite of contrary evidence in 12 out of 13 her cited references.
- Stated that the Dairy Nutrient Management Act addresses air emissions. It does not.
- Stated that dairies in the LYV do not spread manure during winter months. They do.
- Mis-stated statistics on the contribution of ammonia to PM 2.5.
- Mis-stated conclusions from research by John Hopkins University in Yakima County.
- Mis-stated national research on the adverse health impacts from CAFOs.

Regarding Reason 4, the YRCAA Board of Directors hired Keith Hurley to serve as YRCAA Air Pollution Control Officer (APCO) in 2017. While other WA Clean Air Agencies employ attorneys and scientists for this position, Mr. Hurley holds a bachelor's degree in physical fitness. The YRCAA Board rejected candidates with advanced degrees in engineering and environmental science.

Regarding Reasons 5, citizens have protested the presence of Dick Camp and Dr. Steven Jones on the YRCAA Board of Directors to no avail. Mr. Camp operated a facility that was classified as a category 5 hazardous waste site. Dr. Jones receives a significant portion of his annual income from the dairy industry. Dr. Jones votes on issues that economically impact his clients.

## Regarding Reason 6:

- The WA State Department of Agriculture (WSDA) has determined that about 35% of nitrogen excreted on dairy production areas is emitted into the ambient air. <sup>13</sup>
- The WA State Department of Ecology (Ecology) estimated that animal agriculture in Yakima County emitted over 8,000 tons of ammonia into the ambient air in 2011.<sup>14</sup>
- Ecology conducted a study in 2013 that examined high levels of fine particulate matter in Yakima County. The study found, "Yakima is unusual within Washington in that a significant fraction of the PM2.5 during winter is comprised of particulate nitrate, usually in the chemical form of ammonium nitrate (NH4NO3)". 15
- YRCAA enacted policies to address emissions from beef operations in 1997 and from heifer operations in 2002.
- 13. Lower Yakima Valley Groundwater Management Area Program. Vol. I, page 25. Available at <a href="https://www.yakimacounty.us/DocumentCenter/View/22177/GWMA-VolumeI-July2019">https://www.yakimacounty.us/DocumentCenter/View/22177/GWMA-VolumeI-July2019</a>
- WA State Dept of Ecology (2014) Washington State 2011 County Emissions Inventory. Available at <a href="https://ecology.wa.gov/DOE/files/ca/ca462fc4-dee7-4435-a2a6-e69081c8b0fc.pdf">https://ecology.wa.gov/DOE/files/ca/ca462fc4-dee7-4435-a2a6-e69081c8b0fc.pdf</a>
- 15. WA State Dept. of Ecology (2015) Yakima Air Winter Nitrate Study. Available at <a href="https://ecology.wa.gov/DOE/files/a6/a67789dd-aed4-461e-b138-e77537dd1952.pdf">https://ecology.wa.gov/DOE/files/a6/a67789dd-aed4-461e-b138-e77537dd1952.pdf</a>

 YRCAA enacted a controversial policy to address emissions from dairy operations in 2013 and rescinded that policy in 2018 because data might be used in litigation.

Fine particulate matter and ammonia negatively impact human health. People in Yakima County suffer from higher-than-average rates of heart disease, lung disease and adverse perinatal problems. <sup>16</sup> Most recently, Yakima recorded the highest rates of infection and rates of death due to COVID 19 in Washington State. There is a relationship between air quality and COVID 19 morbidity and mortality. <sup>17</sup>

Please, do not validate the ineffective YRCAA by approving the proposed WA State Implementation Plan for Yakima County.

Sincerely,

Jean Mendoza

Executive Director, Friends of Toppenish Creek

3142 Signal Peak Road White Swan, WA 98952

<sup>16.</sup> WA State Department of Health. WA Health Tracking Network. Available at https://fortress.wa.gov/doh/wtn/WTNPortal/

<sup>17.</sup> Wu, X., Nethery, R. C., Sabath, B. M., Braun, D., & Dominici, F. (2020). Exposure to air pollution and COVID-19 mortality in the United States. *MedRxiv*. Available at <a href="https://www.medrxiv.org/content/medrxiv/early/2020/04/27/2020.04.05.20054502.full.pdf">https://www.medrxiv.org/content/medrxiv/early/2020/04/27/2020.04.05.20054502.full.pdf</a>

## Attachments

Attachment A: WSU Dairy Workshop 2005

Attachment B: Citizen Testimony at YRCAA Board Meetings

Attachment C: Descriptive Analysis of YRCAA Complaint Reports for Odor and Dust.

Attachment D: Public Testimony on the Draft YRCAA AQMP for Dairies

Attachment E: FOTC Ammonia Study

Attachment F: WA Dairy Commission Literature Review

Attachment G: Response to WA Dairy Commission Literature Review

Attachment H: Letter to Ecology Director Maia Bellon January 2019

Attachment I: Letter to Ecology Director Maia Bellon March 2019

Attachment J: Timeline

Attachment K: Misinterpreted Rules and Regulations

## Les Ornelas, Yakima Regional Clean Air Authority, Yakima, WA

I'd like to thank everyone for being here and I understand that I missed half of you already. Several of you ran for cover after looking at this afternoon's agenda and seeing that a regulator was going to be here, so I appreciate those of you who had the endurance to hang around.

First of all, let me introduce myself. I'm the air pollution control officer for Yakima, I only speak for the Yakima Clean Air Authority. But I think that much of what I'm going to say will affect you wherever you are in the states of Washington, Oregon or Idaho.

I'd like to start out by saying that the bottom line is going to be affected by how these regulations affect you. Your bottom line is going to be affected by how regulations affect you. Don't forget to include that in your cost analyses as you develop your various programs on whether it's anaerobic digesters or any other kind of program. Regulations have become a real part of our lives.

I speak from personal experience on both sides of the fence. I'm a regulator but I'm also an entrepreneur. I have businesses in California and Utah and in Washington State, and so I sign both sides of the paycheck, I receive one and sign the back, and I issue some and I sign the fronts of them. I want you to know that I understand the situation that each of you, as businessmen and women, have to live with. This agency attempts very diligently to address the issues of the business community, and I'm pleased to be able to report to you that we have been successful in working with most of our businesses which we regulate here. We have a pleasant and ongoing relationship with Steve George, with the Yakima Valley Dairy Federation, as well as other elements of our business community here. We're still regulators and we'll still comply and cause compliance with all the laws that apply to all of us, but that's fundamentally what we're all about.

I was going to read 47 pages of material here for you but I decided that might be a little bit much. So I condensed everything down to a 3x5 card. I hope that satisfies most of you. I want to again congratulate the organizers.

I had the great privilege of being involved in a number of alternative power generation projects in the State of California when I worked there years ago. I think that a lot of the work that you're being approached with today has already been done. The question is whether you can get the numbers to line up. Some of you are more or less affected by the regulations that I

represent, that is, air quality regulations. But let me just go down a couple of them before I get to the subject that was on my line on the agenda.

Boilers, power generation plants, storage and activities all may be subject in one form or another by an air quality agency. The subject that was listed for me is odors. As you know, the public's expectation is changing. Their tolerance levels are being significantly changed as we continue to evolve. New people not accustomed to agricultural activities move in next door to you. Your organizations, your businesses are growing. Therefore they contribute more to the problems that tend to be an irritation to some of your neighbors.

The two largest contributors to pollution from your industry are dust and odors. Fortunately here in Yakima we've been able to deal with most of the dust problems very effectively. Because of the uniqueness of the Washington State law, we're unable to deal effectively with the odor issues. And, in fact, many in the community feel that they are being stonewalled by your industry. I work with a lot of you around here and so I know that you're doing things differently. I know that you're making progress, I know that you're taking seriously your role in a vibrant community. I know that you're taking these things seriously, but the public by and large doesn't appreciate your efforts.

So I believe that one of the key ingredients here is to open up ourselves and have better dialogue with our community. As you elect to make these changes including perhaps changing your method of operation, expanding your facilities or whatever, I do believe it would be to your great benefit to involve your community in those plans so they understand what's coming along. The interactive dialogue is going to significantly improve our relationship. I think that's a proven fact. Please pay attention to that.

As I mentioned to you, the odors issue in the State of Washington is difficult. You have an agricultural exemption. The test if someone complains about odors in the State of Washington is difficult to meet. We have to bring in, in a timely fashion, at the time the incident occurred, third party experts to testify that the business is following best management practices for your industry in your locale. Well, if everyone is doing everything in a particular kind of a way, guess what the best management practices are, irrespective of the public's perception of a problem. You follow me there? The public's perception of the problem is what's pushing many people's trigger finger or hot buttons or however you want to put this. So, I ask as you change your business or as

your community is changed around you that you attempt to address this issue in a more public sort of a way.

Now, I receive the largest number of odor complaints currently for my jurisdiction against feedlots, dairies, other kinds of chicken farmers, and other sorts of activities like this. We have people in the field who have been trained to evaluate odors, to be able to discern from a level 1, 2, 3 or 4 (4 typically is the one that causes a gag reflex). We go out and respond to all these numerous complaints every year and we have not yet issued a citation to any of the dairy people on odors in Yakima County, even though we have hundreds and some years over a thousand complaints.

Why is that? Because the perception of your neighbor is that you have a real big problem and the evaluation of an agency responsible to investigate these issues is that we don't find a problem significant enough to issue a citation. This is causing frustration in the community. And I've had to withdraw from some of the meetings and discussions that are going on among your industry here in Yakima because I have people looking over my shoulder all the time and they want me to fully disclose the minutes, the actions, the report in great detail, and some of the things that you're planning for the future to address these sorts of things. The concern I have on your behalf is that once we say that we're dealing with some of these problems, they tend to be an acknowledgement that a problem does exist, which then feeds the critics. You follow me here? This is a dangerous circle, but you have to understand that this does exist here.

So I'm asking all of you to continue to stay this course. Do what you can. As you start to contain and manage your waste streams, you're going to deal with the major component of the public's concerns and that is odors from your facilities. Because you're going to contain them, you're going to process them, you'll divide them, separate the solids from the liquids, you're going to create gases, you're going to contribute to the community in a more holistic perspective. We will all benefit from your work, your investment, and reward from your changes in the way that you do things.

I'm not here to criticize you, I'm not here to pose tremendously fantastic new models and pictures. You guys are doing the right thing by looking at this. I'm not here to advocate anything in particular other than, I think that you're on the right track, and I encourage you. We put money out for demonstration programs. We will support you in pursuing grants to assist in these things,

and I think that we can meld a wonderful relationship among ourselves here if we really work on this aggressively. But I do think that the clock is ticking.

I have a five-member board. It takes three of those board members to make a change in policy. And we have legislatures and county commissioners, boards of commissioners, and other kinds of boards around that have regulations, and all it takes is a majority to change the paradigm from what we have today to what it might be. I think it's in all of our interests to do those things so we can demonstrate steady progress toward addressing these problems whether we want to accept them ourselves or not. They are a perception and we have to deal with a perception one way or the other. I hope I've not said anything that has offended anyone, but that's the way I see it.

There were two other points I wanted to make here—I guess I made one of them. From an air quality perspective your permits will include your boilers, your generators, and any other point sources that you create as you change your operations. And the applicability of these laws will be different when you start moving into those more industrialized kinds of processes than they are today where you are by and large covered by the agriculture protection laws. That's one thing I repeat myself on.

The other thing is that I want you to work closely with your own regulatory agencies as you consider these changes so that you can be prepared for that. I guess I'll emphasize the first point once again. You should include the cost of compliance in your economic analysis as you consider the various ways that you can approach this issue.

# Public Comments from YRCAA Board Meetings

 $Access\ video\ tapes\ of\ YRCAA\ Board\ Meetings\ at $$\underline{https://videos.yakimawa.gov/CablecastPublicSite/search?channel=2\&query=yakima%20regional%20clea} $$n\%20air\%20agency$$ 

#### December 2011

Jan Whitefoot (Citizen): Against CAFO air pollution. Object to Tom Silva, former director, as a citizen rep on the AQMP work group. No information from Mr. Silva. Picture of Mr. Silva's house with burning during a burn ban. Study by D'Ann Williams – air testing on 40 YV homes showed that it is bad to live next to a dairy/feedlot. Particulates can travel over ¾ miles. Today smelled stench of CAFOs. Have you read D'Ann Williams report. Have asked copies of the notes from dairy WG meetings. Have not received them. Violation of the law. She volunteers to be the female rep on the dairy meetings. Gary Pruitt says the dairy meetings are not public meetings and they do not have to share minutes with the public. Invited the board to tour the LYV. There is more manure in the county than there is land for application. Has photos of manure application for two straight weeks during the winter. That is why you need a genuine citizen rep on the dairy WG.

Tom Gasseling (YRCAA Board Chairman), "let's see what comes out with this report and this work group. . . . we still don't know exactly the final outcome of this workgroup. . . we may not have a legal recourse, but we have an ethical recourse."

Jan, Whitefoot "We should be there working with you." "The people of the community need to know that we are not being represented by Clean Air."

Larry Fendell (Citizen): Ongoing inversion. No outdoor burning. Asked for no more liquid manure spreading. They are spreading it next to me, . . . every day. A ban would help a lot.

Chairman Gasseling: I don't think we have the jurisdiction.

#### January 2012

Presentation of Air Quality for Dairies by YRCAA Director Gary Pruitt

Dr. Nicole Embertson, Nutrient Management Specialist from Whatcom County participated.

Louie Aguilar (Citizen): When he visits his 90-year-old mother in Sunnyside the smells are bad. Will this policy make a difference or is it just a procedural document that says, maybe in 15-20 years Sunnyside will smell better.

County Commissioner Rand Elliott: Appreciate the question. No intention of getting into a public debate.

Jim Dyjak (Citizen):

Only seven people got the packet. What about the hundreds of people who did not get the packet?

What if a dairyman removes manure from pens and gets high points, then moves the manure to another place? What if he takes the manure off the dairy and places it on another site?

No scientific instruments were used. Re NAEMS – Where is the baseline for neighboring homes?

#### Karen Cook Gulley (Citizen):

Lived in Toppenish all her life as well as grandparents. Health is decreasing in value. Has asthma, sinus infections, migraines, now chest pains. Why can the Beef Plant burn whatever they want any time they want, while residents cannot use their wood stoves.

Every time there is a problem, they sell the plant and pass the problem on to someone else. Have you ever studied the asthma rates in Toppenish?

The air quality leaves deposits on Toppenish murals.

Jan Whitefoot (Citizen):

Vision Statement – To protect public health and safety from air pollution

Score Card is based on the assumption that BMPS work. Have been in place for 20 years. Not enforceable. Following BMPs has led to the mess we are in today.

YRCAA received \$30,000 to conduct the Pilot Project. This is unethical. No environmental representatives were allowed to attend the meetings. Consider this a conflict of interest.

Quotes Attorney Charlie Tebbutt: "The proposed policy does nothing . . . but allow the industry to claim they are regulated."

You cannot separate a lagoon with aeration from water.

"Why do you allow the poop sprinklers on the dairies?" People have experienced poop sprayed on their cars while driving to work. Under BMPs the poop sprinklers are legal.

Why are poop sprinklers not addressed?

John Hopkins study. Why did the YRCAA say the study has holes in it. Why are you not paying attention to this study, peer reviewed, etc.

Say you are going to use eyesight as a mode of measurement. Not scientifically acceptable.

RCW 70.94 requires scientific measurement. HOUND has been used at Monson feed lot and by the EPA.

We have had horrible inversions. Cows don't stop pooping during inversions.

Dairy Score Card does not address public health during inversions.

Voluntary participation has never worked.

Pumping liquid manure from a lagoon onto 40 acres next to an area where children are playing. And this is legal under the AQMP.

Dust control.

Acting YRCAA Board Chairman Bill Lover tries to cut her off.

Whitefoot continues: Why would you allow dairies to recycle wastewater to be used for dust control?

AQMP creates a paper tiger that protects industry and does nothing to protect the air.

Are there monitors at dairy sites?

EPA did not participate in development of AQMP.

Much of the information in the score card will not be available to the public.

Ask them to stop and work with the public to write a viable plan.

Jean Mendoza (Citizen):

Report looks very nice. Goal should be to make report relatable to reality. Goal to improve and maintain public health with respect to air quality.

Baby's lungs are not mature until age five. Pollution impacts children differently.

Studies on young people with asthma.

Chairman Lover questions relevance

Mendoza – trying to make the link to human health as well as animal health. Encourage YRCAA to put a human health component into the project.

Suggested additions:

- Look at impact on human health
- Micro-organisms in particulate matter
- Difference between Pm 2.5 and PM 10

- Look at fecal dust can cause disease in people
- Look at how much pollutant there is Can look at how many cows per acre

Chairman Lover intervenes – have to close meeting by law

Suggest rejection of Appendix G – A lot of people will accept this as the truth, It is more virtual than real. There was no baseline air study. YRCAA says they cannot measure odor, but says they reduced odor by 24% in Appendix G

Adjourn study session and re-open to public comments for regular meeting. Lover, Elliott and Camp present.

Louie Aguilar (Citizen):

If you held these sessions in an environment where people are exposed to the pollution all the time, it might bring a different incentive, able to observe changes. We are sitting here in a beautiful, air-conditioned environment. Need to consider the issues where the problem exists. Otherwise, will be here 20 years from now discussing the same problem.

#### Gerald Gefre (Citizen):

Downwind from the DeVries Dairy – means anyone within 3-4 miles of a dairy. There was no true citizen representation at the workshops. Impacted people were not heard. Maybe the board should get into an airplane in June or July and smell the odors from the dairies – causes N/V.

Suggests implementation of BAT – Best Available Technology instead of BMPs. Dairymen who make a good living, should be looking out for their neighbors.

Pollution will affect people down the road.

No reference to what happens to manure after it comes off the dairy.

## Asa Washines (Citizen):

From West Wapato area. The document lacks the partnerships with the Yakama Nation, part of Yakima County.

There have been cases in which tribal areas have higher standards than neighboring areas. Tribal standards can supersede neighboring rules.

Disappointing to see lack of collaboration.

Chairman Lover says he tried to reach out, not successful.

Do you remember the name of the person from the Yakama Nation.

Rebecca Hauk, Elizabeth Sanchey, Noelle Saluskin & Phil Rigdon per Gary Pruitt. YRCAA presented to the Tribal Council.

#### Lavina Wilkins (Citizen):

Tribal member who lives on West Wapato. Moved to her home for fresh air for her grandchildren. Now all her family has allergies and asthma. Every morning when you go outside you smell cow manure. Raising a grandchild with asthma who is on a machine. I have an inhaler.

Jurisdiction. Air does not have jurisdiction. The cities are affected by pollution.

Need to see a better plan and more people involved. Our children are our most valued possession.

"If you can see the air its OK" Is this the policy you are pushing. I can't for the life of me see how you can see the air. Applause.

## Steve George (Citizen):

Works for the dairy federation. The industry was invited to participate and did so voluntarily. Appreciate the professionalism of the YRCAA staff and others. There has been a lot of chaff spread round here today. Believes the wheat needs to be separated from the chaff.

Industry looks forward to working with staff. Believes they have made great headway. Great program. Looks forward to working with YRCAA.

#### Larry Fendell (Citizen):

A lot of work involved, even though I don't agree. Appendix G-1. Pie Charts. Ammonia and odor. Could not find a baseline anywhere. Says they reduced ammonia and odor. But there is no baseline.

I live down there. I don't notice a 24% reduction. It stinks. There's too many cows on a confined area. You end up with > 6 cows per area. This is not agronomic. The main thing dairies produce is manure. But we have just too many cows.

Only eight people participated in the workshops.

Not the first in the nation. Have found projects in Idaho and California. They are used to get more laws passed and a propaganda tool.

Putting up trees at stage three. Creates problems – mites and aphids.

Running manure through wheel lines, or through a honey wagon, pollution hangs in the air till the cows come home.

There is nothing scientific about the AQMP. They should have established a baseline. Dr. Ndgwa has state that spraying manure is the worst way to spread manure. People's homes and cars have been sprayed.

Dr. Nicole Embertson (Consultant):

Good comments, etc. Good to compile so the scientists can reply and provide resources.

Lover was an observer throughout. Not an expert but has comments:

Public should believe the dairy industry made a good faith effort and should be commended. In particular the article in the paper from Dr. Williams made irrelevant comments.

Conclusions are consistent with pro-active problem solving with CQI. Same processes used in major industry.

States he is still open to opinions. Believes it will improve air quality. Commends the industry.

## February 2012

Study Session – YRCAA Director Gary Pruitt – Purpose to comply with the WAC. Identified BMPS that impact human health. Investigate whether BMPs were being implemented. Summarized in a Score Sheet. Emissions can't be measured adequately and accurately for fugitive sources such as dairies.

There are public impressions and concerns:

- Measurement of ambient air is necessary.
- Measurement of fugitive emissions cannot be done.
- Public was not involved.
- No new BMPs created.
- Therefore, the public could not and should not have been involved.
- Perception of conflict of interest because of dairy funding
- CAA declares that the cost of air quality control should be funded by polluters.
- BMPs don't work.
- National Academy of Science disagrees. 2003 report on Regulation of Air Emissions from Animal Sources says there should be no delay.
- Industry has concerns Not totally on board Policy is another layer of govt regulation.
- Prefer no consequences.
- Gary disagrees.
- Industry says there is already a high degree of BMP utilization.
- Information given to the agency can be used to support lawsuits.

• YRCAA would not disclose.

YRCAA has the legal authority to require all dairies to register.

Registration does not mean a permit. Need to be able to determine if a facility has the potential to permit that would trigger a permit requirement under federal law.

## March 8, 2012

Larry Fendell (Citizen):

Involved in clean air for a number of years. No problems getting information. All of a sudden it is hard to get information.

Dave Caprile wrote a deal into the paper – best approach to the dairies. He's writing and talking about people twisting facts. This leads a lot to be deserved too. I brought a few pictures showing the smell problems we have. They push up berms. Make lagoons wherever, usually on property lines. They spread it out to dry right next to people's homes.

This is a rig spreading the manure out. This is what it looks like after they harrow it. They haul it everywhere. This is Roza Drive in one drive. Where do you think that goes when you can't get your mile? How do you incorporate manure on asphalt? One of the pictures they have dead calves laying out there. Here are the Big Guns. This is brown water. There supposed to be cutting that with something. Dr. Pius has said this is the thing they can do. Aerating it through irrigation. Here is a barn that hasn't been cleaned.

When Dave writes a deal for the paper, he shouldn't be so single minded. There are lots of reports that are ignored. They were supposed to be doing something since 2003.

#### Jan Whitefoot (Citizen):

On Monday the day the wind was blowing, 40 miles or more. Helen and I invited a reporter to go with us on a poop tour. You couldn't hardly see the road. I the Best Management Plan it said they wouldn't do anything in the wind. We saw truck after truck applying manure. They are not following it now. What will make them follow the plan.

Concerned about transparency. You didn't share that the dairy industry provided \$30,000 until we brought it up. We are never offered the choice of participating. The citizen rep has not showed up for the last meetings. We all volunteered to serve in that position.

I would like to formally request that we do gasses. Asked for tracking and way to go back and see results. It is an EJ issue to include the public, and a matter of fairness. We never have the opportunity to share what we know.

Did anyone work with Ecology on the AQWMP card.

Did any members of the YRCAA lobby for a bill that would limit public request records. Kevin Bouchey might have done this.

You wouldn't be getting all these PRRs if we could access the records.

Steve George (Citizen):

Reiterate items from dairy industry perspective.

Industry participated 110%. Worked toward a positive goal. Had significant participation – at least half of the cattle. Had academia. High compliance rate.

Dairy should not be saddled with a mandatory program.

YRCAA Board Chairman Tom Gasseling:

The problem with the pictures is you cannot tell what they are. They could be dust blowing or anything.

Fendell: You mean you don't know shit from shinola.

Gasseling: That's right, I don't.

Gasseling: I'm getting real tired being told that I'm sneaky, deceitful, devious . . I 'm getting real tired of being called devious. . . Don't come here every month and being told I'm some useless piece of crap.

I personally, I'm fed up with it.

This has got to stop. I'm not going to tolerate it any more.

Jan Whitefoot: You were bad mouthing me in an email.

Gasseling: I meant what I said.

## **April 12, 2012**

Steve George (Citizen): Industry appreciates the tact you took at the last meeting. Over half of the cows in the program. Thanks from the industry to continue with a voluntary program.

Doug Moore (Citizen): Fighting this problem since Feb. 1991. I quit counting how many calls I have made. They go to the dairy. They don't go to the complainant. The dairies take them to a different area. I have had visitors that visited the boundary and almost vomited. Dr. Williams

said the air at my place is the second worst in the LYV. When I see that crap in the paper that says no one complains I throw my hands up in the air. Like I said, I have been complaining since 1991. I get pretty upset. As you can see my hands are shaking right now. There is an extra lagoon. The stuff is going into Ditch 9, Black Rock Creck. I know they are dumping, and no one investigates. They put in a plastic pipe that discharges right into Ditch 9. Now the discharge is covered up. It's been 21 years and I am still fighting the bureaucratic BS. Brought pictures. I got a dairy on Stover Road with manure this high. (five feet) Now they are coming down Braden Road. That's not good management practices . . and you want them to decide what is good management practices. There is a lagoon with 3 million gallons of raw manure 187 feet from my house. I've filed complaints against it. They bulldozed down cat tails because that was a wetland. One time the gate broke and the whole 3 million gallons drained into Black Rock Creek. Nothing has ever been done. I'm so mad I have just about given up.

Dale Coder (Citizen): I really don't know what I'm doing here because it sounds like no one is doing anything. I get up every morning and go out to get my paper and the air is so bad I can't hardly stand it. Who pays you guys wages? When are you going to get off your butts?

Chairman Gasseling tries to intervene.

"Come out and take a look. It's crazy."

Eleanor Hungate (Citizen): Former full-time faculty at WSU Dept of Ag Economics. Talks about externalities and CAFOs. Don't think you are concerned about the vastness of the externalities. Pediatric asthma cases are real costs. Increased among people who live down wind. You don't seem to have much power to regulate. I think you have too nice a relationship with those you regulate. If dairies can say they are performing within guidelines their liability is reduced. Concerned abut the over concentration of CAFOs. We have other agriculture that is of equal or greater value, that is being adversely affected.

Doug Moore: Many years ago I was affiliated with a dairy in Southern California, one of the largest, and they didn't do this stuff. At one time I helped service about 57 dairies in this area. A lot of them came from Simi Valley, through Maple Valley, they started moving here in the 1990s. So they didn't really sell their dairies like they were supposed to. I'll bet a lot of them have another dairy over by Twin Falls, Idaho.

Jan Whitefoot: Questions. At last meeting I was embarrassed by the way Tom Gasseling yelled at us. Where is the code of conduct for board members?

Chairman Gasseling: I'm going to cut you off.

Jan Whitefoot: Last month someone said that only a few people complained. Brought presentation from Les Ornelas. Brought documentation of many complaints.

Have requested exact changes to policy. We should not have to FOIA this information. Need differences between new and old policy. Requested this information three weeks ago. Still has not received. Feel that only meeting with the dairy industry is prejudicial. Request meeting with the public so people can present information more than allowed in two minutes.

Five months that the public representative has not showed up for board meetings.

What scientific instruments should be used to measure air pollutants. Going out and having a guy roll down his window and take a sniff is not scientific. Dairies say an official came out and took a sniff and said we are in compliance.

Let's work together. You need to involve the citizens.

Recently one of the CAFOs on the reservation applied for an expansion. Why is YRCAA included in the permit application. Hasan says it is because of the SEPA review. Did Dr. Tahat visit the site? No. The dairies fill out the paperwork.

You have members that have attended dairy symposiums and have presented dairy symposiums. Why not attend health symposiums.

Marlene White (Citizen): Member of the Yakama Nation. As a resident of Harrah dairy smells are getting worse. Becoming significantly far, far worse. I have family members that suffer from allergies. Now we smell it during the winter. Have had problems with flies. New problem. Need a response to the people who come to you with these problems. When you permit establishments to come onto a reservation and you don't regulate it, this is concerning. Lots of cancer on the reservation. Listen to some of the things that are being said. I assume that this is part of your jobs. No one has come to the little town of Harrah and asked what we think. I beg you people to do something and then get back to us.

Jan Whitefoot: In your statistics include the hundreds of complaints to the EPA.

Chairman Gasseling: Agency has no authority on the reservation. (Incorrect because the county permits)

Marlene White: Cites the permitting that takes place on the reservation. If you are going to permit find a way to cooperate on regulation. We meet resistance regarding regulation of non-Indian people on the reservation. I would say, extend an olive branch regarding regulation of CAFOs.

Larry Fendell: This has been going on for 20 years. It got really bad in 2002. There were stacks of complaints. When we talked to Clean Air they had no record. We had stacks of records. People are angry. Has only had one person set foot on his property after a complaint.

They are still not incorporating. The dairies are clean but the neighborhoods are a mess. It is spread all over the roads. Manure is just laying out there on the fields since winter.

Jan Whitefoot: Of all the dairies on the reservation only one has a legal permit to operate. Yakima County permits dairies on non-tribal land, permits pipes. Only one operator has a legal permit.

# May 10, 2012

Helen Reddout (Citizen): Minutes of last meeting said that he invited Helen to be on the dairy committee. If I had been invited, I would have been there with bells on. I went back to 2010, the only face to face conversation with Mr. Pruitt took place in 2011. Mr. Pruitt came up to me and thanked me for my professionalism. If it is an oversight on my part, I would like for Mr. Pruitt to produce the emails asking me to be on the committee. Asked for clarification.

YRCAA Director Gary Pruitt: I placed a phone call. Intent was to aske her to meet and be on the committee if we talked. Never got the opportunity to invite Helen.

Helen Reddout would like to be on the committee.

Jan Whitefoot: Corrections to last months minutes. Also, comments on Les Ornelas exaggerating. Please add to minutes. Mr. Silva has now missed six meetings. Asked for clarification. We ask questions but don't get answers. YRCAA did a SEPA review on the Steve Bangs Dairy.

EPA has air monitoring devices available. Public asks for air monitoring when you do an investigation. Some people are voting on CAFO issues and have never seen a CAFO. Invitation to tour the area.

Director Gary Pruitt: Will post comments on the YRCAA website.

Jean Mendoza (Citizen)

Are several vacancies on the board. FOTC supports Jan Whitefoot for the small cities position. She is knowledgeable. Has necessary contacts. She is female. Feel the need for a female perspective.

Chairman Gasseling: Board has no control over small cities rep.

Mendoza: Response to review of John Hopkins by Ndgwa, Harrison, Embertson. Clarifies a longitudinal study versus a cross sectional study. They talked about ammonia. Not the only component of odor. There are over 200 chemicals that impact odor in the air. You can have sub threshold levels for all compounds but when you put them all together you get bad odor.

When people have asthma, they respond to lower levels of BOS D2 antigen. That is why there are no threshold levels.

Antigens can 1. Sensitize the lungs – develop asthma over time. 2. Cause an asthma attack with exposure.

## June 21, 2012

No public comments

# July 12, 2012

Jan Whitefoot (Citizen): Asked for clarification re PM 2.5 number of times out of compliance. What measuring devices are you using and is it different from EPA devices. How do you differentiate between particulates from CAFOs and wood smoke?

Acting Chairman Bill Lover: Do you want to wait until the next meeting?

Director Pruitt: Would be a qualified answer. Needs to make assumptions in order to answer.

Use a federal reference monitor approved by EPA.

Differentiating particles form CAFOs and wood smoke. There is really no way to differentiate. Are running a set of chemical speciation monitors. But no way to differentiate between either crustal or organic.

Will make an attempt to answer.

Steve George (Citizen): Understanding is that the air quality issue is primarily during the wintertime when wood stoves are being used and there is little agricultural activity

#### August 9, 2012

Jan Whitefoot reads letter from Helen Reddout. Letter says that the RCW does not say YRCAA cannot enforce air quality on CAFOs. At no time was a position on the dairy committee mentioned or a position on the committee. If he wanted me on the committee not mention it on the call or send a letter. In June Helen said she would like to serve. Did Mr. Pruitt forget?

Minutes forgot to tell about air monitoring in Harrah. Citizens still do not support AQMP. No reason not to have air monitoring.

Title VI says there should be diversity on the committee. Would like to see more women and minorities on committees.

Provides data from the federal govt on the number of cattle. Contradicts numbers from YRCAA. Left data with the board.

For the record, Do not repeat that Jan Whitefoot is against all CAFOs in the Yakima Valley because that is not true.

Chairman Lover - will answer at next meeting.

# October 11, 2012

Jan Whitefoot: Last meeting gave YRCAA the numbers for cows in Yakima Co. Working on data through NASS. The number does not include beef and slaughter cows.

Hot spots for water pollution are in Granger, Mabton, Sunnyside, Grandview. Lagoons lead to air monitor. Want air monitoring near the Outlook School.

Why wasn't Hydrogen sulfide included in YAWNS.

Need to test downwind from facilities.

Still asking YRCAA how they monitor poop sprinklers?

Impacted communities are supposed to be included in the studies.

Larry Fendell: Last month was a tough month for smoke and things. We were socked in and yet we had neighbors that were aerating the manure. You know where it stayed. What do you think hangs in the air? I've asked in the past and I'm asking again. If there is a Stage II burn ban, and I can't burn a fireplace or any outside burning, I don't know why people should be allowed to go out and spread liquid manure. I've asked before and I'm asking again for a discussion.

Jean Mendoza: As advocates for people in the LYV Ammonia is a precursor to nitrates in the air. Every dairy cow produces about 80 lbs. of ammonia per year.

Director Gary Pruitt: We'll communicate with Jan, Larry and Jean outside the meeting.

Acting Chair Lover: There were some jurisdiction questions in WA. All contributors of airborne nitrates will be considered. Even the ammonia that each of us emits on a daily basis. It's a "must do" study. We support.

Legal action by Citizens for Sustainable Development – hearing date set for October 30.

**New Mission Statement** 

#### **November 8, 2012**

Jan Whitefoot (Citizen): New information on dairy cow numbers. 226,000 non-dairy cows. 58,000 milkers, other Total 318,687 head of cattle.

Lagoon surface area in 1,211,127 meters squared. Need to address this.

How will you incorporate the new numbers into your policy.

Letter from Mendoza,

Spraying of manure during air inversions. Would you be willing to discuss and write regulations re manure spraying during burn bans?

Helen Reddout (Citizen): I would like to look at your definition of a dairy. Should include heifers, calves and other.

Larry Fendell (Citizen): Need discussion. It was a simple question. I want an answer in an open forum. I want a discussion. Let's talk about it between the board and citizens.

Don't need any more cows in this county. We have polluted air and water.

When did the policy lower the time between pulling out trees and burning to 30 days?

Kathleen Rogers (Citizen): Neighborhood formed a group called AWARE. They stopped a calf operation in their neighborhood. Close to her home two dairies have merged. They have added so many more calves, cows, lights at night, piles of poop. Used to have 5 acres of manure. Now they have started more. I don't understand why you have to be so angry. Enough is enough. Draw the line. We have to do something to contain the smell of the lagoons, urine, cow poop. I want to protect my home and I know you would too.

Director Gary Pruitt: Have experienced ineffective information exchange. Asked about an open forum.

# **December 13, 2012**

Jim Dyjak (Citizen): Major health problem. Haystack fire burned and smoldered for a week. I am now the proud owner of an inhaler.

Facilitator at community forum needs to be independent from the agency. (Facilitator was Dave Caprile from YRCAA)

Larry Fendell (Citizen): Feels for Jim Dyjak. In Larry's area there was a huge barn fire. The fire dept. stayed until the fire was out. No smoke the next morning.

Community meetings. I've asked a question for three meetings now. No answer. Why are dairies allowed to spread manure during burn bans? The reason we bring things to the board is when we bring things to the agency nothing happens. Need to have concerns recorded. For the last three months we have asked about ammonia. We have to stop using wood stoves and fireplaces. We go out and they are spreading manure and the air is bad. I want the board to know that there is a problem.

Director Gary Pruitt: "You're so full of crap."

Jan Whitefoot (Citizen): We have been asking for several years for scientific air monitoring in the LYV. \$9,000 on incentives. Spent \$12,000 on a reader board. We need a 1-800 number so people can call in complaints. YRCAA says they still have a 1-800 number. A lot of people do not have computers.

Community Forum no decision-making power.

Did Tom Silva attend the dairy meetings? Still no citizen representation.

County Commissioner Kevin Bouchey – The board needs to address Mr. Silva's absence.

Director Pruitt: There are others that are no longer attending.

Whitefoot: The fact is that throughout the whole procedure you had no citizen representation.

Cow numbers were not put in last months minutes.

Mary Baechler (Citizen): Is it true we don't have any air monitoring in the LYV.

Dr. Hasan Tahat (YRCAA): We have them in Yakima, Toppenish and White Swan. None in Sunnyside.

Baechler: Are we monitoring nitrates? I recall that nitrates are carcinogens.

Tahat: No.

Baechler: Why not?

Tahat: What we are monitoring is the criteria pollutants.

We have a speciation monitor in Yakima. By law we are required to have basically the criteria pollutants.

#### **January 1, 2013**

Larry Fenden (Citizen): From a TV interview Mr. Pruitt, "Frankly the money just 1sn t there (esting wouldn't produce credible evidence of anything. It would cost tens of millions of dollars to set up testing in the lower valley." Does that statement bother anyone?

Requests for items on the community forum agenda. Its also been stated that they are going to take this nationally. Other studies have PhDs and peer review. Don't see this on the AQMP.

Board Chairman Gasseling We don't have any authority so anything we can do to move it forward is a good thing.

Fendell: Mr. Pruitt said that Helen Reddout would not be on the work group.

## First Community Forum - Led by Dave Caprile of YRCAA

Outlined the purpose of the forum – to address air quality questions from the public. Only air quality issues. Provide answers that can't be provided at board meetings.

Will start with points of information. Point of view from the laws and regulations.

Larry Fendell (Citizen) Spraying manure during an air inversion

Several days when manure just stayed on the fields. The pollution just hung in the air.

Dr. Tahat (YRCAA): We do not have the authority to shut down an operation

Fendell explains that originally dairies had to have enough storage. Now they haul every day of the winter.

Helen Reddout (Citizen): I'm astonished that you have no idea what is happening in the valley. Why don't you come down and we will take you around the valley? Over 400 pathogens held near the ground surface. What are those pathogens doing to people's lungs.

YRCAA Director Gary Pruitt: We have no authority to regulate emissions during emissions except for wood stoves. There is a piece of legislation that would change that – specific to banning heating devices and outdoor burning.

Monitor in Yakima is situated to find the highest readings in the Yakima urban area. The type of pollutants of primary concern would not measure the pollutants of concern.

Steve George (Citizen): Not aware of a certain time frame in the fall or spring when manure from lagoons could be applied. Only aware of weather conditions or soil conditions.

Reddout: SYCD handbook 1995 talks about fall applications only.

Fendell: roads covered with manure, liquids and solids.

Caprile: looking for our ability to stop manure applications during a burn ban.

Reddout: provided scientific studies – PEW, John Hopkins, etc.

Caprile: this is based on a model, not sampling.

Reddout: but we have used the Cerex air monitoring device. We had readings clear off the graph.

Caprile: maybe we should offer discussions on modeling and sampling.

Reddout: you turned down our offer to use the Cerex air monitor.

Fendell: Dr, Ndgwa used this type of monitor in the NAEMS

Dyjak: the dairies are clean and getting high scores. They just move it across the street and you ignore it.

If they lease land it is not attached to the dairy.

Pruitt: we are looking at the whole farm operation, all the land under his control.

Rogers: Veldhuis stored manure 50 feet from a neighbors' home. Composting manure across the street from her house. He says this manure doesn't stink and there won't be any flies. There shouldn't be manure dust in my home. That is an invasion of my home.

Keith Hurley (YRCAA): Agrees with her. But we are paid to be dispassionate. We are constrained by the law. My guys will continue to act within the letter of the law. If we see a violation we will act. We have sat down and we have examined the law. Because of the complaints that were lodged we did something.

I'm going to speak to D'Ann Williams study. She wrote it. John Hopkins did not endorse that study. We all know there is a dilution level after air leaves a dairy. The problem I have is there were serious technical issues with it. There was no correlating to a health issue threshold. If there was there would have been actionable intelligence. The NAEMS is going to do that. We are kind of tied until the results arrive.

In this particular case the fight is at the legislature. We aren't moving fast enough for you guys.

#### June 13, 2013

Jim Dyjak: Changes in Item 9 from the material presented to the public. Need to sit down with the public at a study session. A lot of unanswered questions and different from the material that was presented last month.

Larry Fendell: Item 10. Started this discussion earlier. We were berated, reprimanded and ignored. We have brought things up at the community meeting and it gets thrown away. You wonder why we want to come to the board. If we can't have open communications; if things are being covered up then some changes need to be made.

Item 9, is not what the public reviewed a year ago. It is a blank check.

Jan Whitefoot: Agrees that the public was left out of the dairy score card. Cannot think about any public suggestions that have been implemented. Does nothing to protect public health. Ecology has public hearings for their air permits for CAFOs. YRCAA does not do this. You all were elected to protect all of the people, not just dairy. Using eyesight to measure air quality is junk science.

It's a logical concern to put poop into the air that people breathe. Would you accept this for your children?

Helen Reddout (CARE): Over a decade of advocacy. Each time we had to go to court. That is not a good way to go about protecting a neighborhood. You represent all of us, not just one group. Supposed to be making decisions on the basis of the needs of the constituency. This is the agency that is being paid to do that.

Kathleen Rogers: Invitation to visit the LYV and see what is surrounding homes in the LYV. Last month Mary Baechler spoke, and someone asked why she spoke since she is form west valley. Mary does visit the LYV.

Jean Mendoza: Response to Ex Memo, Item 10. Would have been good if the agency had consulted Ecology, DOH and SYCD. WSDA does not address inversions in their implementation of the nutrient management act. Do address high winds. Appears some producers ignore these provisions.

Regarding the Ex. Memo. It is not the role of YRCAA to protect groundwater. Not the role to protect industry. Primary role of clean air is to protect the most vulnerable members of society,

A member of a community advisory board for asthma in the LYV. Looks at what happens to asthmatic children. Have measured ammonia and other pollutants. Data shows a relationship between decreased lung function and air pollution. U of W wants to share the data.

Gary Pruitt: Lawsuit against YRCAA by Citizens for Sustainable Development has been settled in the amount authorized by the board. Dismissed with prejudice in process. Agency denies any liability. Settlement chose to avoid continued litigation.

Item 9: AQMP for Dairies.

Director Pruitt: Changes were made specifically to address non-substantive requirements.

- Open to advice from Ecology, EPA, etc.
- Changes related to applicability.
- Number of site visits & frequency. Code B, Part 5 address site visits.
- Fees. Treat all the sources the same. Would fit into the minor source category. Some might be considered a complex minor. Won't know until the visit.
- AG Task Force has been existence since 1995, not always active. Has been dormant, and primarily dealt with ag burning. Dairy Task Force has completed their work. Would entertain suggestions on who should serve on the task force. Will bring a recommendation.

Board Member Lover: Is there an appeal process for a task force ruling?

Pruitt, doesn't know of an appeal process.

Lover, so it would just be a citizen appeal to the board.

- How AQMPs are submitted added to the policy.
- When will policy be evaluated? Will be accomplished jointly by YRCAA and Ag Task Force, based on effectiveness of reducing pollution and reasonableness. Board would approve any changes.
- Recommends adopting the policy.

Board Member John Gawlick abstains from voting on policy and rulemaking because he does not know enough.

Yakima County Commissioner Elliott willing to support with the proviso that it is appropriately reviewed.

Lover questions answered include evaluation, dispute resolution, updates, timelines, etc. Prepared to go forward with the current document.

Yakima County Commissioner Bouchey believes the policy represents the interests of all people in Yakima County. Delay is not advisable. Passes with 2 for and 1 abstention.

Item 10: Ban of manure spraying.

Director Pruitt: The guiding statute is the Administrative Procedures Act. Talked to Laurie Crowe, SYCD. Dairy Nutrient Management Act (DNMA) is the only law that deals with manure. Emailed Virginia Prest at WSDA. She responded yesterday.

Part of the tenet of the Clean Air Act is to support economic development.

Reasons are not stand alone.

Nutrient management is managed by the DNMA. Must be agronomic.

There is no evidence that there would be a difference of health risks during a burn ban. Burn bans are sometimes called to prevent fires. Air quality burn bans don't exist during windy conditions.

Could impact groundwater.

We don't want to be responsible for overflowing someone's lagoons. Also, there would be an enforcement issue. We can't do that.

If board choses to deny the petition I will give further reasons.

Commissioner Elliott not willing to adopt petition. Does not think petitioners will run and appeal to the Governor. It deserves further consideration.

Commissioner Bouchey if we do not take action then the rulemaking process begins.

Board needs more time. Will commence rulemaking.

## July 11, 2013

Jim Dyjak (Citizen): Questions

- Can the public participate in the study sessions? Pruitt When it is appropriate. There would be some cases in which it would not be of value. Depends. Elliott No hard and fast rule.
- Re AG Task Force need a study session. In the past I tried to be on it and was told I could not join.
- How often the AQMP for dairies is reviewed needs to be clearly stated.
- Petitioners need to meet with YRCAA It is being dragged out. Suggestion of back room dealings. Let's fill in that two month hole and meet with the petitioners. We ask for the same respect YRCAA gave the dairies.

#### Kathleen Rogers (Citizen)

- Directors report re rulemaking When will the first stakeholders meeting be held? How many meetings? Why the 60 day delay? What are the criteria for acceptance or rejection?
- Why did YRCAA reject the nomination of Jim Dyjak for an award? Larry Fendell was also nominated. Believes the criteria needs revision to make citizens eligible.
- Advocates for ammonia monitors

#### Larry Fendell (Citizen)

• Supports the need for LYV monitors. Have been calling for this for 12 years.

- Delays in Item 6 another drag out that prolongs suffering of the people form air pollution.
- Cow numbers are increasing. Manure hauling increases during the winter months. Let's don't sit on our hands. We're ready to go. You need scientific evidence. We have it. No reason to have to go through another winter like last winter.

## July 15, 2013

**Community Forum** 

Dave Caprile, Gary Pruitt, Hasan Tahat, Patty Walker, Jim Dyjak, Linda Dyjak, Kathleen Rogers, Dan DeGroot, Genny DeRuyter, John Gawlick, Mary Baechler

Open Agenda: Rule Making, Final Thoughts

Kathleen Rogers (Citizen): Few other ways to express Yakima County concerns. Has not seen Mr. Pruitt report concerns from the meetings to the Board of Directors. No assurance that concerns would be brought to the board so they could provide solutions. Only insulates the board from community complaints. Some meetings have been intimidating. Regular citizens would be inhibited by this format. Sees value in the forums if the alternative is no venue whatsoever. Hope the forum continues.

Question: Has the YRCAA staff communicated with the board after community meetings?

Director Pruitt: Communicates by providing a meeting summary. It is their decision to decide whether or not to come.

Question: Can we presume that the forum meetings are only designed to placate the community? Partially answered.

Pruitt: I personally have reported that the meetings have been productive. We can provide this in any format that provides information.

Mary Baechler (Citizen): How do you publicize the community forum?

Dave Caprile (YRCAA): Website & board meetings. Community Announcements in Yakima Herald, Sunnyside Sun & El Sol.

Genny DeRuyter (Dairy): How has attendance been recorded. Disappointed that so few people attend and we talk about the same old things.

Mary Baechler: You have to leave work. I had to leave work for example.

Genny DeRuyter: We have to hear from more people.

Jim Dyjak: Twice I have asked to have something put on the board agenda. The board gets to put on a presentation with their spin. We have to spend our time correcting their statements. That's why I will not tell the agency what I plan to say ahead of time.

## August 8, 2013

Study Session: Discuss a Petition to Disallow the Spraying of Manure during Inversions

**Director Gary Pruitt:** 

There is an executive memo, and a summary of the two public meetings.

Very little attempt at consensus building.

## Four key points

- Does the agency have the authority to write a rule?
- Adverse health effects.
- Is the rule needed?
- Where to go from there, continue the rule making process?

  There is apparent consensus that YRCAA should not continue the rule making process.

Comments from the Farm Bureau, Yakima Dairy Federation, WA Dairy Federation, Attorney Shawn Russell. Late comments came in late, consistent with those comments against:

- No clear statutory authority.
- No adverse health effects.
- already regulated.
- potential damage to crops, soil and water.
- unreasonable operating and management impacts.
- probable adverse effects on non-dairy operations.
- uncertainty of agency's ability to enforce.
- does not apply to Yakama Nation.
- best addressed by recently adopted AQMP for dairy operations.
- lack of consensus to proceed.

## Summary of comments in favor:

- 50 signers
- 3 Individual letters of support.
- Literature in support.
- Rule is needed.
- No conflict with other laws.
- No less expensive alternative.
- Should not apply differently to public and private entities.
- Rule is simple.
- Rule does not differ from federal law that applies.

# Comments from meetings:

- BMPs are not being used.
- BMPs don't work.
- There are adverse health effects.
- Air quality is worsening.
- There is a lack of air sampling in the LYV.

Emails received in support of the rule. Made no progress on consensus on that the rule should say. Are at the end of negotiations. Need to decide whether to proceed with the rule making process and if they do proceed how to accomplish that.

If they decide to proceed with rulemaking there is a period for further public comment. Have up to 100 days to complete the rule making.

Both meetings resulted in unanimous decisions not to proceed with rulemaking. No hands raised in favor of pursuing.

Elliott – Have we fulfilled our obligations. If there is no interest in going forward, do we need to go on.

Gary Cuillier (YRCAA Attorney): Are past the 60 days to deny the proposal. At the exact point to chose

- Stop proposed rule, discontinue the process.
- Refer the effort to committees such as the AG Task Force.
- Continue effort by agency staff.

#### Regular Meeting:

Jim Dyjak: Put together a package. Flow chart for agency rulemaking.

- Agency must make the rule
- Optional paths rulemaking process
- Earliest you can take public comments on the rule

Does anyone know where negotiated rulemaking came from? 1990 Congress enacted the National Rulemaking Act. Public Law 104-320 signed in 1996.

No rule was ever proposed.

Why the rule is needed or might accomplish. But that is not what he sent to the state. The statement to the state should have been given to the public.

Commissioner Elliott asked who the rule writer is. It doesn't have to be Mr. Pruitt. No qualifications.

The intent is for people to come together on the writing of the rule. The agency can still write a rule without consensus. I myself got upset at the meeting. It was like, "lets go out and lynch somebody." The statute doesn't say let's get a bunch of people together and ask them to fill in the blanks.

Questions about AG task force. Why are we making for dairies their own little world where they are judged only by their peers and insulates them from the process. Why aren't Jim Dyjak and Larry Fendell on the list? We have been coming to these meetings for 11 - 14 years. Debra Suzuki from EPA said that her people couldn't make the meetings, but they are happy to advise.

Larry Fendell (Citizen): Agrees with Jim Dyjak. The two meetings – Consensus of what? I had to ask to have the petition read so people would understand it. At the second meeting other things were discussed. Meetings provided no information. There was no rule written. Nothing explained.

This valley is getting worse on air quality. I don't need someone from Whatcom County or anyplace else to tell me what's going on in my neighborhood. It all boils down to too many cows. They shouldn't be putting manure on their fields in the winter. Rules and regulations are not being fields.

Doug Moore (Citizen): Lived in the valley for 22 years at the same spot next to a 3 million gallon lagoon. Last night at 3 o'clock I had to get up and close my windows due to the manure smells. Last winter, five weeks in a row, my neighbor spread this stuff on the ground next to my home, within fifty feet. Ammonia releases at a packing house brings closure of a highway. But not for the dairy. I have had to fix electrical problems on dairies due to ammonia destroying the wiring. I would guess 20% of dairies are not very good. Especially during a burn ban, that should be a no brainer. Family is being bitten by vicious flies.

Steve George representing the Yakima Farm Bureau and Yakima Dairy Federation (app 70 dairies)

Item 9. Did not see the legal brief from Groen, Stevens & Klingle on the table of documents.

- Proposed rule prohibited by the ag exemption.
- No substantial effect on public health
- From Ginny Prest from WSDA request to comment. Can't endorse a proposal that might have unintended consequences in other areas.
- Farm Bureau requested data from Dept. of L & I. 90% of injuries are open wounds & bruises. No complaints from harmful air quality.
- No scientific data
- Clients do not support moving forward.

Yes, ammonia is corrosive. But this does not happen just on dairies. Also for fertilizers.

Steve attended both meetings. Did not hear confusion. A large majority of the attendees were dairymen. Dairy is still committed to working on the issues.

### Jan Whitefoot, a Petitioner:

Has talked to families where children have played in sprinklers when they did not know manure was in the water. Spraying manures have been banned in other areas due to the pathogens and particulate matter. Referenced El Proyecto Bienestar regarding asthma. Have asked YRCAA to do further studies with the same inexpensive equipment. We never hear about asthma at YRCAA meetings. In favor of proceeding with the rule. Attended both meetings. Opposes Gary Pruitt as Rule writer. Our health studies were not shared at the meetings. But dairy information is shared. I felt intimidated and others felt intimidated. No Latinos at the Granger meeting. I get phone calls because people are afraid of losing their jobs and homes. I have been threatened and followed.

You all didn't listen until we brought a lawyer. We have come time after time. We have told you about the problem. EPA does want to be involved. I would encourage you not to take the staff's words at face value. Do your homework.

Doug Moore: Five years ago I had the Hound installed at my place for three months. We have had scientific proof and it's been delivered to the department. She said the air at Harrah was the worst, mine was second worst and there were several others that were similar.

Fendell: There was scientific evidence turned in with the petition. The agency hid it.

Kathleen Rogers: I have to tell you, scientific data or not, my nose and my lungs are scientific instruments. It is urine in your window.

Terry Brooks (Citizen): This winter one of the dairy farmers that has a new lagoon right in my front door. Last night my neighbor had so much manure on the road you can't see the line. This stuff is getting in my throat. I just hope and pray that something can be done. I don't think we are asking too much. I have lived there all my life, longer than any of my neighbors.

Steve George: Some people have relied on a report from John Hopkins by Dr. Williams. Dr. Embertson did a review of that report. She states, the study examining allergens found levels below National OSHA levels. In some cases, children born on farms have lower incidences of allergies. You have to make your decisions based on science and the law, not impassioned pleas.

Genny DeRuyter: Not all dairies have the same practices. Since 1997 we have spent millions of dollars to address issues. There are different degrees of manure separation. At our dairies we have a three-stage separation. We end up with brown water. We have more than enough storage. Where we get into a problem is different storm events with rain and snow melt. We can't predict the weather. There are lots of extenuating circumstances. I'm not convinced that it is the responsibility of this agency to address. Some lies with WSDA and Ecology.

Report on six Community Air Forums

AG Task Force:

Gary Pruitt: At the July board meeting you agreed to the formation of an Ag Task Force. Has a proposed list.

Item 9: Petition

Board Member Lover moves to suspend the rulemaking process. Second. Discussion.

Board Member Gawlick: Having another rule when others already exist and need to be enforced. Can revisit the rulemaking process after we see the implementation of the practices that were approved by the board in January. I have been told by staff that there was a positive effect. We should put it into action. For those who are not participating compliance should come into play.

Commissioner Elliott: Lots of contradicting opinions and evidence. Believes that 90% of problems are created by 10% of dairies. We need to put pressure on WSDA to do their job. Agrees on stopping the process.

Lover: This was excluded from the BMP study. Maybe this is where it should land. To me we are headed right into court. We should wait for EPA to complete their work. Obviously, there are problems in certain areas and with certain operators. I don't believe a rule is the way to go.

Commissioner Bouchey: Currently the rules and regulations are not being followed. We need to look at the agencies that have oversight. We have approved the AQMP for dairies. I'd like to see the staff focus on that.

Motion passed.

### October 10, 2013

Jon DeVaney joins the board as an at-large citizen representative, replacing Tom Gasseling.

Larry Fendell (Citizen): E-coli can travel on air. Would like to hear from the Health Department on how people can protect themselves. The manure trucks are going really heavy. It is falling of and blowing all over. Other trucks have to cover up their loads. Manure trucks should also.

Jim Dyjak (Citizen): Jean Mendoza would like time to address the study session of removing Dr. Embertson from the Ag Task Force. 90% of the members are from ag. But I see you adding more dairies. You need some citizens on there. Again, what happened to the public? What about the victims? When will we be included? Everything is geared to protect ag. If I bring an academic is the agency going to pay them. The last time we had to pay them. But the agency pays the academics for the dairies. If you are going to pay one you should pay them all.

Jean Mendoza (Citizen): Re Dr. Embertson.

- Provided misinformation and false information to the agency and the board
- Embertson's Literature Review was made available to the public and was posted on the YRCAA website.
- Statement regarding scientific misconduct
  - Fabrication
  - o Falsification manipulating data or results
  - o Plagiarism appropriation of another person's ideas
- Definition of a Literature Review

Chairman Bouchey asks for information in addition to letter.

- Referenced 40 pieces of research. 13 pieces actually look at community health. 12 found significant health impacts related to public health. Reads some conclusions.
- No restrictions regarding high temperatures, inversion, or wind events in the Dairy Nutrient Management Act. Not part of AQMP for dairies. It is a fact that people complained to YRCAA when one of the creators of the AQMP sprayed manure into the air during 40 mph winds.
- Incorrect use of references.
- Incorrect statement of a chemical reaction
- How much does ammonia from agriculture impact PM 2.5. Misstates the statistics.
- States manure is not typically applied during winter months. This is not true.
- O'Conner study rejected all but 9 out of > 4,000 studies on health

Chairman Bouchey – Keep asks Mendoza to stay focused.

Do you get my point that she is saying studies say one thing and they say something different?

- Misquoted the John Hopkins study and said it addressed pollutants carried by winds.
- Ignored studies done in the Yakima Valley.

### Jan Whitefoot (Citizen):

Granger meeting, proposal was not presented to the public. Only dairy information was shared. Dave Caprile gave the board misinformation.

Dick Camp, former YRCAA board member, has applied to increase his operation. Why could a person be a board member when they are regulated? Mr. Camp's operation (Bay Zinc/Kronos) was the biggest polluter of SO2 in Yakima County. Why was a permit even given to a facility that was classified as a category 5 hazardous waste site? EPA is currently investigating a spill at Kronos (Camp's facility). Kronos self-monitors.

Jim Dyjak (Citizen):

Summary says that Jim Dyjak declined an opportunity to participate. I don't believe in the program, and I'm not being involved in kick starting it. Summary did not convey what he meant.

33 - 38 dairies have not come on board yet. Now fees are going up. We want your money because we need a pay raise.

Item 12: Ms. Rogers asked about the status of a grant for monitors. Tell us what the monitors are, what they will be used for, and where.

Steve George representing Dairy Federation & Yakima Farm Bureau. Organizations do not agree with accusations against Dr. Embertson. Swine operations are not relevant.

Mendoza: Dr. Embertson is the one who brought swine information to the table.

Bouchey: Need to give Dr. Embertson the opportunity to respond. (Dr. Embertson wrote a letter in which she rejected the need to respond. The board took no action against her.)

## **December 19, 2013**

Kathleen Rogers (Citizen): Questions re monitors in Sunnyside. There was a monitor at the Sunnyside Schools around 2000. How to get the monitor back. The bases are still in place. Also, the "Hound" is available. Invasive air in the area. Keeps my in my home. I can hardly breathe.

Jan Whitefoot (Citizen): Has received training on how to read the PM 2.5 monitors. In Toppenish for six days in a row the readings were above 35 mcg/sq meter in November. Horrible inversions for weeks. Has friends with bad COPD. Need to inform the public. Risk of non-attainment. Ten days of non-attainment so far this year. It would be good to have a report on asthma. YHD said e-coli in the air can affect people. How many extra people are hospitalized during periods of high PM 2.5? Please do air monitoring.

Jim Dyjak (Citizen): Asks for details on grant request for monitors. For years you have said you cannot afford monitors. When we brought the "Hound" to the board we had to provide information.

Larry Fendell (Citizen): November and December have been pretty bad. Tuesday night there were three fires going along the old Sunnyside Highway. Seems like people are burning more. There are just lighting them up. Someone needs to impress on them that there is a burn ban.

Can we get the health district to talk to us about e-coli in the air?

I asked Nicole Embertson to tell us where she got her information. She said that only 5% of the people spread manure during the winter. I asked where she got the information. She said that Stuart Turner told me that. I asked, Is Stuart Turner running experiments? I don't think so. That's the reason we don't like your paper. You don't have any facts to back it up.

Jean Mendoza (Citizen): Presented a paper last week regarding Dr. Embertson's Literature Review. I read her response that is in your packet. She essentially said, I don't have to justify what I said. By implication the Clean Air Agency is saying, we can put out any information and we don't have to support it. It is a cruel thing to do to the public, to put out information and say, it is your job to research and find if it is true. I hope you will take some action on my request.

Board discussed complaint against Dr. Embertson. Took no action.

## **January 9, 2014**

Dr. Steven Jones joins the board in place of County Commissioner Kevin Bouchey.

Jim Dyjak (Citizen): Board and staff do not answer citizen questions. Cites unanswered questions.

Kathleen Rogers (Citizen): Please continue in your efforts to understand what is happening in the lower valley. Need a monitor.

## February 13, 2014

Kathleen Rogers (Citizen): Monitoring is a huge step. Without the data, we have no comparison on what the task force is doing.

Jim Dyjak (Citizen): We do need monitors. Talks about a contract for a monitor. Asks for a citizen's group to discuss. Dyjak hand carried the grant application to EPA trying to help the agency. Need more communication with the citizens.

Mayor Micah Cauley joins the board as representative for large cities in place of Bill Lover.

## March 13, 2014

Jean Mendoza (Citizen): Provides information to the new board members. Participates in the ag task force with the goal of improving air quality. Talks about spreading/spraying manure during inversions. WA Dairy Commission asked Dr. Nicole Embertson to write a letter. She opined that there is no danger to human health. Mendoza analysis is that Dr. Embertson is biased and gave the agency misinformation. Passed on half-truths. Embertson said producers do not spread manure during the winter. This is not true.

## **April 10, 2014**

Study Session for Budget.

Jim Dyjak (Citizen): Will citizens receive the complete board packet. Will the agency post the complete packet on their website? Clerk Patty Walker says the complete packets will be emailed to the addresses she has for board members and for interested citizens.

Item 6, the Dairy Work Group Meeting. Russ Davis is an instigator? Is this insulting? Director Pruitt agrees. Why are we still testing on the dairies? The problem is on properties next to the dairies, in the homes of people who are impacted.

Ask that the public be made part of the budget process. People get five minutes or less to testify. There is no discussion. The public is left out of the process. Written comments never make it to the board.

At one time there was discussion at the board meetings, but no longer. The board assumes that the YRCAA staff is correct. Not always true. For example, giving a pay raise and a bonus at the same time is wrong. Bonuses should not be automatic.

Larry Fendell (Citizen): Seems to be a whole new atmosphere on the board, an improvement. There has been a study in Idaho re spreading of liquid manure. Injection reduced the ammonia and air emissions by 78%. Idaho started with a baseline. The YRCAA policy did not. There is a huge difference in application rates. Be cognizant. Testing needs to be done off the dairies also.

Dr. Tahat (Agency): What is the baseline you referenced?

Fendell: They place monitors on a 22-acre field. Applied manure from tankers. Had another field with circles. Had another field with injection. The baseline was before application.

Genny DeRuyter (Dairywoman): In response. If you were to come to our dairy and measure the differences in tank applications and compare to other dairies, there will be a big difference based on manure separation technology. We are trying for better separation and get cleaner water. Our applications will be different from others. Lots of variables involved.

Don Day (City Manager for Sunnyside): Introduced himself. States concern and awareness of odor problems. SS wants to work with dairies and others to find solutions.

Kathleen Rogers (Citizen): Thanks for open attitude and improved communication. She has talked with neighboring dairymen. All we can do is hope. The door is open. She has talked with Director Pruitt about dust control and flies.

Jean Mendoza (Citizen): Compares YRCAA budget to family budgets when children are sick, for example asthma. References letter from WA Dairy Commission. Concerned that the letter became part of clean air thinking. You all do not answer to anyone but the legislature. You are the only people who can address respiratory problems re air quality.

Shares SIP for YTCAA. No person shall make a false statement to the board.

May 8, 2014

Presentation on Yakima Air Winter Nitrate Study (YAWNS).

Jim Dyjak (Citizen): YAWN Study identified potential health risks to people in the valley. Opened a lot of eyes and will help everyone.

Questions re the study. Do you need further study?

Jan Whitefoot (Citizen): Questions for Ecology. Is ozone higher in the summer? Where is the proof of a NO2 max compliance? A couple of years ago the EPA Environmental Justice division cane to Yakima and found serious problems. 100,000 cows contribute to much of this air pollution. We learned of a difference in air monitors. Any monitor should be certified. Need to monitor for a large number of pollutants in order to know where the pollution is coming from.

Answer – off-gassing of ammonia from application happens during the summer. There are probably other forms of nitrate in other parts of the year but may not be gaseous.

Whitefoot: Ammonia is a precursor?

Yes.

There was a NOx monitor at the community college. Nothing close to the standard.

Whitefoot: You mentioned other areas with similar problems. Do those areas have CAFOs? Yes.

Alvin Atlee (Businessman from Selah): Concerns about a big smoker and barbecues. Smoke impacts businesses. It is not illegal to have a smoker in town. Smoke is worst during non-business hours for YRCAA. Several complaints to YRCAA.

Director Pruitt: YRCAA will address the complaints.

Inspector Hurley: The smoker is legal. Invading other properties is not. Ideal solution is for parties to work things out. Trying to get the smoke up and out of the breathing zone. Put a stack on it.

Theresa Lua (Citizen and another Selah business owner): Concerned about the health of her employees who now have breathing problems.

Rick Moen (Owner of the Smoker): Prior to this meeting we would have openly taken discussion about the problem and tried to rectify it. We start it in the morning and bring it up to heat. and this eliminates the smoking later in the day. I've always tried to accommodate them. I sat down

with these gentlemen and explained the smoking process. We have looked at bids for extending the stack. We will continue to do everything we can.

Kathleen Rogers (Citizen): Applauds people for coming together and talking. Keep communication open.

Larry Fendell (Citizen): Thanks people who presented the YAWN Study. People who testified on manure spraying during inversions proved health problems during inversions. Asks board to revisit a ban.

Dean Effler (Citizen): Ran into a grandma recently with four grandchildren, ages 3 to 10. About forty years ago she bought a rural home. There was a neighbor with a few cows. About ten years ago that property was purchased by a dairy. She can no longer let her grandchildren go out and play. Two of them have asthma. There is a lot of particulate matter in the air. Lots of spraying of manure right next to her property. So frustrated. It is no longer a good place for family. Property values have dropped. If this was your property, what would you want? If these were your grandkids, what would you want? I am making an assumption that everyone in the Yakima Valley has a right to clean air. Monitoring units should be on the property right next to the CAFOs. They have as much right to clean air as someone who lives in the middle of Yakima next to Yakima Valley Community College.

Mayor Gawlick: As always, the problem is the budget. We have to do the best we can with current resources.

Steve George (WA Dairy Federation): Dairy industry went into an effort with the YRCAA on a mandatory reduction program. Asked the YRCAA to give it time. Already addressing the ammonia issue. Give it time to work and gather real data, rather than use some model from outside the area.

It appears that claims are made that animal agriculture is not healthy. I would challenge you to come up with the data that shows agriculture is not healthy. There is data that shows people on farms are more healthy than the national average.

Mayor Gawlick: Board members visited the LYV. Are aware that the dairy industry is using the AQMP for dairies. Board is hopeful that they will see positive results.

### June 12, 2014

No public comments. Discussion about additional monitor in Sunnyside and proposal for more monitoring.

## August 14, 2014

Study Session re Open Government Training. John Gawlick and Steve Jones present for the board.

General Session.

No public comments

Rand Elliott joins.

## **September 11, 2014**

No public comments

### October 8, 2013

Jim Dyjak (Citizen): Questions about Item 8, Item 9 on the agenda. Shares documents. Suggestions regarding posted data from the new monitor.

Jan Whitefoot (Citizen): Thanks YRCAA for setting up the new monitor. The CDC will do some ammonia and hydrogen sulfide monitoring in Harrah. Concerns because the SS monitor is not certified. A citizen called her and stated that the Steve Bangs Dairy is expanding. Does it need an air permit for expanding? Citizen called Yakima Planning and was told there was no need for action. 1. Does he have an air quality permit. 2. Does he need an updated permit.

Question: Do you have any dairies with air quality permits?

Director Pruitt: No.

Kathleen Rogers (Citizen): This year has been better than last year re neighboring dairies and air quality. Pleased about new monitor. Hoping for progress.

Director Pruitt: YRCAA asked for an FRM monitor. Were denied. Will continue to request an FRM. Looking forward to a large data set.

## **December 11, 2014**

No public comments

### **January 7, 2015**

Jim Dyjak (Citizen): If there is an item on the agenda, do I come up now or during the discussion.

Rand Elliott: Comments now. John Gawlick agrees.

Dyjak: Comments on Strategic Plan. Is this a requirement of some sort?

Elliott: Not that he is aware.

Director Pruitt: No

Dyjak: Input from key stakeholders. In the AQMP plan public was excluded. Will this happen again? Question re highly impacted communities. What is the definition of highly impacted communities?

Elliott: When the plan came up, I was going to ask to table it. I think it would be better for the board to prepare a presentation to the public, rather than a presentation from staff.

Dyjak agrees. Has lots of concerns.

Dyjak: Concerns about statement re declining cancer. Now we have an agency with no expertise that thinks they can do something by 2020. Goals have to be measurable.

Larry Matson (New Director for the Yakima Council of Governments): Introduces himself.

## February 12, 2015

No public comments

## March 12, 2015

Jim Dyjak (Citizen): Effectiveness evaluation of AQMP for Dairies assigned to Dairy WG. Will the victims be allowed to comment? Asked whether YRCAA contracted out Smoke School to a former employee?

Director Pruitt: Yes

Dyjak: I asked the board specifically to watch that. Caprile retired and he got the contract. Asks someone to look into it. Was the contract advertised, or was it set up?

Larry Fendell (Citizen): Did not attend Tuesday meeting of the Dairy WG. Heard that some of the information he passed on was inaccurate. Justifies his statements about increasing dairy herds. Cows from outside the area are coming through the Toppenish Auction. This is where the market is.

Jan Whitefoot (Citizen): Questions about solar energy. There are some really good programs for solar panels. Would be pleased to see YRCAA pursue solar in addition to wood stove change outs. On the east coast people can lease solar panels.

Talks about NPDES permits for CAFOs – under consideration by Ecology. There is a dire need. Curious why dairies are not permitted while others are.

Dairy Air Score Card. Has not seen a change in air quality. Hardly any burn bans called this year, because we can see hazardous air.

Monitor in Sunnyside is frequently down. How can you calculate impaired days when the monitor does not work during bad air events?

Where does the public get information on hazardous waste facilities? Is it ever put on the YRCAA website? Specifically, how to get information on Kronos in Moxee.

## **April 9, 2015**

Jon Devaney assumes the role of Board Chair.

Jim Dyjak (Citizen): Questions on Item 7. Does this policy cover contractors, or just employees?

Director Pruitt: Applies to contractors.

Dyjak: Is it customary to issue credit cards to contractors?

Pruitt: No. Only if the Director administers a credit card?

Dyjak: How does a contractor purchase gasoline?

Pruitt: They use a gas card that is assigned to a vehicle.

Further discussion. Discussion of Smoke School and former employees. Anything > \$25,000 must come to the board. So you divided Smoke School into two sections, each < \$25,000. This is a sweetheart deal that was set up before the employee retired. Also an employee was terminated for cause and then received a contract with YRCAA. YRCAA does not know if the contractor is bonded and insured or has a contractor's license.

Devaney: You have raised some good questions. The board needs to investigate.

Jan Whitefoot (Citizen): Was the contract put up for bids?

Pruitt: No. Does not reach \$25,000 bar.

Whitefoot: Comment on Dairy Air Score Card. Describes John Hopkins study, YAWNS. Concerned about using eyesight to measure air quality. How does YRCAA evaluate off gassing of hydrogen sulfide? No baseline. No scientific air monitoring equipment in AQMP for dairies. Dairies are supposed to use AKART and BACT. The CDC will do scientific studies in the valley using scientific equipment. SS monitor did not work for a month. Dairy Air Score Card does not address off gassing from lagoons, nor manure spreading.

Larry Fendell (Citizen): Number of cows has increased. Lots of studies since 2009. So much ammonia in the air according to YAWNS.

## May 14, 2015

Jan Whitefoot (Citizen): Article in YHR says Yakima is one of the most polluted cities in the nation, worse than Seattle. No stage 2 burn bans last year? The year before there were about 66 burn bans. Has anyone looked into the solar information? Did a PRR on Yakima Air monitors. Response says there are five monitors. Four are in Yakima, so they do not measure anything near the dairies. For Director Pruitt to imply that YRCAA is monitoring air on dairies is incorrect. The only relevant monitor is in Sunnyside and that is for PM 2.5. That monitor was down from January 9, 2015 to March 10, 2015. This is a period with the worst air quality. EPA said they would place the monitor for a year and see if there were problems. Having the monitor down skews the data. Please ask us questions.

## June 11, 2015

No public comments

### August 13, 2015

FOTC asked YRCAA to address global warming and climate change.

Larry Fendell (Citizen): Over the years we have had public comments during meetings. Sometimes we have question that arise during the meeting. Asks to have public comments moved to the end of the meeting.

Commissioner Elliott: Yakima County has comments at the beginning. Board meetings are business meetings. Should welcome questions ahead of time, take them under advisement and respond.

Dr. Jones: Could this take place in another setting?

Rainey Haws (Alternate for Jon Devaney) Agrees

Bill Lover: At City Council Meetings have sign in slips for agenda comments. Otherwise, there is a public comment period at the beginning.

Mayor Gawlick: Will continue as done in the past and address at next meeting.

Jim Dyjak (Citizen): At one time we could talk during study sessions. Now we cannot. All you get is what the agency wants you to hear. Item 8 – approval of SS air monitor – should be upgraded. Hopes you vote in favor. The public has fought hard for the monitor. Has worked with EPA.

Environmental Justice is big in the federal government. YRCAA should not be getting funds when the public is left out. I am pushing hard to stop federal funds until we get an EJ program.

The SS monitor was off for a week and no one noticed.

YRCAA needs the public and should realize it. Dyjak hand carried a grant request to EPA officials in Seattle. Work with the public.

Jan Whitefoot (Citizen): Hx of not working with the public. We had to go to the CDC to get air monitors that would tell us where the pollution is coming from. CDC sent a team, and they are in the second phase. The YRCAA Board has turned your backs on the public. YRCAA has refused to monitor for ammonia, hydrogen sulfide and VOCs. Many monitors are easy to program.

Dairy Air Score Cards – Lots of redactions on PRR information. They did not list the number of cows. No scientific measurement of the pollutants that the scoring says they measure. Why are the numbers of the cows not listed? If you don't know how many cows, how do you know how much ammonia or hydrogen sulfide? Does YRCAA measure the pH in manure piles and lagoons? She shows cards with major redactions.

Director Pruitt: If there is reaction RCW 70.94.205 provides for redaction. Dairies have to certify in writing that the information would adversely impact their business.

Mayor Gawlick: What about multiple facilities in one operation. Title V insists that the agency document all facilities under one operation as one operation. They are registered as one operation.

Director Pruitt: There is no reason to look at cow numbers.

Whitefoot disagrees. The pollutants are listed at the top.

Kathleen Rogers (Citizen): Shares an album of pictures and pictures from the previous night. There is no water applied to the dust from the pens. Drove around and took pictures of the neighborhood. There is no reason why people should have to breathe that air. Some dairies are improving. They have gone to expense and effort. Others have not. Instead, they buy more property and expand. Do not even take care of the facilities they have.

Mayor Gawlick re the photos: What part of the BMPs addresses dust control.

Director Pruitt: Most of the dust is PM or larger. You can water, cross fencing in which urine stops dust and compacts, additives. These practices are listed in the policy. I've never been a cow inspector, but I've been a building inspector. You have to manage dust.

Director Pruitt: Cites the law. Have to prove public health problems. The law really says that nuisance is OK. This is the major complaint we receive. We don't like the nuisance exemption. Obviously, the people that are being annoyed do not agree with what we are doing. I would not either. Describes limited resources.

Larry Fendell (Citizen): Dry year. Once a pollutant leaves your problem you are in violation of the law. There are laws that cover that also.

Genny DeRuyter (Dairywoman): Single family-owned farm. Clarifies how dairies operate. She has two milk barns classified by WSDA as two facilities. But they are contiguous. There are different methods of classification.

Jean Mendoza (Citizen): Who wants to do something about Global Warming?

No response.

Mendoza: That is sad. YRCAA is the most important agency re Global Warming. Presents a mini-lesson. In Europe, the amount of ammonia in the air has increased by 50% over 100 years. Here to ask YRCAA to get involved. Ask YRCAA to do this type of analysis. Here to volunteer to help.

### **September 10, 2015**

Study Session – Comments and Appearance before the Board: Request to move the comment period to the latter part of the meeting.

Commissioner Elliott prefers keeping comments at the beginning.

Director Pruitt: Administrative Code Part A says people could engage with the board during action items. Fill out a request prior to the meeting. Was never implemented because the board changed. It is your choice. There are no rules.

Mayor Gawlick: Concerned about prolonging the discussion. Can be a problem.

Commissioner Elliott: Needs to be ahead of time in writing. No back and forth.

Devaney agrees.

Jones agrees.

Make a change. Comments during the public comment period. Consider changing Code A.

Second Item – Proposal from Jean Mendoza. Commissioner has not heard from staff. Postpone to next meeting. Pruitt – needs to look at from an engineering viewpoint and also from an administrative viewpoint. They are dissimilar.

Director Pruitt comments on paper. Lots of works. Large body of information. Does not fit into any of their work programs. Are some disagreements. "Nitrogen is not an air pollutant. It is not even an air contaminant. It can become an air contaminant." "Our atmosphere is extremely durable, and resilient." "We need to deal with pollution one pollutant at a time." YRCAA can aske the DOH to discuss asthma and health problems. We are not health officials. We use advice from others. This is a request from FOTC asking YRCAA to:

- 1. Analyze impact of agriculture on air quality Ecology does that.
- 2. Analyze impact of wet and dry deposition of ammonia We are not going to do that.
- 3. Estimate costs and benefits from PM 2.5 and Ammonia with respect to public health We are not going to do that.
- 4. Seek funding for research and mitigation projects Yes, absolutely.
- 5. Inform outside researchers and agencies about the unique characteristics of the Yakima Valley If you want us to do that, we can.

- 6. Discuss the ways that pollution impacts life in the Yakima Valley Yes, absolutely
- 7. Read and consider the document "Hidden Costs of Agriculture" by Harvard scientists Paulot and Jacob Yes. We have read it and do not disagree. But we are not economists and do not pretend to be.
- 8. Inform decision makers that lung health is not addressed in the Yakima Valley in spite of the fact that we have the worst air in the state. That is an opinion.
- 9. Impose appropriate regulations to control Yakima Valley air pollution YRCAA disagrees with statements.

Will address at next meeting.

## Regular Meeting

Kathleen Rogers (Citizen): Wrote a letter to the editor regarding dust from dairies. "It seems to me there ought to be a conscience there of taking care of their pen dirt when there is already and air issue." They should have been out there with some water. Question about Mr. Pruitt's answer last month about how dairies chose how to deal with pen dirt. What does YRCAA do if they make poor choices.

Jean Mendoza (Citizen): Thank you for reading my request. There is a strong connection between air and water. Sometimes when you decrease water pollution there is increased air pollution. I am here to volunteer my skills and work. At the meeting for the Integrated Plan yesterday people acknowledged Global Warming. I want to help.

### **October 8, 2015**

No public comment

## November 11, 2015

Devaney & Jones present. No Quorum.

Kathleen Rogers (Citizen): Urgency of air pollution in her neighborhood.

Larry Fendell (Citizen): Can vouch for the bad air quality last night. Poop sprinklers are still going. Lots of manure that has not been incorporated into the ground. Air quality is worse.

### **December 10, 2015**

Larry Fendell (Citizen): Four months ago I asked for public comments to be moved from the beginning to the end of the meeting. Bringing up the request again.

Commissioner Elliott thought it was discussed and agreed to leave it as it was.

Dr. Jones agrees.

Fendell – cannot bring additional information that disagrees with the staff at the meeting.

Dr. Jones – Was discussed and agreed to leave it as it was.

Jon Devaney – Move it to a future agenda item when Director Pruitt returns.

Mayor Gawlick – Put it on a future agenda.

We've had burn bans for some time, but manure is still being spread. If you can't burn wood stoves people should not be spreading manure.

Mayor Gawlick – Put it on a future agenda?

Fendell – Future agenda.

Jim Dyjak (Citizen):

Example – Item 8 Budget Revision. Suppose I have a question after the report? In order to ask I have to come back next month. It is hard to ask an agenda question if you don't know what people are going to say.

Where does the citizen award program stand?

The citizen representative on the board is always from industry. This agency is corrupt. The agency is discriminating against the public.

Dr. Tahat: Not sure about the citizen award?

Mayor Gawlick: The accusation of corruption is offensive to me. I have taken my job very seriously and have worked with several of the staff members. The things that I have seen do not substantiate the allegations.

Dyjak: You have done an outstanding job. From Day One when the Dairy Program began, citizens could not participate. When is the Five Year Strategic Plan coming back?

Commissioner Elliott: It was tabled. Will not come back.

Dyjak: Where is the enforcement on business during burn bans. Why only private citizens? There is discrimination.

Kathleen Rogers (Citizen): Sent a letter. Received an answer from Nancy Helms. Dr. Catherine Karr is doing health studies. EPA is working on the problem. Hoping the CDC will provide useful information. Thanks Mayor Gawlick for his hard work.

Steve George (Yakima Dairy Federation): Clarification on the YHR article by Dr. Seeman. He supported some valid studies.

Jean Mendoza (Citizen): YRCAA is the only agency with the responsibility of protecting public health re air quality. One method is education re risk factors. Uses the media. Last week there was an article in the Toppenish Review Independent. Quotes the YRCAA. Says ammonia emissions are insignificant. This is inaccurate information. Review Independent said the article was approved by the YRCAA. Shared U of W research from November 2015 in the LYV re asthmatic children. Article talks about ammonia in the LYV. Found a relationship. When ammonia levels rise the children's respiratory function decreases. The closer to dairies, the more ammonia. People in the workplace are expected to tolerate higher levels of pollution than young children. Hopes the board will direct YRCAA staff to request a correction to the newspaper.

Kathleen Rogers (Citizens): Agrees with Mendoza. Received a report from Dr. Wasserman from DOH about asthma in Yakima County. Last year the air in my home was intolerable. Begs her neighbors to do something. Too many calls on such a small area. There is more than smoke in the air.

Jim Dyjak (Citizen); Item 9. The chart on PM 2.5. The monitor was down for a week. We had the same problem last year. Does it take a week to change a battery? Dec 27 to 30, the monitor was off again, during a peak of pollution. Dr. Seeman was talking about farms, not CAFOs. On page 13, tables 13 & 14. Who is the QA person? If no evaluation was performed, how do you get valid data?

### March 16, 2016

Kathleen Rogers (Citizen): Impact on her health last week. In spite of promises, her neighbor began stockpiling manure across the road from her. Nothing he could do because of the wet winter, he said. They have no other place to use. I begged him not to place manure there.

Dr. Tahat, you can come to my house any time and test the air. She has asked to join inspections. No one every invited her.

Jean Mendoza (Citizen): Talks about NAEM Study in the LYV by WSU. Studied Hydrogen Sulfide. Average level of hydrogen sulfide in the ambient air was high. Some states do regulate it. Levels in the study were above regulatory limits in California and Minnesota. In Minnesota the state sanctioned a dairy for hydrogen sulfide.

WA state has a law that regulates toxic air substances and the air in this study exceeded WA regulatory limits.

According to Regulation 1, if a business emits more than 40 tons per year of VOC, they must get a permit. According to the NAEM Study LYV dairies emit > 40 tons.

Jan Whitefoot (Citizen): Since yesterday people in Harrah are getting sick. Has been coming to meetings for ten years. Sees no attention to public health. Only cares about industry. Talks about

Ecology fines at the Wallula Feedlot. YRCAA is supposed to be doing this. If YRCAA cannot do this, you need to step down.

Larry Fendell (Citizen): Recalls smudging. Was involved in moving away from that practice. This problem went away. That problem lasted one month out of the year. The dairy problem lasts all year long. Talks about inability to respond to misstatements until the next month. Talks about spraying manure during inversions.

Jim Dyjak (Citizen): When you started the AQMP for dairies, Director insisted it could be enforced. A few meetings ago Director Pruitt said it could not be enforced. In this newspaper article Hasan says it can be enforced. Which is it? If they are only going to inspect dairies with a D or below, this is just a money-making project. No inspection but we will take your money. Where is the report and evaluation? Where is the baseline? Need to measure what is off the dairies. Come to my yard. I have told you that many times. YRCAA needs to make money so they can get their pay raises and guaranteed bonuses.

## **April 14, 2016**

Mayor Norm Childress from Grandview joins the board.

Kathleen Rogers (Citizen): Several years later expressing disappointment. This is her sixth year coming to YRCAA meetings and making comments. Had hoped that things would change. Maybe a little bit. Last year was one of the most horrific. Doesn't expect anything better this year. Her neighbor is turning a green field into a compost area. Doesn't know how some neighbors survive the stench. Disappointed that there are no handheld monitors. Director Pruitt asked her to organize neighbors to put together a grant application for handheld monitors and bring it to the board. Buying out your neighbors is not a solution. I am not going to sell. I've been in my home for 35 years. Asking for board's help.

Jean Mendoza (Citizen): Correction to last meeting. Dr. Tahat said that a study was a snapshot in time. Actually, it was a two-year study. There was an article in the Toppenish Review and the Yakima Times saying there is no danger to public health from ammonia emissions from Yakima dairies. Publisher said the article was endorsed by YRCAA. It is a bad policy for the agency to deny health hazards. The research shows that there is a health hazard. I presented this information to the board in January and Commissioner Elliott said he would look into it. I haven't heard a response since then.

Jan Whitefoot (Citizen): Clarification re what she said last month. Why doesn't YRCAA address fugitive dust the way that Ecology does in Wallula. YRCAA has refused to implement enforcement against dairies as the law says they should. A local agency cannot institute less restrictive rules than the state. Meeting after meeting we come here and you guys have turned your backs on us. Linda Dyjak has been reporting the DeVries dairy to YRCAA for 15 years. Air quality is not improving. It is YRCAA's legal responsibility to do something. Questions re which monitors are used for determining attainment/non-attainment. You have purposefully turned your

backs on the people of the Yakima Valley. People cannot sit in their own back yards, but YRCAA gives dairies high scores.

Larry Fendell (Citizen): I'm going to sound like a broken record. When the people ask about something it is discussed behind closed doors. This is not a public meeting. If you have three board members together that is a public meeting. Things are getting worse. Who gets marked down for all the manure on the roads in the LYV? Air quality is not getting better. Don't think that anyone who lives there believes the statements about improved air quality. Let's actually do something or save the \$1.2 million and let Ecology take over.

Steve George (Dairy Federation): We discuss with what has been said. We feel that the dairy industry has stepped up to the plate to work with the YRCAA. Guidelines were put together by professionals in the field. I looked into the DeVries Dairy. YRCAA said there were no violations. Tom DeVries does everything he can. His dairy is a showcase dairy. There were no obnoxious odors when I was out there last Friday. I know that YRCAA went out there last Friday and did not find the conditions that these people describe. They make these claims that are not substantiated. In regard to the claims that there are health issues, WSU and others have done studies on dairies. We have provided the information to staff. They have not found health issues directly associated with the dairies. I don't know where this is coming from. The dairies are willing to come to the table.

Sandy Braden (Citizen): Happy to take Mr. George to the LYV when odors are high. Why is Dr. Jones on the board, considering that he is a dairy nutrition consultant? He is here in a position of decision making while he has financial ties to dairies.

### August 11, 2016

Study Session – Process for Selecting Next Executive Director

Jean Mendoza (Citizen): Asks the board to add a member of the community to the search committee. Be aware of public health related to air quality. YHD is seriously underfunded. YHD cannot even send a representative to YRCAA work groups. Asks the board to find a director with knowledge about public health. Asks the board to add Jim Dyjak to the search committee.

Jim Dyjak (Citizen): Why is there no emergency back-up for the director? What if he is killed in an auto accident? Most clean air agencies in this state have a director who is an environmental attorney. Let's make sure you hire a director with the educational qualifications. Avoid the good old boy system. Do they have the background, the knowledge, the people skills?

Sandy Braden (Citizen): Do you have any information from the Attorney General's office based on complaint re Dr. Jones conflict of interest?

Chairman Jon Devaney: Still awaiting an AG opinion. Will be asking YRCAA attorney for an opinion.

Braden: Has called the AG office to learn whether they have received a complaint. They said they have received no complaint. In essence, the supposed complaint has not reached them. Braden submitted her own complaint. Received confirmation.

Chairman Devaney; YRCAA submitted it as a general request, not a complaint.

Braden: Asked if there was a record of anything coming from Rep. Johnson. She will share her data with the chair.

Steve George (Yakima Dairy Federation): In regard to the selection committee. If you are going to open it up to persons other than the board, then please include someone from the regulated community.

Kathleen Rogers (Citizen): Reiterates what she has said before. Need someone from the public on the search committee.

### **December 8, 2016**

Study Session for Proposed Ammonia Project

YRCAA presented a proposed ammonia study. Prepared by staff after conversations with Dyjak, Mendoza & Rogers. To assess the contribution of ammonia to aerosol emissions inventory. Suggested use of National Ammonia Program methods.

Proposed: Four sites, two in upper valley, two in LYV.

"will provide YRCAA with a better estimate of nitrogen inputs to the Yakima County airshed and a better understanding of the county's emission inventory."

Proposed Budget: \$14,400.44

## Questions:

Costs? Come from profits from NOC or penalties. Those are discretionary funds. Absorbable.

Will establish additional baseline data? Yes.

Will not tell us anything about sources? Yes.

What will the decision tree look like? What would the board's actions be after data is collected?

Answer: What we are trying to find out is how much ammonia is in the ambient air and how it contributes to the 25% of PM 2.5 in the UYV air and 33% of PM 2.5 in the LYV. Long term that might point to methods for reduction in the winter of PM 2.5. Might lead to changes in the YRCAA PM 2.5 Advance Program that we submit and change every year. There is no National Ambient Air Quality Standard for ammonia.

Dr. Jones: Disturbed by the phrase, "it is hoped". Did you have a thesis or hypothesis for this study?

It doesn't appear like there is randomization for sampling. This biases the study from the beginning.

Commissioner Elliott: How did you arrive at these four locations?

Dr. Tahat: About 3 years ago we submitted a grant for half a million dollars. There would have been 20 sites.

In this case, as far as I am concerned, ammonia is going to exist whether it is in an urban area or a rural area. No question. It is really a matter of time, temperature and humidity for contribution of PM 2.5. There are several ammonia sources in addition to dairies. Year long study will give you an idea of how much ammonia we have. It could come from fertilizer, or from other sources.

The objective, as far as I am concerned, is to say how much ammonia is in the lower and the upper valley. We can do some modeling eventually. Take those numbers and do some modeling county-wide.

Dr. Jones: Is there any agency policy about doing sampling on private property versus public property?

No.

Dr. Jones: So the YAWNS said that 97% of ammonia comes from agriculture and dairy was 94% of that. That's really, really high. I'm suspicious of that number. Hristov studies estimated that only 50% of ammonia comes from agricultural operations.

Dr. Tahat: I don't remember that number. If that number is true, I would also question that number.

Dr. Jones: If we know that ammonia is not the driver of PM 2.5, why do we need to measure it in the first place?

Dr. Tahat: We are talking about the primary source and the secondary source. Regarding secondary you are talking about the NOx, part of the combustion process.

Dr. Jones: But you are not going to get PM 2.5 unless you have the NOx. As long as you have the NOx available it is going to create aerosol nitrates.

Dr. Tahat: If you look at the ammonia by itself, then you can look at other reduction strategies. Going back to the National Academy of Science paper, either you are going to wait for the emission factors, or you measure. That is the dilemma, how much is there. We know it is there, but we don't know how much.

The question we are being asked is, you don't have the scientific data to show how much you reduce emissions with BMPs. With the data you can implement some modeling and develop control strategies.

In this agency we have never had the chance to say how much ammonia is in the air. Even though it is limited, I don't believe it is a bad idea.

Dr. Jones: To me it is like wetting your finger and sticking it in the air and saying, OK the wind is blowing. I don't see how you are going to come up with any definitive numbers.

Dr. Jones: Is there any approved method accepted across the United States for ammonia sampling?

Dr. Tahat: There are several. There is a lot. But you have got to look at the budget and how much you can do.

Keith Hurley: Initially we had two sites. I talked with Dr. Lehman at the national monitoring lab in Illinois and he said it would be better to have four sites. What you really need is a large array of sites.

Dr. Jones: What you are telling me is what you will get will be a number. It won't be worth a lot.

Mayor Childress: With the lack of a national standard, do you guys have an idea, what will you use as a baseline to tell us, this is a lot of ammonia, or this is not a lot of ammonia?

Dr. Tahat: What we have right now is the YAWNS and the subsequent study.

Jon Devaney: My understanding is that we will have the opportunity to question staff further as we need to.

### Regular Meeting

Jean Mendoza (Citizen): Comment on ammonia project. No NAAQs. The CDC does have standards for chronic exposure. The U of W has studied asthmatic children in the LYV. At least three board members are presumed to have the public interests at heart. Please put public health at the top of your agenda as you think about this study.

Jim Dyjak (Citizen): Now if you have some numbers to show ammonia is here, it may give us data to get more grants. If you have the numbers, it may make a lot of sense to the people holding the purse strings.

Sandy Braden (Citizen): Back again for the eighth month. Have you heard from the AG's office about my complaint that Dr. Jones has a conflict of interest?

Board Chair Jon Devaney: I have not.

Kathleen Rogers (Citizen): There is nothing like getting your hopes up about something being done and then see someone on the board squelch it. We want monitoring because our dedication to this program has gone on for a decade or more. We don't come up here for our jollies. We come here because of what is going on in our homes. It feels like Dr. Jones is putting the industry ahead of the citizens. We have been battling YRCAA to get attention for many, many

years. And it is here. We are finally going to get something that will tell us what we are seeing and smelling and feeling.

Steve George (Dairy Federation): Has written comments that he will provide to staff. Will give a summary. We contacted Dr. Pius Ndgwa earlier this year because this is the first time this has come up about how ammonia emissions affect the air. I'm going to read an excerpt. Dr. Ndgwa says, "Air quality in Yakima gets worse in winter months from December to February when too many residents keep warm with wood burning stoves that when blended with vehicle emissions bring significant air quality challenges to the valley. Regional Clean Air Authority continues to work on improving air quality with local residents and businesses including farms. Although the research reveals small amounts of ammonia emissions from farms, these emissions are insignificant and do not pose an overall risk to human health."

States that research shows low levels of ammonia at sites outside dairy parns. States levels are below levels set by OSHA and NAOSH

So. a lot of the stuff has already been addressed. For the record, the dairy industry does not support this project as proposed. It is too cursory without enough depth. It targets dairy producers when there are other sources of ammonia. These sites are not random. They are biased.

The government is providing services to two chronic dairy complainers who have demonstrated that their complaints are frivolous, being used as harassment, and, according to agency staff that I have had conversations with, wasting public resources.

The dairy industry has already stepped up. We are in our third year of a mandatory dairy air emission program.

Jim Dyjak: I'm going to rebut that. He just gave you a false statement, that all the complaints have never been verified at my house. Do you know why? Not one person from this agency in sixteen years has ever been to my house. Not one. When you report something on Monday and they might come out a week later, it ain't going to be there. The study he cites was done inside the barns. Dr. Pius is using an assumption that the drift is less. This study will show whether it is there or not. I resent being told my complaints are wrong when no (investigators) have ever been to my house.

Larry Fendell (Citizen): All the testing has been done on dairies. The neighbors really don't care what is on the dairy. We care about what comes across the fenceline. We care about all the fields where they apply manure, don't disc it in, make two or three applications. The neighbors get to smell it for a month. So, let's be fair about this. He (Steve George) is a paid person who gives you half-truths. Too many of us live with this. We want to know what is coming over the fence. We want it reported.

# January 12, 2017

Study Session to Interview Candidates for Executive Director

### Regular Meeting

Sandy Braden (Citizen): This is my ninth month asking this question. Have you heard form the AGs office yet about my complaint about Dr. Jones presence on your board. I feel there is a conflict of interest.

Chairman Devaney: We have not heard from the AGs office. In the interim it has been the board's determination that there is not a conflict. We are acting according to our own counsel's advice in the interim.

Jim Dyjak (Citizen): Discussion about the ammonia study. Dr. Pius supports what the agency is doing. He supports what you propose to do. He gives them a study by Dr. Ndgwa on measuring odors from dairies. He outlines low cost equipment for measurement because sense of smell is variable from person to person. He provides a form for doing the studies.

If you look at an odor complaint from this agency, none of this information is on there and it is very critical – the wind, the temperature. When you look at a form this agency fills out it just says, I was there, there was no smell. It tells you nothing about it.

I doubt if anyone at this agency has ever had certified training for using your nose.

Board discussion of proposed ammonia project.

Devaney: There were questions about cost and methodology. Do you have answers? No.

What data points would be actionable? It could lead to raised expectations and public disappointment.

Commissioner Elliott: I think that questions remain and I'm not comfortable approving it today.

Dave Edler will get a further report for next month.

Devaney: We'd like to table this till a future meeting where some of those methodological questions can be addressed.

Dr. Jones: Mark, will you accept some written questions from the board? Yes

Devaney: I know there is a lot of public interest. Why don't you communicate with the public and try to get their questions?

## **February 1, 2017**

Commissioner Ron Anderson replaces Commissioner Rand Elliott

Discussion of contract with Keith Hurley, the choice to head the YRCAA.

Regular meeting was cancelled.

### March 9, 2017

Study Session – Proposed ammonia project – Bill Lover, Rainey Haas & Steve Jones present Comments were solicited. Copies provided to the board.

Dr. Jones: With DOE inventory of ammonia why are we doing further study? > 8,000 tons for the county?

Dr. Tahat: Differentiates between ag and animal ag. Basically, ammonia comes from livestock. The purpose is to look at temporal and spatial distribution. We would like to know how much ammonia is available in the atmosphere by season. It is a stretch to say the ammonia by source is the same in the UYV and the LYV.

If we are out of attainment for PM 2.5, We have to look at every source. Without data we have to use the emission inventory.

Dr. Jones: Four sites will give enough information?

Dr. Tahat: Yes

Dr. Jones: I am still not sure the four measurements are sufficient.

Director Hurley: We are not doing this for the dairies. We are looking at ammonia. Don't have the resources to do more studies. We have had 9 exceedances in 2017 so far. In the past we had 2-3. This is due to more sampling. This is purely an exploratory study. We do see value.

Dr. Jones: Drs. Harrison and Leytem said more data is needed.

Director Hurley agrees.

Bill Lover: Hear from the audience. Haas & Jones say No.

Regular Meeting.

Jim Dyjak (Citizens): Request removal of ammonia project under the fairness doctrine. Two board members have not participated in the ammonia discussions.

Public comment

Sandy Braden (Citizen): Month 11 asking if they have heard about complaint that Dr. Jones clearly has financial ties to the dairy industry.

Bill Lover: Our chair has been following this. The agency has received no update.

Rainey Haas: No information.

Kathleen Rogers (Citizen): Thanks Dr. Tahat and Director Hurley for presentations about ammonia studies. Last meeting was so difficult because her complaints were classified as frivolous. Don't vote today. Brought parents because they are also impacted. Dr. Jones does not

know the impact. Problems only began when the CAFO across the road from her began to grow. If the CAFOs are growing then we need to let YRCAA measure the air quality.

Jim Dyjak (Citizen): Questions about the community forum, item 12. Dan DeGroot said that economic incentives reduce emissions. Where is the documentation. The summary says the odor intensity is decreased. Where is the documentation?

Director Hurley: There was no documentation. That was his opinion.

Dyjak: Why not use the EPCRA calculations for animal ag?

Does anyone know if they have even been required to provide this information?

Keith Sparrow (Citizen): Lives in Grandview Sunnyside. Goes for walks in the evening. Sees high clouds of dust from cows that spread for several miles. The smells are in my house. I think the air monitors would show the problem before it gets worse. If the money is there, why not?

Jean Mendoza (Citizen): Provides handouts. Letter to YRCAA re conflict of interest. Response to Chairman Devaney's interim opinion. Formal request for date, time and minutes for the meeting where that decision was made. Mr. Cullier's letter to the board cites a requirement for board members to recuse themselves from discussion and voting on projects in which they have a financial interest. Requests that Dr. Jones not vote on the ammonia project.

Dr. Jones: Took offense when Mr. Fendell referred to PhD as piled higher and deeper.

Larry Fendell (Citizen): Comments referred to submitted letters by PhDs. When people talk about dust, that is not dirt. Let's call it what it is.

Director's Report:

Proposal to eliminate division reports at board meetings.

Ammonia Project – Table till next meeting? Yes.

### **April 13, 2017**

Study Session for Budget

**Regular Meeting** 

Jim Dyjak (Citizen): Approve ammonia research. On AQMP there were lots of questions by the public and we were blown away. Now the public wants research and industry opposes. The public could not attend dairy meetings. Dr. Jones was not a board member at that time and he attended. We need to work together. There has never been an actual citizen on the board.

He applied to be on the YRCAA board and was refused because he stated he would not vote on dairy issues. Then they appointed someone from the industry.

Public comments at the community forums do not reach the board. Why should we go to a meeting if it makes no difference? We are busy just like you.

When the public brought information that disagrees with information presented it is cut out. Now we cannot comment in a timely manner. If I have been slandered at a meeting (by Steve George) I will defend myself. Start working with the public, not just industry.

Devaney: You have spoken for five minutes.

Dyjak wraps up.

Kathleen Rogers (Citizen): Asked classmates about their experiences when they come back home for a class reunion. Several submitted comments. She reads five. She has fifteen. Please vote for ammonia study.

Sandy Braden (Citizen): Month eleven or twelve. Have you heard from the AG's office re conflict of interest?

Devaney: Yes. Will discuss during the agenda. The short answer is an unequivocal No. There are details.

Braden: She received a letter and reads point by point. No. 2 & 3 are in fact maybe. If there is a conflict of interest the member may not participate or vote on related issues. Will the board allow Dr. Jones a vote on the ammonia project?

Larry Fendell (Citizen): In the past things, when he was young, were discussed openly. There were heated discussions among the board members. Have not seen that for a long time. Appears that some things have been discussed outside of public meetings. I think you need to watch what is going on. I'd like to see some dissent. Five people do not agree all the time.

We want to know what is happening on our property. This is the agency's job.

Director Hurley suggests a study session on conflict of interest.

Devaney asks attorney Gary Cuillier if he sees anything in the AG letter that impacts voting at this meeting.

Cuillier: If Dr. Jones earns more than 20% of his income from an industry, he probably should excuse himself from a quasi-judicial hearing. Getting to the legislative issues, it is difficult, because legislators have agendas & constituents. Cuillier goes by the 2016 MRSC book, Knowing the Territory. They look at financial interest. If someone were to be influenced because of their customers, then there is a conflict of interest. The other conflict is if the agency contracts with someone that the board members works with. The other conflict is if the board member feels obligated to disclose confidential information. Sharing confidential information poses a conflict of interest. Doesn't really say that every legislative matter involves a conflict of interest. The AG letter leaves that up in the air.

Does not know about a conflict with the AQMP.

Plan to ask MRSC to present a study session.

Devaney: Re annual adoption of a fee schedule. Has impacted clients.

Cuillier: Schedules are presented by staff. Does not originate with the board. Does not see a financial gain or loss from voting on this issue.

Director: Letter from Steve George re Public Comments at Board Meetings – will formulate guidelines for public comments.

### Ammonia Project

Dr. Jones believes he can be fair and impartial but asks for the board to consider.

Bill Lover – At City of Yakima they don't vote on anything without time to study the issue. The Las Vegas rule.

Devaney, the Las Vegas rule has been met.

Childress – I don't intend to make a motion. If Steve says he can be impartial I think he can be impartial.

Lover – To me there are citizens who do not want Jones to vote and they are using the conflict of interest issue to keep him from voting. Do we settle this before voting on ammonia.

Devaney further discussion on the Draft Ammonia Project.

Mayor Childress: Let's presuppose that we do this and get the results. What are the ramifications of the results? Does the agency have enforcement action as a result? Do you have sanctions?

Director Hurley: First of all, this is ammonia and there no NAAQ standards so there is no enforcement. The study will also educate us on the life cycle of ammonia in the valley. I don't see any enforcement.

Motion to take action. Anderson moves to adopt. Second – Childress. Discussion.

Commissioner Anderson: It is a study. I feel we need to have a study so we have a basis for any future actions and determinations.

Lover asks for staff input on the need.

Hurley: relates to non-attainment. May help reduce precursors.

Childress: No standards. I've been in the valley for close to 60 years. I lived across the road from the Monson feedlot. I understand. I smell it in Grandview. I don't know what we are going to do with the information. So, what do we do? Now we know the air stinks and there is dust. There has to be an end result.

Childress: Is ammonia a public health risk? Is there a danger to the public?

Hurley: What if we go through this and we see medium levels and we see something that says we need more monitors?

Dr. Jones: In March, the highest PM 2.5 was around 8. Can you directly relate any reading for ammonia to PM 2.5?

No.

Childress: If we do this it will just get our foot in the door. We'll have people coming to us saying there is ammonia in the air, what are you going to do?

Devaney: If we are solely looking at ambient and monitoring of regulated pollutants, why do we need four sites.

Hurley: I increased the sites at the suggestions of the AMON people.

Devaney: What is the cost difference between two and four sites?

Hurley: Roughly half.

Anderson votes in favor. Others, including Jones, vote no.

## May 11, 2017

Jean Mendoza (Citizen): Tried to attend the public forum in April. Jumped through all the hoops she knew about. Was told to go home and come back in August.

Since the YRCAA is not doing an ammonia studies, hopes YRCAA will use the ammonia studies already performed. U of W found levels up to 200 times the state average. Some samples above the minimum risk level for ammonia. Shared MRLs fir ammonia from the CDC. If YRCAA cannot do your own studies, need to use the best available information.

Re Ag advisory committee. Last month's report sounded like everything was going well. Disagrees. YRCAA shared no data at the meeting. No data from the AQMP. The only evidence at the meeting was testimony from two people who live close to dairies. In one home a woman's son came to her and said he could not breathe.

April 2016 board meeting. Last report in 2014. Beginning in 2015 dairies with grade D would be visited every 6 months, grade C dairies would be visited every year. This has not happened.

## August 10, 2017

Study Session on Ethics and Conflict of Interest

**General Session** 

Jean Mendoza (Citizen): March of this year AG task force met. Later Director presented a review of the AQMP for dairies. I sent you a disagreement with Director Hurley. Will send the disagreement again and requests a response.

Kathleen Rogers (Citizen): In July she took videos of air in her area. She will send a copy. The air in Grandview/Sunnyside is horrid and she will persist until they do something.

Board made changes to the code regarding public comments.

### **September 14, 2017**

Sandy Braden (Citizen): A year and a half ago she asked about conflict of interest re Dr. Steven Jones. Listened to Jim Daugherty from MRCS. No definitive answer whether there was a problem here, whether Dr. Jones is allowed to vote on issues related to dairies.

Dr. Jones is also supposed to address the general public interests

Dr. Jones Mr. Chairman, I have a point of order – Public comments are supposed to address an agenda matter.

Braden: The fact that we were supposed to, according to Mr. Cuillier he brought this gentleman in to address . . . cut off

Childress – that item is not on today's agenda.

Hurley – You are absolutely correct. that item is not on the agenda. Her characterization is incorrect. It is wrong. It's off. There were three opinions.

Braden: Which were two maybes and a no

Hurley – No, it is pretty clear. Much more . . .

Braden: OK, may I finish. Is this something new, that I'm not aware of. People have brought up things before . .

Lover: The first three lines state. . .

Hurley: The admin code is quite clear and was discussed at the last meeting. There is a process now for people to submit comments to me ahead of time.

Braden disagrees.

Lover: He has not ruled on a point of order.

Childress: This board has put things to rest. If you want to bring it to us . . . I don't think this board has any problem with Dr. Jones serving on the board. I think we put this issue to rest.

Braden: You see no problem with Dr. Jones voting on air quality issues related to dairies?

Childress: I personally don't. You would have to go to the board members individually. Case by case. If a conflict arises we will address it.

Lover: Point of order. We have not discussed the point of order.

Childress: You are correct. Her comments addressed something not on the agenda. If you want to continue this submit comments ahead of time.

Braden: Is this something new.

Hurley: The admin code was discussed last month.

Braden: At an open public meeting why is the door locked?

Don Lyon (Citizen): I don't know whether what I want to talk about is on the agenda. I was invited to this meeting by Commissioner Ron Anderson. . . I'm here and I would like to speak.

Childress: What item are you speaking about.

Lyon: I am speaking on clean air . . begins

Jones: Point of Order is it on the agenda

Childress: I don't know

Lover: We have public comments on the agenda. Should we suspend the rules.

Childress: I would entertain a motion to suspend the rules until we get this sorted out.

Jones moves, Second.

Discussion follows. Passes. Will allow Ms. Braden to restate her comments.

Braden cites definition of open public meeting.

Lyon: I'm just trying to get some information out here. Up until 1994 summers were always clean and pristine. We have choices but I think we can make better ones.

The clean air authority does some good things. But . . two weeks ago I called the YRCAA when it was so smoky I could not see Ahtanum Ridge from my home north of Selah. There was no burn ban n effect.

Burn permits in this county are just a source of revenue. Many are not following permits. Some homeowners burn large piles on the weekend when the YRCAA is closed. Some burn large amounts of unpermitted materials.

When are we supposed to get a breath of fresh air around here?

Except for agriculture, outdoor burning should be outlawed countywide – my opinion.

Easter Sunday, I came out of the house. It was so smoky I thought I was in the forest fires of '94. Two houses north of me was a pile burning. Neighbor was burning. He said, "I've got a burn permit". He didn't follow it.

I've had heart palpitations due to bad air. How many people are dying because of the air.

Jean Mendoza (Citizen): "I did attempt to get something on the agenda." Her request is not on the agenda. I want to submit a petition. Can you tell me your preferred method?

Childress, Hurley – don't know

Mendoza: I'm just asking.

Hurley: I would have to research.

Childress: Do you have copies. Go ahead. I don't have a problem.

Mendoza: How soon will you get back to me?

Childress: I don't know.

Hurley: I will have to take a look at the Clean Air Act.

Mendoza: Will you give me time to talk at the October meeting?

Childress: Yes

Mendoza: Will you give me more than three minutes?

More

Can present at a study session.

Mendoza: It is a legal petition from the citizens so I hope you will take it seriously.

Francisco Maltos (Citizen): I want you to think about something. Global warming is for real. Suggest that the YRCAA discuss the benefits of inviting more people to participate, specifically the young people. They are the future and, unfortunately, they have to deal with global warming and climate change. If you set an example by being proactive by trying to engage and think about this issue.

## October 12, 2017

Study Petition to Ban Spraying of Manure during Burn Bans

CARE and FOTC asked for the ban.

Director Hurley presents. April 20, 2013 the same petition was presented. This is the second submission. Process ceased after public meetings.

Hurley recommends rejection of petition. No evidence of change. Conflicts with RCW 90.64 and RCW 90.48. Laurie Crowe from SYCD says permit processes have emergency application

provisions. Cites the agricultural exemption. There is no evidence that spraying of manure during burn bans endangers public health. Such a rule would impact many farmers.

Adds a letter from Gary Cuillier. Finds no impediments to deny or initiate rule making. A discretionary legislative policy decision.

Jean Mendoza (Petitioner): Mr. Hurley spent a great deal of time investigating from the perspective of the dairy industry and no time on public health.

No one should be adding pollutants to the ambient air when it is unhealthy. Intentionally adding pollutants to the air when it is unhealthy is unwise.

Rebuttal of five recommendations.

- RCW 90.64 does not address air issues. DNMA is for water.
- Most dairies are not covered by NPDES permits and these only address water.
- Overtopping should only be an emergency situation. Don't see why this is a valid reason for not protecting public health.
- Local regulations cannot be less stringent than state. Reads ag exemption for YRCAA. Reads state exemption more information "unless the practice has a substantial adverse effect on public health and safety."
- It is incorrect to say that spraying does not impact public health.
- Section 2.03 A of the SIP no false statements
- Research shows increased morbidity and mortality with increased pollution.
- There is no proof that farmers would substitute synthetic fertilizers for manures.
- Compares inconvenience to dairies to inconvenience when orchardist cannot burn trees at will.
- Director did not tell us how many lbs. of ammonia in fertilizers are applied and how many lbs. of manure are applied.
- Manures are aerosolized and this increases air pollution.

People of the LYV are more likely to be poor and people of color.

Most manure is spread in a 271 square mile area.

Know the impact of disease related to PM 2.5. Know the percentage of PM 2.5 in the LYV from ammonium nitrate.

Talks about reduced life expectancy and spread of infectious organisms when the air is stagnant.

No questions.

Devaney: This issue is appropriate for the public comment period.

**Regular Meeting** 

Review of Administrative Code Part A, Public Comments

Director Hurley: Letter from Yakima Valley Dairy Federation – concerns with conduct of board meetings. Resolution 22.11.

During the May board meeting the board requested procedures for conduct of public comment period.

Page 5-10. Agenda posted on YRCAA . . . Requires the public to submit comments ahead of time for approval.

Public comment period on page 9-10. Must identify agenda item to be addressed. < three minutes per person.

Will introduce a change to the format for agendas.

Mayor Childress: I voted for it, but I don't like it. There needs to be a way for people from the street to address us. There needs to be civility and decorum. We need a way for people to come to the podium and say their piece.

Chairman Devaney: When there is back and forth, we are getting into an un-advertised discussion of policy.

Mr. Lover: I have always been in favor of public comment. Never too much, maybe too loud.

Devaney: You don't have to come to these meetings to interact with staff or board members.

#### **Public Comments:**

Jim Dyjak (Citizen): Comment section needs to be moved to the end of the meeting. It is hard to address items on the agenda until we have the opportunity to hear the presentations.

On the petition, if you go to the state website. There is a form that says, when you say no, you have to reply, say why and provide an alternate method.

None of the material Jean turns in to the agency is sent to the board. The dairy information is shared with the public and the board, but the board does not hear public health. Let's take a look at the documentation.

Devaney: We had issues with emails from the agency not being auto forwarded to our personal emails. At some point my workplace decided this was spam. Forwarded mails are flagged as spam by many systems. It was not intentionally not forwarded by staff.

Lover: There should have been a point of order called as soon as he started talking about the ED. Get in the habit of not allowing negative comments.

Childress: Also had trouble with emails. Has been rectified. You are correct. A lot of information did not reach us.

Larry Fendell (Citizen): Comment period should be moved to the end of the meeting. RE the petition, a burn ban is called because the air is unhealthy. If you ever drive by one of these fields at this time you know. This is in the dead of winter when artificial fertilizer is not spread. They spread manure because they need to get rid of the manure. There is a huge difference when they turn on the big guns in the evenings. There are 84,000 people in the LYV. People can't heat their homes during a burn ban. It seems idiotic that they can spray raw sewage during a burn ban.

Steve George (Dairy Federation); Re the petition:

- Discussion made it sound like the dairies are not regulated. Are the most regulated segment of ag in the state.
- We have the AQMP in place. All dairies are inspected by this agency.
- Nobody talks about the increase in population and the increase in vehicle traffic, the main contributor to pollution.
- There was a burn ban for 60 days last summer and that is during the growing season.
- Best practices are to spoon feed fertilizer to the plants a little at a time.
- "Dairy is second only to apple in Yakima County. Employee nearly 5,000 people. Over 90%, probably closer to 99% is of Hispanic origin. So, those people, I feel I represent, along with the 60 -70 farm owner families. Those people like their full time jobs, They like to buy their houses and their cars. The dairies are a huge employer of minorities and those guys like their jobs. We don't seem to see those health effects with the workers and their families that live on those farms."

I'd like to add to the public comment issue. Keith mentioned that the letter I wrote to the agency is in your file. I wrote that letter because I was tired of the type of conduct I was getting from other people who were making public comments.

I don't know where the comment came from that the dairy industry is running things, because I'm from the industry and I haven't talked to anyone.

Sandy Braden (Citizen): Doesn't claim to be a scientist. If your purpose as an agency is to guard the public health of this valley. When dairymen chose to spray manure into the air during a bad event, common sense says you are adding to the pollution.

### **November 9, 2017**

Study Session re YRCAA Permit Program Revenue Analysis

No comments

## **December 14, 2017**

No public comments

## **January 11, 2018**

No video

## **February 8, 2018**

No video

## March 8, 2018

No public comments

## **April 12, 2018**

Study Session re Legal Costs of Exposure for the AQMP for dairies

Director Hurley: December 9, 2011 the agency was sued by Citizens for Sustainable Development. Followed by \$120,000 settlement. Legal fees = \$60,000. Consequently developed Admin Code Part C.

Jan Whitefoot has sued the agency over public records access.

Started tracking PRR.

Annually 425 work hours fulfilling PRR. Dairy issues require more staff time and are more complex. Dairy centered PRRs are about 19%.

Two suits directly related to dairy PRRs. No estimate of future costs re PRR and lawsuits.

Legal costs are allocated under base operations, professional services.

PRR is spread over entire spectrum of YRCAA work.

Childress: What happened in 2011?

Violations of the Public Records act.

Could be a plethora of issues with the PRR. With the new law suit we are concerned with redactions.

Devaney: Understands that by collecting information YRCAA is a target for lawsuits against dairies.

Hurley: Some of the data in AQMP forms there is protected information. Have a duty to protect. On the flip side, there may have been a misunderstanding that anything they turn in was protected. The records open us up to legal liabilities.

Devaney recommends continuing the discussion at a later time. Provide guidelines that reduce emissions without collecting information that may contribute to litigation. Need to more fully explore their options.

Kay Funk: Are your records electronic.

Hurley: They are electronic. There are problems doing redactions electronically. There is some paper. Try to digitize where they can. YRCAA is a lean agency.

Devaney recommends that Hurley brings back more information.

General Meeting

No public comments

## May 10, 2018

Study Session for Review of the 2018 Budget Summary and Proposed 2019 Budget

General Meeting

No public comments

## June 14, 2018

Study Session to Review the 2019 Budget

General Meeting

Jean Mendoza (Citizen): YRCAA is responsible for implementing the federal CAA. Sent research regarding "manure irrigation". A permit is required in Wisconsin. Sent the board related research. Looked only at bacterial infections. Three different bacteria – Salmonella, Campylobacteria and E-coli 0.157. Did find an increase in infections when manure is sprayed and spread.

How many people are allowed to get sick before we impose regulations on animal agriculture.

Summarized the research – zoonotic GI infections.

In Wisconsin manure spraying is prohibited within 500 feet of a home. Recommended that manure irrigation should not take place during inversions. Cites pages.

Devaney: Are the documents included in the Monthly Packet? Yes.

## August 9, 2018

Study Session to Review the AQMP

Director Hurley: Presents an executive Memorandum. Vast majority of litigation risk relates to the documents collected. Impressive requirement to examine documents for PRRs. If they reduce the data in the collected documents reduces litigation risk.

Maintain the policy in current form.

Terminate in entirety.

Modify by reducing the

Terminate and publish as a resource guide.

Blend of strategies 3 & 4.

Anticipate a federal plan to estimate air emissions from animal ag that will require data collection, if animal emission factors are promulgated.

Devaney asks about conflict of interest.

Dr. Jones does not believe he has a conflict but steps out to avoid problems.

Hurley recommends rescinding the policy and making it a resource guide.

Calls Laurie Crowe from SYCD to add information.

Hurley: I don't know if she is a doctor or not. (In fact, Ms. Crowe does not even have a bachelor's degree).

Devaney: How would you use this document in the future?

Hurley: We would make it available on the website and to anyone who asks. We would continue to provide free consultation. A bookshelf reference.

Laurie Crowe: We (SYCD) gathers our own information gathered from other agencies. Each dairy has a nutrient management plan. Dairies are inspected by WSDA. There is a tool for

producers to evaluate their own properties. She is in the process of adding a web page on dairies. Partnering with YRCAA they could do a fantastic job.

Crowe: Dairy odor and dust has always been part of the nutrient management plans.

Anderson: Would you send out letters that say your web sites are linked. Could send letters to dairies.

Childress: Concerned about changing from a policy to guidelines. Takes the teeth out.

Hurley: Cannot enforce anyway.

Crowe: Most eastside producers are doing a really good job.

Childress: I've found that with any group you have bad apples.

Hurley: If we felt the need, we could always bring in WSDA.

Crowe: A lot of people do call them.

Devaney: How do we require other industries to pay a fee in anticipation of modeling?

Hurley: We don't require people to register for modeling. For ag do not have approved estimated emission factors. Nationwide do not. His opinion that the state will do this first.

Devaney suggests coming back during the regular board meeting.

## Regular Meeting

Jean Mendoza (Citizen): More information regarding the dairy policy. Is part of a group looking at atmospheric deposition – wet and dry. The EPA does study atmospheric deposition of ammonia across the nation. There is a monitor in Twin Falls, Idaho. Similar to Yakima County. CDC says that anything > 25 ppm for eight hours is hazardous to human health. Left copies.

## **September 13, 2018**

Study Session re Reducing Litigation Risks

Two proposed resolutions:

- 1. Simple Rescinding.
- 2. Maintain registration and publish AQMP as a resource guide.

For purposes of discussion. No action. Action in October.

Dr. Jones: Questions about distribution of BMPs. (Dr. Jones stepped out of this AQMP discussion in August)

Chair Devaney: Do we currently maintain lists of other sources?

Yes. What is different in this is when they pay a registration fee, they go through New Source Review.

Dr. Jones: If other clean air agencies wanted a dairy policy, they would have to get information from other agencies. Or gather the information themselves.

Childress: I assume the fee covers administration costs.

Hurley: \$124 per registration for a scaled down program – for two hours of work. For all sources it is \$423 normally.

Childress: Is there a problem with sharing information? Do you have interlocal agreements? Why do you need a PRR?

Hurley: No intergovernmental agreement with WSDA.

Dr. Jones: The registry would potentially be an inventory?

Hurley: Yes. It would be part of being a good air agency. Would provide a clearer description of the airshed.

Jones: How do CERCLA and EPCRA fit in?

Hurley: We want to be the best agency we can be. There is a recent court decision. CERCLA and EPCRA no longer required. But we owe it to the public to know what is happening in the airshed.

Decision in October.

## General Meeting

Jean Mendoza (Citizen): Apology because she brough inaccurate information re Twin Falls. Math error.

Dept. of Ecology is readdressing standards for toxic air pollutants. Will attend meetings.

During unhealthy air days last month, dairies continued to spray manure into the air.

Devaney: Do we post the revision study to our website?

Hurley: Gives an overview. Will not be a complete rewrite. Dr. Tahat sits in on the meetings.

## October 11, 2018

No public comments

Board votes to rescind the AQMP for dairies.

## **November 8, 2018**

Study Session Review of Calendar 19 Fee Schedule

Regular Meeting

No public comments

## **January 10, 2019**

No public comments

## February 14, 2019

No public comments

## March 14, 2019

Study Session to discuss public comments.

Director Hurley: Hx refresher. Took over as Director on February 17, 2017. Soon after the board approved changes to public comments.

Reviewed the community forum so items could be addressed that are not appropriate for the board.

Will make an addition to the policy today. Suggested addition. "The agenda is the business at hand." Comments by public commenters are to be directed to the board chair. Have heard from MRCS, Jim Dougherty - Recommend putting restriction on when public comments are allowed. Limit to matters on the agenda. Time limits are good.

Mayor Childress: I don't know that we should put on restrictions. If people read that we are having a meeting, come down and have an issue that they want to talk about, I don't think we should restrict it to agenda items only.

Dr. Jones: Items were being brought up that the agency had no control over. It got to be pretty frustrating for me personally listening to things we could not address.

Chair Devaney: We had issues brought up that tended to engage the board. We had un notice debates.

Commissioner Childress: I've presided over hundreds of meetings. These are lay people. I know you can get off topic, but people really don't understand. I can go both ways. I think people have a right to express their concerns. Maybe they will say something, and we can give them help.

Chair Devaney: I have not refused to hear a public comment. I don't think anyone else has done so.

Director Hurley: Parliamentary Rules govern. If we are going to suspend rules it takes 2/3 to do that by a motion and vote. Options:

- Suspend the rule for a certain meeting.
- Rewrite the rule, doesn't have to be an agenda item.

Childress: The rule says any item relevant to the business of the board, not an item on the agenda.

Devaney: My view is that when people have detailed information on a specific issue the board may not be prepared.

Childress: We could give people more than three minutes if they ask to be put on the agenda. Items should be for discussion with not action – avoids need to notify the public.

Dr. Jones: I think you will put a lot of pressure on the chair. There were some aggressive comments. Pressure on the chair to calm the public. The chair has to be able to cut off comments if they get out of bounds and that will be difficult. Needs to be something the agency can actually do something about.

Childress: I don't know that we can decide this until we give people the chance to speak.

Dr. Jones: I want people to address something that the board or the agency can actually work on and that is not what we had in the past.

Devaney: They could relate to the Director's report and agency operations. As chair I would interpret it broadly. I would relate it to the agenda and board activities.

Agree on no change and discretion of the chair.

## Regular Meeting

Last Monday was a deadline for selection of a representative from the Small Cities. No nominations. Will have to start the process all over again. Not sure if he has the authority to call a meeting of the City Selections meeting. (Norm Childress, former Mayor of Grandview and rep to the YRCAA board, was elected to the Yakima County Comm

Commissioner Childress: I have had two people from the small cities ask and it appeared that the message is not being passed along.

Hurley: Don't know if the process is convening the City Selection Committee or starting communication for the third time. Will target June. We have met our obligations as far as the CAA goes by starting the process.

Sandy Braden (Citizen): Placed on the agenda for "Other Business"

Jean Mendoza (Citizen): Am I allowed to talk about the study session? Knows that people have asked to have public comments at the end of the meeting. Previously was a member of the AG task force and disagreed with Director Hurley's summary of the meeting. Asked to be put on the next agenda to make corrections at the nest meeting. Was not placed on the agenda. Emailed each of the board members. Asked them to let her know if they received the emails and there were no replies.

At a previous board member Board Member asked if private citizens could represent small cities. That is encoded in code A. That is an option. Please let the public know.

It is frustrating when private citizens come here month after month and feel that they are being stonewalled. This is a reason for anger.

Received a letter from Kirk Ellis. Hurley is in communications with the EPA Office of External Civil Rights.

Usually get 2-3 exceedances per year. May be more this year. One in 20 year event.

Sandy Braden: Clarification of the type of burn permits and enforcement methods if an inspection officer determines that the permit is not the correct one. Initially talked to Director Hurley at a community forum. Relates a case. Appears that someone used an incorrect permit for land clearing and there were no consequences.

## **April 11, 2019**

Sandy Braden (Citizen): Addressed the board last month re enforcement of burn permits. Discussed at last month's community forum which she missed. Asks what happened.

Chairman Devaney: Contents of meeting will be available on the YRCAA website.

## May 9, 2019

Study Session to Address on Proposed FY 2020 YRCAA Budget.

Regular Meeting

No quorum

Jean Mendoza (Citizen): Study Session, Composition of the Board, and Inform about an Ammonia Study. Is that alright?

Yes

There is a law that the majority of the board members need to represent the public. Since January there has been a 50/50 split. Two are elected officials. Two are from the regulated community.

Re SIP policy. Asks the agency to follow its own guidelines when reviewing regulations. Shares problems with YRCAA Regulation 1, in place since 2003.

FOTC completed an ammonia study between Sunnyside and Grandview. Results show that on average the samples were above the Minimum Risk Level (MRL) for chronic exposure.

Why has the YRCAA gone from 11 FTEs to 10 FTEs? Gone from 3 inspectors to 2 inspectors. If either of the inspectors takes vacation, that leaves only one inspector to do the work. The cost for salaries and benefits has gone down but the cost per FTE has gone up.

Would like to hear what the YRCAA is doing about SIP.

How are raises determined? Who evaluates whether people reach their job goals?

Director Hurley: State of the Air 2019. Yakima is the sixth most polluted city in the nation for fine particulate matter. Previously was sixteenth. YRCAA attributes this to wildfires.

WA Dept response to FOTC for requested review of YRCAA.

Small City rep. Receiving nominations and will move to balloting portion.

## June 13, 2019

Mayor Jose Trevino form Granger joins the board.

Jean Mendoza (Citizen): Questions about pages 11 & 12. Numbers don't agree.

Director Hurley: Probably a data entry error.

Testimony on Budget.

Jean Mendoza (Citizen): Sent an email re the budget to the agency and board members with questions. Received no answers. It is difficult to comment on a budget with so many unanswered questions.

Director Hurley: We are not required by law to respond. I looked at the comments and considered them. There is no requirement to respond. I believe she addressed them to board members. We can respond if you direct me to.

## August 8, 2019

Jay Hester (Sunnyside Port District) Speaks about relocation of Ostrom's Mushrooms to Sunnyside. Experience with permitting has been exceptional.

**Executive Session re Potential Litigation** 

## **September 12, 2019**

No public comments

## October 10, 2019

No public comments

## November 14, 2019

No public comments

## January 9, 2020

Vicki Baker replaces Norm Childress as County Commissioner

Jean Mendoza (Citizen): Ask for report on update to SIP revisions. Also, requests a report on how the agency is addressing risks form the composting of dead animals in Yakima County.

SIP will be addressed in March.

Composting of animal carcasses? Article in the YHR. More the purview of the YHD and WSDA. YRCAA visited sites, identified no adverse impacts. Have not identified any odor complaints specifically related to the compost. No air testing.

## February 13, 2020

Sandy Braden (Citizen): Question for Director Hurley. 20 - 25 acres off of Washington and  $64^{th}$  due north of Ahtanum View Correction area. It appears they have taken out the orchard and there are house size piles of removed trees ready for burning. Appears to require a land clearing permit. There are restrictions, including population limitations.

Director Hurley: It is not land clearing so the restrictions for land clearing do not apply. Has visited and there have been approved burns because it is not land clearing. It is inside the UGA. Land clearing and residential are prohibited within the UGA. Ag burning within a UGA is permissible and permits have been permitted previously. Aware of citizen concerns on the internet. Will have a meeting with the orchardists to resolve issues. Must let stuff dry for at least 30 days before burning.

What type of permit?

Agriculture.

So you are saying that land will be re-planted with something?

Yes

## March 12, 2020

Study Session re SIP Need to update Regulation 1

Sandy Braden (Citizen): Watched a news report on KIMA news re Tree Tops Waste Water Pollution. Director Hurley stated the odor was a solid 2, but not enough to warrant any further investigation. What scientific method was used to establish this conclusion?

Mayor Trevino: Is there a process or method where a concerned citizen can ask the agency that question?

Director Hurley: There is no scientific method for determining odor. This state classifies this as a pollutant. Our field agents used a scale with a four point odor evaluation. Its not as simple as Ms. Braden led you to believe. We get this question all the time. It is not a scientific method, but it has been approved. We draw the line at 3, typically causes people to wretch. Tree Top is well aware. We are working with Tree Top. No action. As APOC I get to decide when to take action. Will take a significant financial investment to fix the problem and they know that. There is no certification for the odor evaluation. We do test inspectors sensitivity. Talks about coffee roasters in the Puget Sound Area.

# Descriptive Analysis of YRCAA Complaint Reports for Odor and Dust

January 2017 to August 2019

#### **Introduction:**

YRCAA states: Our mission is to protect the people and the environment of Yakima County from the effects of air pollution. The Yakima Regional Clean Air Agency is committed to achieving and maintaining healthful air quality throughout our jurisdiction. This is accomplished through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. See <a href="https://www.yakimacleanair.org/about/">https://www.yakimacleanair.org/about/</a>

YRCAA fails to do this for the people of the Lower Yakima Valley when it fails to enforce air quality standards for dairy operations. There are no dust control policies for dairies in Yakima County. YRCAA claims a blanket exemption for dairies regarding dust and odor, even when there is clear evidence that dairy emissions impact the health and well-being of neighbors.

#### WAC 70.94.640 states:

(1) Odors or fugitive dust caused by agricultural activity consistent with good agricultural practices on agricultural land are exempt from the requirements of this chapter <u>unless they have a substantial adverse effect on public health</u>. In determining whether agricultural activity is consistent with good agricultural practices, the department of ecology or board of any authority shall consult with a recognized third-party expert in the activity prior to issuing any notice of violation.

YRCAA never evaluates health impacts, but simply cites the agricultural exemption and ignores health complaints regarding dairy operations. YRCAA incorrectly denies a link between odor, presence of hazardous pollutants and human health.

When people in the Upper Valley complain about dust obscuring the roads the YRCAA acts. When people in the Lower Valley complain about dust from dairies obscuring the roads the YRCAA tells them to call the police department. See Complaint #3842

## **Characterization of Data from YRCAA Complaint Reports re Dust and Odor:**

FOTC received 138 Complaint Reports from YRCAA in response to a 2019 Public Records Request. That data is included here in Attachments 4, 5 & 6. Two of the reports had incomplete data. Consequently, FOTC has analyzed 136 reports. Our Excel spreadsheet is Attachment 7.

Thirteen (13) or 9% of the reports had questionable dates and times. The times of incidence occurrence supposedly happened after reports were made, or investigations supposedly took place before the incidents were reported. These are clerical errors, but they confound the data analysis.

The YRCAA Administrative Code Part B provides a flowsheet to guide agency response to complaints on page 5-7. It is copied here:

## COMPLAINT RECEIVED YES HEALTH RELATED? NO PREVIOUS COMPLAINT? NO YES RESPONSE LEVEL 4 RESPONSE LEVEL 3 NO IMPACTING COMPLAINANT? YES RESPONSE LEVEL 2 IN PROGRESS? NO RESPONSE LEVEL 1 YES -

#### GENERAL COMPLAINT RESPONSE FLOW CHART

The following response levels will be used in conjunction with the complaint response flow chart.

a. Level 1

Attempt same day site inspection. Request backup if not available for same day response. b. Level 2

Attempt inspection within 48 hours. Request backup if not available for 48 hour response. c. Level 3

Attempt site inspection within 7 days. Request backup if not available for 7 day response. d. Level 4

Site inspection not required. Correspond with the source to advise of the complaint, to inform of the applicable rules and to discuss the potential for enforcement action. A phone call or a fax may be helpful but, it should be followed up in writing.

To be very clear, the only path to a Level 4 Response happens when the complaint is not health related and there has been no previous complaint. According to FOTC analysis 85

out of 136 or 63% of complaints were assigned Response Level 4. We believe that at least 29 of those assignments were incorrectly done. See yellow highlighting in our spreadsheet. However, in reality, YRCAA made onsite investigations of many complaints that were assigned Level 4 Responses.

There were 89 complaints from the Upper Valley or about 65% of the total which correlates very well with the percentage of people who live there. For the Upper Valley 87% of the complaints concerned dust, 11% concerned odor and 1% concerned "other". For the Lower Valley there were 47 complaints or 35% of the total. For the Lower Valley 62% of the complaints concerned dust and 28% concerned odor.

For the Upper Valley the average lag time between when an incident allegedly occurred and when the complaint was received (recorded) was 18.18 hours with a median of 4. Half of the complaints were received (recorded) within 4 hours of the time they were sent. For the Lower Valley the average lag time between when an incident allegedly occurred and when the complaint was received (recorded) was 37.92 hours with a median of 17 hours.

For the Upper Valley the average time between when an incident was reported (recorded) and when an investigation was initiated was 26.58 hours with a median of 3.5 hours. For the Lower Valley the average time between when an incident was reported and when an investigation was initiated was 60.25 hours with a median of 24.75 hours.

Lag Times between Occurrence, Report & Investigation

					Upper Valley	Lower Valley
Average Ti	me Betwee	n Occurre	nce and R	18.18 hrs.	37.92 hrs.	
Median Tir	ne Betweer	occurre	nce and Re	4 hrs.	17 hrs.	
Time Between Report and Investigation					26.58 hrs.	60.25 hrs.
Median Time Between Report and Investigation					3.5 hrs.	24.75 hrs.

## **Compare Upper Valley and Lower Valley Response Levels**

	Upper		Lower		
RL-1	7	8%	5	11%	Attempt same day site inspection. Request backup if not available for same day response
RL-2	10	11%	0	0%	Attempt inspection within 48 hours. Request backup if not available for 48 hour response
RL-3	5	6%	7	15%	Attempt site inspection within 7 days. Request backup if not available for 7 day response
RL-4	51	57%	30	64%	Site inspection not required. Correspond with the source to advise of the complaint, to inform of the applicable rules and to discuss the potential for enforcement action.
No Rating	16	18%	5	11%	
Warning					
Letter	6	7%	2	4%	
NOV	7	8%	3	6%	

Percentage wise slightly more Lower Valley complaints were assigned a Level 1, 3 or 4 Response. Upper Valley complaints were more likely to receive a Level 2 Response or no rating. Upper Valley complaints were more likely to end in a warning letter or a Notice of Violation (NOV).

## Comparison of Prolonged Odor Episodes in the Upper Valley and the Lower Valley

Two prolonged episodes of foul odor were documented in the complaints. One occurred in Selah and was related to the Tree Top Apple Processing Plant. The other occurred in the Lower Valley between Sunnyside and Grandview and was related to a cluster of dairies in that area. The ways that YRCAA responded are informative.

## Selah:

**May 31, 2017 at 3 PM** a resident called and YRCAA took the call immediately. According to the record:

CP says that there has been a terrible odor (sewage-like) emanating from Tree Top's wastewater pond. He says it has been particularly bad for the last couple of weeks.

YRCAA began an investigation 23 hours later on 6/1/2019, assigning Response Level 2 which means that there was a health risk that was impacting the complainant, but the problem was not in progress:

Did not smell anything until I parked right across from 1500 Harrison Road, which is the Treetop Treatment facility's address. The odor was at a 2. I noticed they were utilizing sprinklers, which may be making the odor more airborne, as we have had complaints with Treetop in the past regarding the same issue. I am going to go out in the morning, as most of the people calling in are saying it's worst in the morning.

**June 1, 2017 at 9:04 AM** another resident called and YRCAA recorded the call three hours later at 1200 noon. An investigation began two hours later.

CP says that there has been a horrible "sewage-like" smell in the East Selah area for the last two weeks. She said it was extremely bad this morning.

## YRCAA found:

Investigated this issue along with other complaints that were place recently. Odor was not detectable until I was across from 1500 Harrison Rd. At that point, the odor level was a 2.

**June 1, 2019** at **9:41** a third resident called and the YRCAA recorded the call at 12:00 noon. The same investigation began two yours later at Response Level 2:

CP says that there has been a terrible smell in East Selah lately. She said she checked with Selah Public Works, to see if their waste treatment plant could have been the cause of the smell, but they said everything is fine.

#### YRCAA found:

Drove past the Selah waste treatment plant, but did not smell anything bad, I continued to drive on Harrison Road by Tree Top and when I hit 1500 Harrison Road, I could detect and odor that was sewage-like. The odor level was a 2. Treetop had their sprinklers going, so I'm assuming the water is coming from the wastewater ponds, and that is the cause of the smell.

**June 5, 2019 at 10:30 AM** a fourth resident called and the YRCAA recorded the call 3 ½ hours later at 2:00 PM. The investigation began one half hour later with a Response Level 4.

CP says that there has been a bad odor emanating from Tree Top's wastewater ponds

YRCAA called Tree Top and issued a verbal warning.

# Sunnyside/Grandview

**July 19, 2019 (Friday) at 7:35 PM** a resident left a voice mail message with YRCAA that was picked up on Monday, July 22, 2019 at 3:00 PM.

CP says there's "Ambient cow pen dirt from Hornby west to Waneta and further. Particle dirt filling the air around us can be seen on video with lights. It smells like urine but you don't care about that."

According to the report the complaint received a Response Level 3 and an investigation was not begun until eleven days later on July 30, 2019 at 3:00 PM.

**July 21, 2019 (Sunday) at 11:30 PM** the same resident left a message that was picked up on Monday, July 22, 2019 at 3:00 PM.

CP says that "Foul cloud of ambient open pen dirt and lagoon storage. Strong smell of ammonia/urine permitting our property and home. Gagging, sinus headache and inability to breathe even with high power filtering system."

Although the resident clearly states health complaints that are impacting her, the complaint is assigned a Response Level 3 that implies no health risks. An investigation was begun eleven days later, on July 30, 2019 at 3:00 PM.

## **July 22, 2019 at 11:15 PM** the complainant left another message:

CP says that "The ambient pen dirt air was sucked into her home and her sons through open windows around 11:00 PM when she was cooling her house down with the evening air. Horrible dirty feeling ambient pen dirt willed with horrid ammonia and manure AND

The YRCAA recorded the message the next morning but took no action. Initially the assignment was Response Level 3.

**July 24, 2019 at 9:35 AM** the complainant called again, this time in the morning, but the message was not picked up until 22.5 hours later.

After wonderful rain and thunder showers last night no smells! Wonderful sweet clean air! But tonight, Wednesday, 7/24/2019 9:25, windows open screen doors letting in fresh air until this very moment! Boom! Ambient pen ammonia stench coming in.

YRCAA assigned a Response Level 4 that signifies no previous complaints. There was no investigation.

**July 25, 2019 at 8:00 AM** the complainant called and YRCAA documented the call 45 minutes later.

"Awoke to horrid smell of dead cow composting. Velduis Klompe CAFOs is composting turning dead cow compost and it's gross. The ambient air is bringing this cloud of stench to my property this morning! Go to sleep with smells of urine wake up to manure

The YRCAA did not investigate and made a Response Level 3 assignment to the complaint.

**July 25, 2019 at 8:27 AM** the complainant called again and the YRCAA recorded the call one hour later.

"Kelsey this has to stop! More and more ambient air full of CAFOs stench. I've written several complaints and no response from yrcaa! Come on you guys! Do your job. Kathy Rogers"

The YRCAA did not investigate and made a Response Level 4 assignment to the complaint.

**July 25, 2019 at 11:15 PM** the complainant called and left a message that was picked up the next morning at 9:00 AM.

CP says "Cool nights are once more and very appreciated. However, opening our windows and screened doors is a negative. The ambient pen dirt full of odor from the cafo open pens surrounding our home and the neighbors is restricting the enjoyment of fresh

The YRCAA did not investigate and made a Response Level 3 assignment to the complaint.

**July 26, 2019 (Friday) at 1:20 AM** the complainant left an email message. YRCAA had all day Friday to pick up but they did not record the message until Monday morning on July 29, 2019. Not being able to sleep due to odor qualifies as a health concern but YRCAA made a Response Level 3 assignment and did not investigate.

CP says "Awakened by stench form ambient open pen dirt infiltrating our home! Cool night, windows open, sleeping well, then BOOM, I can't sleep because I'm breathing in this heavy dirt, band like dust in my house. Our large Austin Air filters is always

**July 29, 2019 with no time recorded** the complainant left an email message that was picked up the next day at 9:55 AM.

CP says "Kelsey, once more Klompe CAFO is composting and the ambient dirt from that is just nasty at my home. The wind was blowing from the east as well. I believe they've been told not to compost in the wind. Kelsey I have photos! This needs to be handled

The YRCAA initiated an "investigation" on July 30, 2019 at 1 PM. This was their investigation:

Dairies and CAFOs in the vicinity of Hornby, Stove, Braden and Tear Roads were contacted and made aware of the complaints

This was the final response for all of the above odor complaints during this episode of foul air. YRCAA is well aware that FOTC research in this area found average ammonia levels that exceed the Minimum Risk Level (MRL) for chronic ammonia exposure. The YRCAA cannot state that composting dead cows next to family homes is an acceptable agricultural practice. YRCAA performed no onsite investigations and took no odor measurements. Based on the evidence no one can state how high the odor or ammonia levels were during this week or what the risks were to complainant health.

# Does the YRCAA Agree or Disagree with People Who Complain about Dust & Odor?

Overall, the YRCAA investigations agreed with complainants perceptions 22% of the time, disagreed 39% of the time and took a position in the middle 18% of the time. There was no investigation for 18% of complaints.

The numbers look different when the Upper and Lower Valleys are compared. In the Lower Valley the YRCAA disagreed with the complainants 49% of the time and supported the complaints only 4% of the time. The YRCAA did not investigate 32% of the complaints from the Lower Valley.

YRCAA Support for Upper Valley and Lower Valley Residents

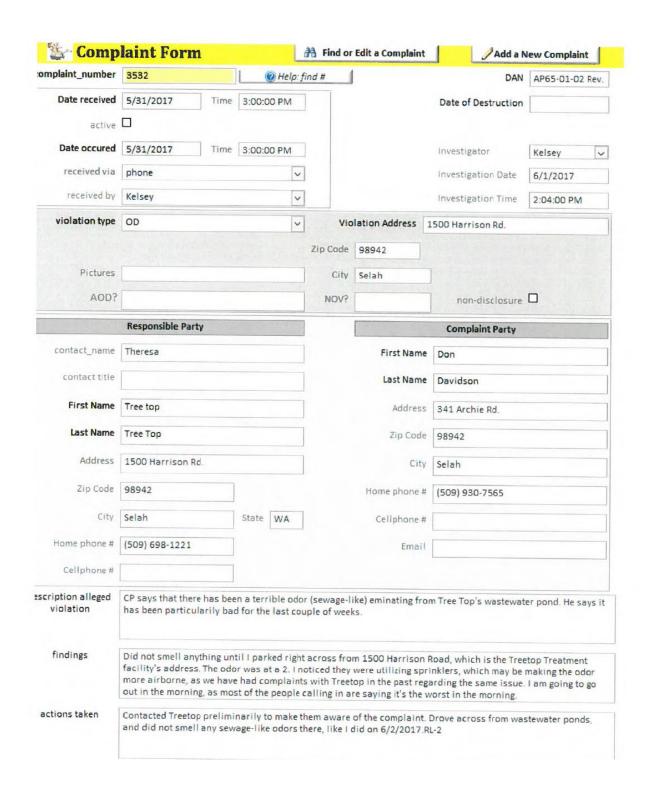
		Upper Valley		Lower Valley		Yakima County		
		# Complaints	%	# Complaints	%	# Complaints	%	
No Suppo	ort	30	34%	23	49%	5:	39%	
Yes Suppo	ort	27	30%	2	4%	30	22%	
Maybe		18	20%	7	15%	2.	18%	
No Invest	igation	10	11%	15	32%	2	18%	
NA		4	4%	0	0%		3%	

When dust and odor complaints are compared there is another large disparity. The YRCAA disagreed with 17% of those who complained about odor and disagreed with 37% of those who complained about dust. The YRCAA agreed with 25% of those who complained about dust and agreed with 17% of those who complained about odor. The shocking finding is that the <u>YRCAA failed to investigate 67% of odor complaints</u>. Given the significant lag time for investigation, especially with respect to odor, this is disturbing.

YRCAA Support for Dust Complaints versus Odor Complaints

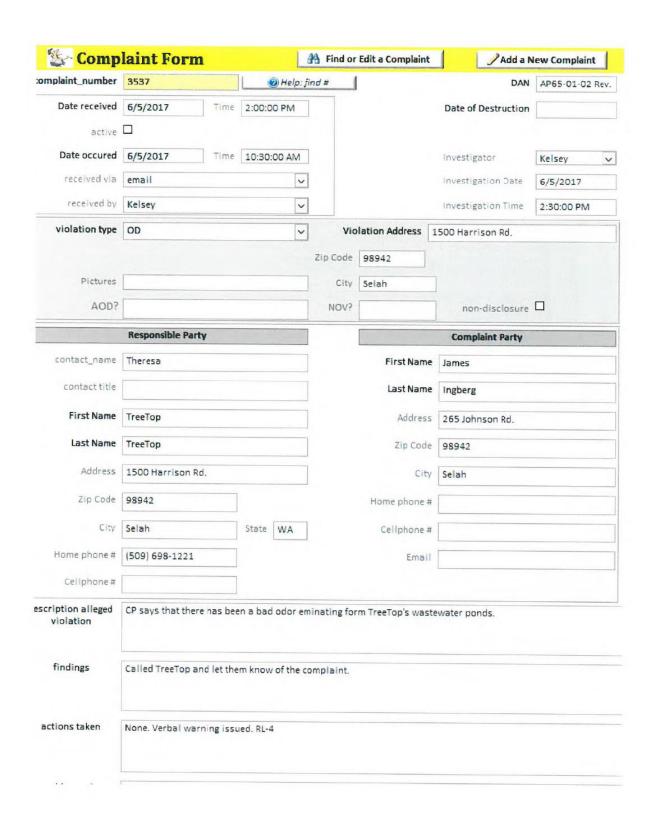
	Dust # Complaints		Dust %	Odor # Complaints	Odor %
No Support	4	40	37%	3	17%
Yes Support		27	25%	3	17%
Maybe		25	23%	0	0%
No Investigation	:	13	12%	12	67%
NA		4	4%	0	0%

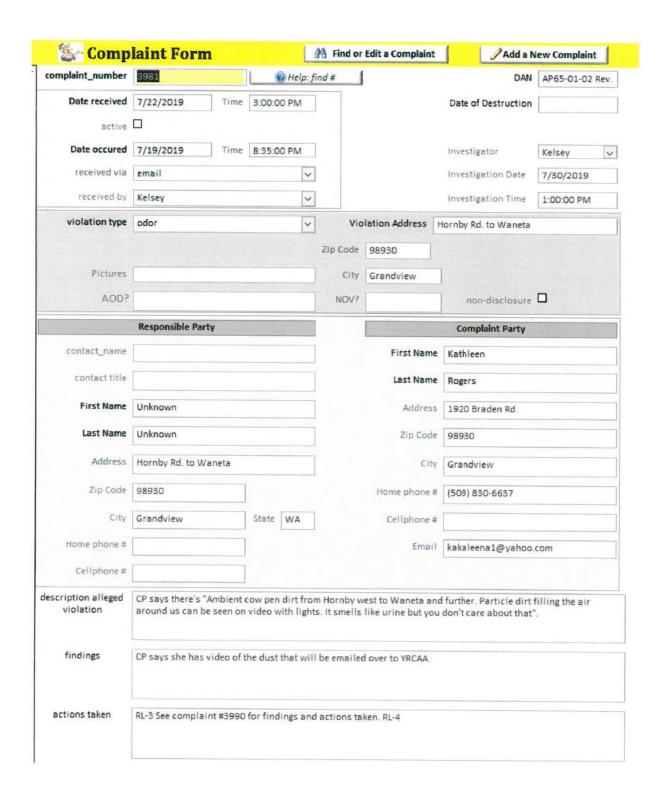
Please see the Attachment 8 Spreadsheet for work documentation.



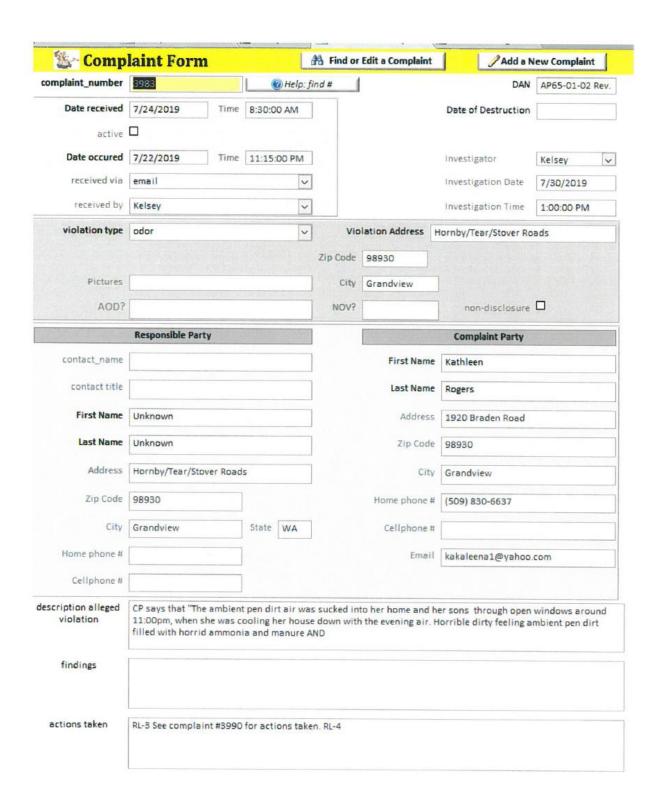
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received by	Kelsey			~			Investi	gation Time	2:04:00 PM
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						Addres	S		
Last Name	Treetop					Zip Cod	e 98942		
Address	1500 Harrison R	d.				Cit	y Selah		
Zip Code	98942					Home phone	# (509) 2	48-4246	
City	Selah		State	WA		Cellphone :	#		
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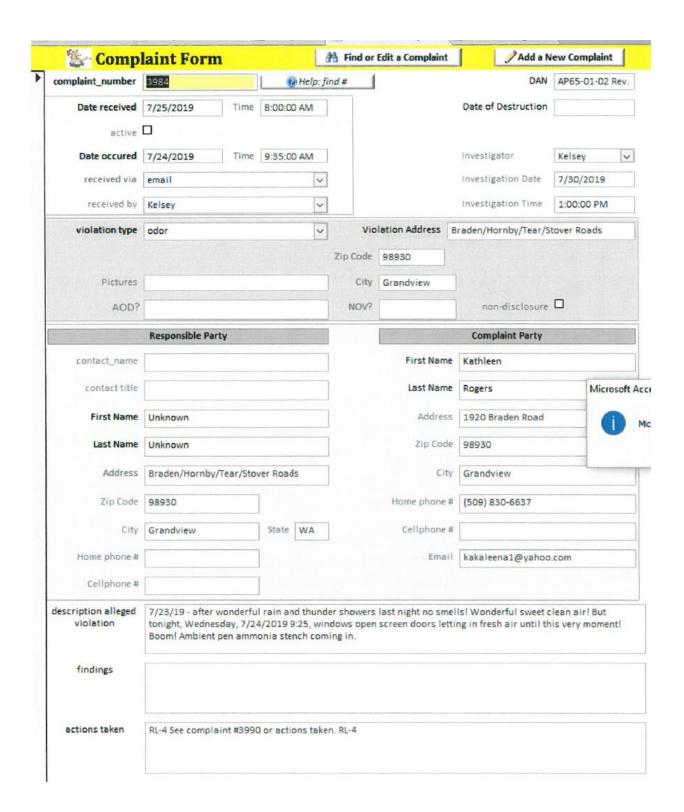
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contact title					Last Name	Santangelo	
First Name	ТгееТор	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			Address	603 Jamie Drive	
Last Name	TreeTop				Zip Code	98942	
Address	1500 Harrison Rd.				City	Selah	
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escription alleged violation	CP says that there has be to see if their waste treat	een a terrible s tment plant co	smell ould h	in East Se ave been	elah lately. She s the cause of the	aid she checked with Se smell, but they said tha	lah Public Works, t everything is fine
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actions taken	Parked in front of CP's he across from wastewater	ouse on 6/5/1 ponds, and di	7 at 1 d not	0:45am, i smell an	and did not smel y sewage like odd	any sewage like smell: ors there, like I did on 6	s in the area. Drov /2/2017. RL-2.

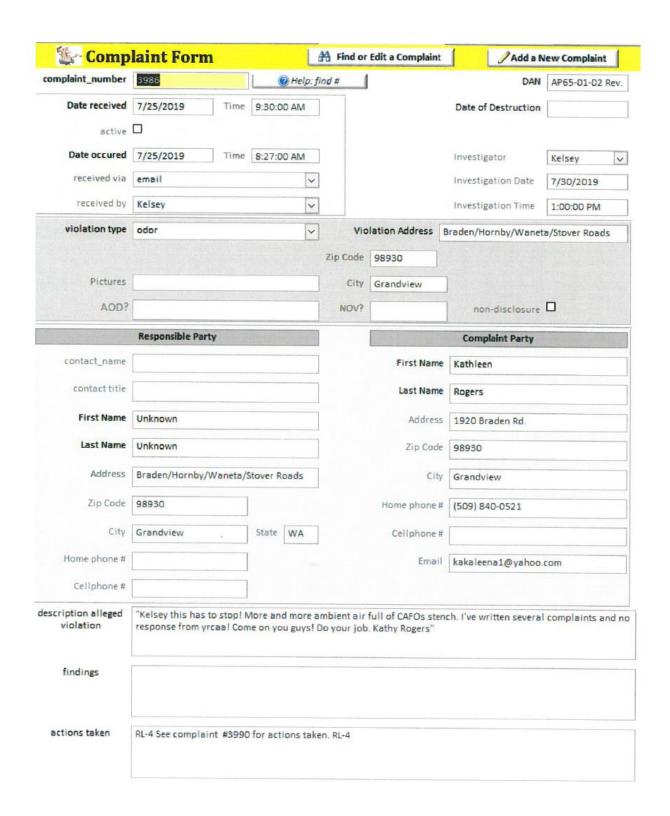




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received by	Kelsey			V			Investigation Time	1:00:00 PM	
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contact_name						First Nam	Kathleen		
contact title						Last Name	Rogers		
First Name	Unknown					Address	1920 Braden Road		
Last Name	Unknown					Zip Code	98930		
Address	Hornby/Stover/Te	ar Road	s			Cit	Grandview		
Zip Code	98930					Home phone	(509) 830-6637		
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actions taken	RL-3 See complair	nt #3990	for fine	dings and	l actions ta	ken			



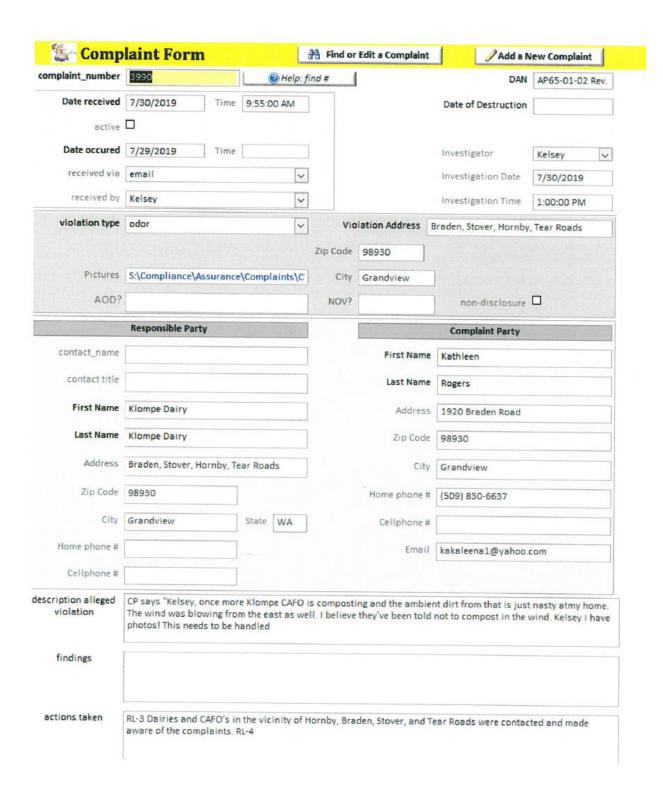




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contact_name					First Nam	e Kathleen	
contact title					Last Nam	e Rogers	
First Name	Veldhuis Klompe				Addres	1920 Braden Road	
Last Name	Veldhuis Klompe				Zip Cod	98930	
Address	Braden/Stover Roads				Cit	Grandview	
Zip Code	98930				Home phone	# (509) 839-6475	
City	Grandview	State	WA		Cellphone	#	
Home phone #					Emai	kakaleena1@yahoo.	com
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scription alleged violation	"Awoke to horrid smell compost and it's gross with smells of urine wa	. The ambie	ent air is	osting. Velo bringing th	huis Klompe CAI	FOs is composting turni ch to my property this m	ng dead cow orning! Go to sleep
findings							
actions taken	RL-3 See complaint #39	90 for find	ings and	actions ta	ken RI-4		

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received by	Kelsey		~			Investigation Time	1:00:00 PM
violation type	odor		~	Vic	lation Address	Stover/Hornby/Tear Re	oads
				Zip Code	98930		
Pictures				City	Grandview		
AOD?				NOV?		non-disclosure	
	Responsible Party					Complaint Party	
contact_name					First Name	Kathleen	
contact title					Last Name	Rogers	
First Name	Unknown				Address	1920 Braden Road	
Last Name	Unknown				Zip Code	98930	
Address	Stover/Hornby/Tear Ro	oads			Cit	Grandview	
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Home phone #					Emai	kakaleena1@yahoo	o.com
Cellphone #							
escription alleged violation	CP says "Cool nights a a negative. The ambier is restricting the enjoy	nt pen dirt f	ull of od	ery apprec	ated. However, o	pening our windows a surrounding our home	nd screened doors i and the neighbors
findings							
actions taken	RL-3 See complaint # fo	or actions to	aken. RL	-4			

<b>S</b> Comp	laint Form		6	# Find or	Edit a Complaint	Add a N	lew Complaint
complaint_number	3989	L 0 H	Help: fi	ind#		DAN	AP65-01-02 Rev
Date received	7/29/2019 Time	9:00:00 /	NA			Date of Destruction	
active							
Date occured	7/26/2019 Time	1:20:00 /	MA			Investigator	Kelsey
received via	email		~			Investigation Date	7/30/2019
received by	Kelsey		~			Investigation Time	1:00:00 PM
violation type	odor		~	Vio	lation Address	Braden, Stover, Hornby	Roads
				Zip Code	98930		
Pictures							
				City	Grandview		
AOD?				NOV?		non-disclosure	
	Responsible Party					Complaint Party	
contact_name					First Name	Kathleen	
contact title					Last Name	Rogers	
First Name	Unknown				Address	1920 Braden Road	
Last Name	Unknown				Zip Code	98930	
Address	Braden, Stover, Hornby, F	Roads			City	Grandview	
Zip Code	98930	1			Home phone #	(509) 839-6475	
City	Grandview	State V	VA		Cellphone #		
Home phone #					Email		
Cellphone #							
escription alleged violation	CP says "Awakened by st sleeping well, then BOOM large Austin Air filters is	A, I can't sle	ambie	nt open per cause I'm b	n dirt infilitrating preathing in this h	our home! Cool night, neavy dirt, band like du	windows open, st in my house. Ou
findings							
actions taken							



Comp	olaint Form	l		-	Find o	r Edit a Complain	t	Add a M	New Complaint
complaint_number	3842			Help: j	find#	1		DAN	AP65-01-02 Rev
Date received	7/12/2018	Time	10:00	:00 AM			Date of	Destruction	
active									
Date occured	7/10/2018	Time	3:04:0	10 PM			Investig	ator	Kelsey
received via	voice mail			~			Investig	ation Date	7/18/2018
received by	Kelsey			~			Investig	ation Time	11:00:00 AM
violation type	CFO dust			V	Vic	olation Address	1420 Out	ook Rd.	
					Zip Code	98938			
Pictures					City	Outlook			
AOD?						Oddiook			
AUU:					NOV?		nor	n-disclosure	M
	Responsible Part	y					Comp	laint Party	
contact_name						First Nam	e Maria	Redaction	n log#1
contact title						Last Name	e Maria	Redaction	n log#2
First Name	WASHINGTON DA	RY HOLD	INGS LL	.c		Addres	s Table	Redactio	n log#3
Last Name	WASHINGTON DAI	RY HOLD	INGS LL	.c		Zip Code	98938		
Address	170 S Lincoln St si	uite 150				City	Outlook		
Zip Code	99201					Home phone	- Carr	Redaction	n log#4
City	Spokane		State	WA		Cellphone #	=		
Home phone #						Emai			
Cellphone #									
scription alleged violation	CP says that the hi cows become mor- so bad it obscures	e active.	ine dus	s the stre	eet from hi straight ac	s house is causir cross the street a	ng fugitive o nd goes rig	dust in the eve ht into his pr	enings when the operty. He says it
findings	No fugitive dust se	en at tim	ne of inv	/estigati	on. Dirt in	the pens seemed	moist.		
actions taken	None. Told the gen traffic safety issue	tleman to	o call th	ne police	departmen	nt regarding the o	dust obscur	ing the road	because it is a
additional comments									



## **Concise Explanatory Statement (CES)**

This Concise Explanatory Statement (CES) provides information on the Yakima Regional Clean Air Agency (YRCAA) policy adoption for:

Title: Pilot Project for the Air Quality Management Policy and Best Management Practices

for Dairy Operations

Adopted date: February 10, 2011 Effective date: February 10, 2011

## This CES provides:

- 1. A description of the policy;
- 2. Reasons for adopting the policy;
- 3. A description of any differences between the draft policy and the adopted policy; and
- 4. Public comments with the Agency responses to comments.

#### **Description of the Policy**

The policy is a pilot project to address fugitive air emissions as contemplated in RCW 34.05.313, which states in part:

"During the development of a rule or after its adoption, an agency may develop methods for measuring or testing the feasibility of complying with or administering the rule and for identifying simple, efficient, and economical alternatives for achieving the goal of the rule. A pilot project shall include public notice, participation by volunteers who are or will be subject to the rule, a high level of involvement from agency management, reasonable completion dates, and a process by which one or more parties may withdraw from the process or the process may be terminated." The pilot project is expected to begin February 10, 2011 and be complete December 31, 2011. At the completion of the pilot project, YRCAA and the workgroup established to participate in the development of the policy shall:

- 1. Conduct an effectiveness assessment;
- 2. Determine the need for modification of the policy;
- 3. Accomplish needed modifications; and
- 4. Propose a final policy for adoption to the YRCAA Board of Directors.

#### **Reasons for Adopting the Policy**

There are many Dairy Operations in Yakima County which the YRCAA has recognized as significant air pollution sources. YRCAA's primary air quality concern regarding Dairy Operations is the generation of fugitive air emissions from feed, urine, manure and other sources.

In recent years, most dairy operators have instituted various practices to control fugitive air emissions. Such practices are also good animal husbandry and good neighbor practices. Air quality management practices can require a significant commitment of time and resources by owners and operators.

Since air emissions from Dairy Operations are considered to be fugitive emissions (cannot feasibly be collected and passed through a control device), mitigation must be accomplished by prevention rather than control. This policy is intended to use existing regulations and clarify what constitutes "reasonable precautions" to minimize air emissions from Dairy Operations. The primary means to accomplish this is to identify pollutant-specific and system-specific best management practices (BMPs) for minimizing emissions and to cause these practices to be implemented according to flexible, site-specific Air Quality Management Plans.

This policy applies only to commercial Dairy Operations where cows are raised, kept and milked and the potential for significant emissions of air pollutants exists. 100% of the air emissions from dairy operations cannot be eliminated. This policy and all BMPs contained in this policy need to be tested, proven to be effective in mitigating air emissions, and found to be economically and technically feasible.

#### Description of Differences between the Draft Policy and the Adopted Policy

Revisions to the draft Policy submitted for public comment are summarized. Revisions were made due to public comments received, either individually or as consensus of various comments as determined by staff.

#### **Cover Page**

The text of the cover page was revised to indicate the pilot project beginning and ending dates.

#### Background

The text was revised to:

- Delete irrelevant information;
- Replace certain information with more accurate information;
- Provide a description of the policy;
- State reasons for the policy; and
- Address jurisdiction.

## **Policy**

#### I. What is the Purpose of the Policy?

Minor changes for clarity purposes were made.

#### II. Who Must Comply with the Policy?

Minor changes for clarity purposes were made.

#### III. How Does the Policy Work?

Minor changes for clarity purposes were made such as, determinations by YRCAA and the work group role in case of disputes.

## IV. Where and When Must Air Quality Management Plans Be Submitted?

Minor changes for clarity purposes were made.

#### V. What Must Be Contained in an Air Quality Management Plan (AQMP)?

Minor changes for clarity purposes were made.

#### VI. How are AQMPs Developed and Approved?

Minor changes:

 Added a statement regarding technical assistance from YRCAA or a technical service provider; and  Added a statement regarding potential compliance actions only for violations of regulation, not policy.

## VII. How and What Changes Can be Made to an Approved AQMP?

Minor changes for clarity purposes were made.

## VIII. How Will YRCAA Determine When an AQMP is Adequate?

No changes.

## IX. How Will Compliance with and Effectiveness of the AQMP be Determined?

Minor changes to further describe:

- How compliance and effectiveness determinations will be made; and
- For what violations compliance actions may be taken.

#### Appendix A

Minor change for clarity was made.

#### Appendix B

Changes were made to:

- Remove references to Appendices D and E;
- Better describe pollutant emissions;
- Better state BMPs; and
- 8 BMPs were removed due to lack of scientific evidence of efficacy.

## Appendix C

Changes were made to:

- Remove references to Appendices D and E;
- Better state BMPs; and
- Remove BMPs as in Appendix B.

#### Description of comments and responses

The Concise Explanatory Statement responds to the identified comments in a Comment-Response sequence. Agency responses are given only for comments regarding the policy content or the policy development process.

The table below lists the names of organizations or individuals who submitted a comment on the policy proposal and where you can find YRCAA's response to the comment(s).

## The first column defines the Commenter Number

The second column identifies the Commenter and Organization, if applicable

The third column assigns a comment/response number:

- The letter A refers to comments regarding the Policy Content
- The letter **B** refers to comments regarding the **Policy Development Process**,
- The letter C refers to comments regarding Other Topics
- The Accompanying Numbers (1-23) show the order in which the comments appear.

#### The format would be:

Commenter Number, Comment Type, Comment Number

Commenter Number	Name and Affiliation	Comment/Response #(s)
1	Nichole M. Embertson, PhD	Note: All comments on point; so numerous, comments will be presented below as submitted, numbered below as
		submitted and attached to Policy Draft

		Document
2	Mark Tudor	C1
3	Jan Whitefoot Concerned Citizens of the Yakama Reservation Friends of Toppenish Creek	B1, B2, C1, B3, B4, C2, C3, C4, B5, A1
4	Jean Mendoza Community Contribution	C1, A1, C2, A2, A3, A4, C3, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21, A22, A23, A24, A25, A26, A27, A28, A28.a, A28.b, A28.c, A28.d, A29, A30, A31, C4, C5, C6, C7, C8, C9, C10, C11
5	Don Lewis	A1
6	Colleen Reimer	A1, A2, C1, A3, B1
7	Pius Mwangi Ndegwa, PhD	A1, A2, A3
8	Jerald Gefre	B1, B2, B3, C1, B4
9	James & Linda Dyjak	A1, C1.a, C1.b, C1.c, C1.d, A2, A3, C2.a, C2.b, C2.c, A4.a, A4.b, B1
10	Karen Pilon	C1
11	John Bosma	A1, A2, A3
12	Laurie L. Porter Grad Student, Researching Dairy Operations in the Yakima Valley	C1, A1, A2.a, A2.b, A3, A4, A5, A6, B1, B2, C2.a, C2.b, C2.c, C2.d, C2.e, B3, C3, C4, C5.a, C5.b, C6, C7, C8
13	Charles M. Tebbutt, P.C C.A.R.E.	C1, A1, A2.a, A2.b, A3, A4, A5, A6, B1,B2, C2, C2.a, C2.b, C2.c, C2.d, C2.e, B3, C3, C4, C5.a, C5.b, C6, C7, C8
14	Jim Leier	C1, B1, B2
15	Yakama Nation Dept. of Natural Resources	A1, A1.a, A2, A3, A4, A5, A6, A7, A8, A9, A9.a, A9.b, A9.c
16	Larry G Fendell	C1. C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, B1, C13, C14
17	Eleanor Hungate	C1, C2, C3, A1, A2, A3, A4
18	D'Ann L Williams, DrPH Meghan F Davis, DVM, MPH Ana M Rule, PhD Keeve E Nachman, PhD, MHS	A1, A2, A2.a, A2.b, A2.c, A2.d, A3, A4, A5, A6, B1, A7, A7.a, A7.b, A8, A8.a, A8.b, A9-A24
19	John L Cox	C1, A1, C2, B1, A2
20	Steven Rowe Northwest Dairy Assoc.	A1, A1.a, A1.b, A1.c, A1.d, A2, A2.a, A2.b, A2.c, A3, A3.a, A3.b, A4, A5, A5.a, A5.b, A5.c, A5.d, A5.e, A6, A6.a, A6.b, A6.c
21	Fred & Ruth St. Hilaire	B1, B2.a, B2.b, C1, C2, B3, C3
22	Helen Reddout C.A.R.E.	B1, B2, C1, B3, B4, C2
Commenter Number	Name and Affiliation	Comment/Response #(s)
23	William J Weida Socially Responsible Agricultural Project	A1, A2, A3, C1, C2, A4, A4.a, A4.b, A4.c, A4.d, A4.e, A4.f, A4.g, C3
END OF COMMENTS RECEIVED		

YRCAA accepted comments between November 8, 2010 and 5 p.m. December 09, 2010. The following section provides verbatim comments that were received during the public comment period. No grammar or spelling corrections have been attempted. Agency responses can be found immediately following each comment.

Commenter #1 Comments #NME1 – NME32

## **BACKGROUND**

Most dairy farms are diversified crop and animal production systems. Some feeds are purchased, but dairy producers usually grow their own forages (whole plant feeds such as hay or silage). Most dairy farmers sell their bull calves and many raise heifers as replacement animals. The advantage of raising heifers on farm is that it helps prevent introduction of diseases when animals are introduced to the milking herd. In a typical herd, mature cows calve every 12 to 14 months, producing a female calf 50 percent of the time. Milk production increases for about 10 weeks and then decreases for the remainder of lactation. Typically, the lactation period lasts about 10 to 12 months. Cows are bred artificially when behavioral and physiological signs of ovulation occur about 60 to 120 days after calving. Lactation continues until two months prior to the next predicted calving. A typical herd with 100 lactating cows may also include 18 dry cows and 86 growing heifers (Dunlap et al., 2000) for a total inventory of 204 head. Young dairy calves consume casein or soy-based milk replacer until adjusted to grain and eventually forage-based diets as they mature. Lactating cattle in peak production consume diets with as much as 60 percent of dry material from grains and high-energy by-products and 40 percent from forages (whole plant crops such as hay or silage). Lactating cattle at lower levels of production and mature cattle between lactations consume diets comprised mostly of forages.

While there are many small dairy operations in Yakima County, the Yakima Regional Clean Air Agency (YRCAA) has recognized Dairy Operations with inventories of over 500 head as significant air pollution sources. There are many Dairy Operations located in Yakima County which are able to support inventories in excess of 500 head. Smaller dairies may also be significant. YRCAA's primary air quality concern regarding Dairy Operations is the generation of fugitive emissions from feed, urine and manure.

YRCAA began working with local beef cattle feedlots in 1993 to minimize dust emissions. As a result, fugitive dust plans were developed and implemented. Since then, the plans, and their effectiveness, have improved each year. YRCAA staff met with owners of heifer replacement and calving operations in March of 2001 to discuss fugitive dust control plans. As a result, a policy was developed to serve as a vehicle for applicable dairy heifer feeding operations to acknowledge requirements and to demonstrate their commitment to continued improvement of effective fugitive dust control. That policy was developed using the same regulated stakeholder and public stakeholder involvement process.

Comment [NME1]: This is a strange definition/review at the beginning of this section, I am not sure what the purpose of it is. It is also a broad generalization of dairy operations. Think about moving it to the end and adding a leading sentence that explains what it is

**Comment [NME2]:** Why is this capitalized throughout? No need.

**Comment [NME3]:** Does that mean that only operation over 500 head are subject to your AQMP? You might want to clarify that here.

Comment [NME4]: Why? Based on what criteria? Give reference...".. based on the definition listed in RCW 70.94.030".

Comment [NME5]: You stated in the first sentence this was not the case. Think about making this a "however" statement at the end of the first sentence. For instance: "...recognized dairy operations with inventories of over 500 head as significant air pollution sources, however, smaller operation can still be noteworthy contributors."

Comment [NME6]: Insert as "such as" statement here (aka, list emissions of concern).

In recent years, most operators have instituted various practices to control fugitive emissions. Such practices are also good animal husbandry and good neighbor practices. Air Quality Management measures can require a significant commitment of time and resources by owners and operators.

Since emissions from Dairy Operations are considered to be fugitive emissions, this policy is intended to use existing regulations and clarify what constitutes "reasonable precautions" to minimize emissions from Dairy Operations. The primary mechanism for doing this is to identify pollutant and area-of-operation specific best management practices (BMPs) for minimizing emissions and implement these practices according to flexible, site-specific Air Quality Management Plans developed by each Dairy Operation. Each plan must be submitted along with completed registration forms and must be approved by YRCAA. Annual updates of the plans will be required.

This policy applies only to Dairy Operations where cows are confined for feeding and milking and the potential for significant emissions of air pollutants exists. It is recognized that 100% of the air emissions from dairy operations cannot be eliminated. Additionally, all solutions or practices need to be economically and technically feasible.

Comment [NME7]: I would just caution this statement – we have a very hard time updating plan on an annual basis due to time, funding, and practicality constraints. Before you make this a requirement, consider who will be doing this work, how many plans there will be, and what constitutes an update. You may want to consider changing this to "Annual review" or "annual update determined by review" instead of "update".

Comment [NME8]: Than the policy doesn't apply to operations that also graze cattle? If so, some of your BMPs and recommendations are not valid. If you do want to include grazing (encouraged), then add that in here.

**Comment [NME9]:** How is this defined/determined?

### **POLICY**

## I. What is the Purpose of the Policy?

The purpose of this policy is to provide guidance for effective prevention and control of fugitive air emissions from Dairy Operations. Components of the purpose are:

- 1. To achieve sufficient prevention and control of emissions from Dairy Operations to assure compliance with applicable laws and regulations;
- 2. To achieve prevention and control of emissions by describing a menu of operation and pollutant-specific best management practices (BMPs) for Dairy Operations that will be implemented through the use of flexible, site-specific Air Quality Management Plans;
- 3. To clarify what constitutes "reasonable precautions to prevent" emissions as required by WAC 173-400-040(3); and
- 4. To inform owners and operators on effective prevention and control of emissions and provide a means by which Dairy Operations can demonstrate that they are taking reasonable precautions to protect the air quality in Yakima County.

## II. Who Must Comply with the Policy?

1. All Dairy Operations where animals are confined for feeding and milking and the potential for significant emissions of air pollutants exists; and All commercial dairies will be considered as potentially significant sources of air pollution for purposes of gathering initial information and determining emissions. It may be that some dairies will only report every three years. Most will report annually.

## III. How Does the Policy Work?

- 1. A Dairy Operation must prepare an Air Quality Management Plan (AQMP) and submit it to YRCAA for approval, along with completed annual registration forms, and pay a fee;
- 2. A plan must identify best management practices (BMPs) and operational procedures to be used to control emissions of various pollutants from each area of operation;
- 3. YRCAA and the dairy operators are expected to work together in good faith toward development of an AQMP which is acceptable to both the Operation and the YRCAA;
- 4. A Dairy Operation must fully implement an approved AQMP according to the criteria and/or implementation schedules outlined in their plans;
- 5. A Dairy Operation may make modifications to an approved AQMP as long as the effectiveness of the plan is not diminished; and
- YRCAA may initiate negotiations with a Dairy Operation to modify an approved plan, if that plan is not sufficiently effective in minimizing fugitive emissions.

Should a dispute arise as to compliance with this policy, YRCAA may request the dairy workgroup that developed this policy to review the dispute and provide input as to an acceptable outcome.

## IV. Where and When Must an AQMP be Submitted?

Comment [NME10]: Is this regardless of size? If so, you should state this, as your introductory statement might make someone think that only operations larger than 500 cows would need to apply.

**Comment [NME11]:** Only commercial? What about non-commercial dairies? You may want to define your word for commercial, or take it out.

Comment [NME12]: While this is an important statement, it doesn't warrant a number in this section based on the title "Who must comply". Consider wrapping it into the previous number.

Comment [NME13]: While I like the flexibility and voluntary nature of this idea, I foresee that you will run into a lot of issues if the dairy operator is supposed to prepare their AQMP themselves. A lack of knowledge, understanding, honesty, and/or assistance may inhibit their ability to properly fill out the AQMP you have designed. If your goal is simply to accumulate a list or survey of what BMPs are currently in place, then this is okay. If your goal is to optimize current BMPs and/or have producers install new ones, you are going to have some difficulty. You may want to provide a technical assistance source (YRCAA?), state they can solicit professional help, or be sure that these documents fulfill all criteria that can be later regulated by the appropriate organization (if that is your goal).

Comment [NME14]: List those areas here.

- 1. Dairy Operations must submit plans to the YRCAA;
- 2. Existing Dairy Operations must submit plans annually, no later than February 15<sup>th</sup>; and
- 3. New or expanding Dairy Operations must file notice with YRCAA, which includes an Air Quality Management Plan for the new facility or addition. This plan must be approved prior to operating the facility.

## V. What Must Be Contained in an AQMP?

- 1. A description of the operation, including:
  - a. A map, aerial photo or drawing of the operation, which adequately represents the layout of the operation and provides enough detail to allow YRCAA to adequately review the feasibility and appropriateness of various BMPs for the facility;
  - A description of the operational capacity of the operation, including the maximum number of cattle which could be confined;
  - A description of the lands where nutrient byproducts from the operation are applied and the application method(s) used;
  - d. Any site-specific features or characteristics which would prevent or limit the use of any BMP; and
  - e. Any site-specific features or characteristics which would require BMP flexibility or adaptation to meet the needs of the operation.
- 2. Pollutants and pollutant groups to be addressed under the plan.

Of the following eight pollutants and pollutant groups, those targeted for emission reduction must be identified in the AQMP:

- a. Direct Particulate Matter;
- b. Ammonia (NH<sub>3</sub>);
- c. Volatile Organic Compounds (VOCs);
- d. Oxides of Nitrogen (NO<sub>X</sub>);
- e. Hydrogen Sulfide (H<sub>2</sub>S);
- f. Odor;
- g. Methane (CH<sub>4</sub>); and
- h. Nitrous Oxide (N<sub>2</sub>O).
- 3. A description of BMPs to be used under the Plan to reduce emissions of the targeted pollutants.
  - a. The description must include which BMPs will be applied for emission reductions

Comment [NME15]: Can you do this legally? I worry this may cause some issues. Dairies typically only file with WSDA or contact their CD (if expanding). I can understand the need for this information as it directly relates to submission of an AQMP, but not for general purposes.

**Comment [NME16]:** What is "direct particulate matter"? Do you mean PM10? Course PM? Dust?

from the following physical areas:

- i. milking parlors;
- ii. sorting alleys;
- iii. feed alleys;
- iv. dry lots and free stalls;
- v. lands where nutrients are applied;
- vi. storage lagoons;
- vii. compost areas;
- viii. feed storage areas;
- ix. unpaved roadways; and
- x. any other area or process where emissions may occur.
- b. The description must include which BMPs will be applied for emission reductions from the following systems:
  - i. nutrition and feeding;
- ii. housing;
- iii. manure management;
- iv. land application (both fertilizer and manure application); and
- v. pasture
- c. The descriptions must also include:
  - i. a description of the equipment and materials to be used, including a description of the normal operational capacity or application rate of any equipment;
  - ii. an operational plan for implementation and operation of each BMP;

The operational plan must describe the criteria the operation will use to determine when and for which areas of the operation to implement each BMP and the criteria for selecting specific BMPs. It is recognized that operations and conditions are variable and that the same BMP may be implemented differently by individual operations. This variability makes the description of how BMPs will be implemented an especially important component of an operation's AQMP.

- iii. a description of which pollutant or pollutant group will be reduced as a result of implementing each BMP;
- iv. a method of monitoring and recording the implementation of each BMP; and
- v. the person responsible at the facility for the Operation's AQMP and its implementation.
- 4. A schedule for future BMP implementation, if applicable.

If an operation intends to implement additional BMPs in the future, target dates for implementation of each BMP should be included in the AQMP.

## VI. How are AQMPs Developed and Approved?

1. An Operation is responsible for preparing an AQMP and submitting the plan or update to YRCAA for approval on or before February 15<sup>th</sup>. Professional assistance may be

Comment [NME17]: This only applies if you change your definition in the introduction to include pasture systems (pasture is not typically considered a "confined" situation).

**Comment [NME18]:** Used for what? Land application? Manure handling? Please elaborate.

used in developing and reviewing the plan;

- Within 30 days, YRCAA staff must review the plan and notify the Operation of plan
  approval in writing or request additional information or propose alternative practices to
  approve the plan. Failure of YRCAA to notify the Operation or request additional
  information shall constitute approval;
- 3. Operations must respond to agency requests for information or modification of the plan within 30 days;
- 4. The approval process may include good faith discussion, evaluation, collection of information, and other efforts to resolve differences of opinion about the plan, so long as reasonable progress toward the development and approval of the Operation's AQMP is being made; and
- If agreement on an Operation's AQMP cannot be reached after thorough good faith evaluation of alternatives and consideration of plan effectiveness, costs, and other pertinent matters, YRCAA may initiate compliance action.

The purpose of good faith negotiation is to share information and resolve differences of opinion regarding an Operation's AQMP. Both the Operation and YRCAA need to be able to exchange information freely and in good faith. Information obtained by YRCAA in the course of negotiation is not obtained for the purpose of any future enforcement activity.

## VII. How and What Changes Can be Made to an Approved AQMP?

An Operation may make modifications to an approved AQMP as long as the modification(s) do not pose a potential to diminish the effectiveness of the plan. Substantive modifications to a plan must be documented and YRCAA must be notified of the changes. Substantive modifications include but are not limited to:

- 1. significant changes in operational procedures;
- 2. changes in BMP selection; and
- 3. changes in criteria used to determine BMP implementation.

Non substantive changes are changes which do not have the potential to diminish the effectiveness of an implemented plan. Such changes may be made without notification to YRCAA, but must be included in the next annual AQMP update.

## VIII. How Will the YRCAA Determine When an AQMP is Adequate?

In considering whether an AQMP is adequate to achieve the purpose of this policy, YRCAA may consider:

1. whether the plan utilizes BMPs identified in Appendix B of this policy;

Comment [NME19]: I thought all plan review was done by YRCAA? Be more specific if you mean technical review, not final review.

Comment [NME20]: Such as? State what the penalties for not completing and submitting the plan are (if there are any). State what the compliance action is and who will carry it out.

**Comment [NME21]:** May want to add a line item referring to the discontinuance of an approved BMP.

- 2. the ability of the proposed BMPs to maintain conditions which adequately minimize emissions;
- 3. other measures in the plan which may be effective in minimizing emissions, but which are not recognized BMPs;
- the adequacy of the operational plan, including the criteria used to begin, end, and apply the proposed BMPs;
- 5. evidence that proposed measures have been effective in similar conditions; and
- 6. whether the plan addresses all requirements of Section V of this policy.

## IX. How Will Compliance and Effectiveness of the AQMP be Determined?

- 1. Compliance After an AQMP has been approved, an Operation will be inspected to determine if the BMPs and their operational plans are in effect. If inspection determines that the AQMP is not fully implemented or reasonable precautions are not being taken to prevent emissions, a Notice of Violation may be issued.
- 2. Effectiveness After the plan is in place, inspection results may be used to evaluate the effectiveness of the plan in reducing emissions. If inspection indicates that the plan is not effective, YRCAA will request information from the Operation or propose additional or alternative BMPs. As with the development of the initial plan, YRCAA and the Operation will work together in good faith to revise the AQMP to increase its effectiveness.

**Comment [NME22]:** By whom? YRCAA? WSDA? DOE? EPA? Who carries out the penalty and compliance review?

Comment [NME23]: How will you quantify effectiveness? Is it a visual inspection only or will you take actual measurements of emissions? Giving an inspection plan or idea of how you will measure these things would be good.

#### APPENDIX A

## STATUTORY AND REGULATORY REFERENCE

This Section is intended to provide the regulatory framework for Dairy Operations. Other statutes or regulation may apply, but the references listed below have the most significant bearing on the industry.

### A. STATUTORY AUTHORITY

- 1. The Washington Clean Air Act (the Act), RCW 70.94.011 states that it is public policy to preserve, protect and enhance the air quality for current and future generations and the intent is to protect human health and safety, including the most sensitive members of the population.
- 2. Dairy Operations are sources of air pollution per RCW 70.94.030 and subject to the provisions of the Act except as exempted in Sections 640.
- 3. RCW 70.94.141 empowers Local Authorities to:
  - a. Adopt and amend its rules;
  - b. Issue orders and take administrative actions to enforce the Act;
  - c. Require access to information specific to the emission and control of air pollutants;
  - d. Secure necessary scientific and technical services;
  - e. Prepare and develop comprehensive plans to prevent and control air pollution;
  - f. Encourage voluntary cooperation to achieve the purposes of the Act;
  - g. Encourage and conduct studies, investigation and research relating to air pollution causes, effects, prevention, abatement and control; and
  - h. Advise, consult and cooperate with agencies, departments, educational institutions, political subdivisions, industries, other states, inter-local agencies, the United States government, and with interested persons or groups.
- 4. RCW 70.94.151 authorizes local authorities to:
  - a. Classify air pollution sources; and
  - b. Require registration, reporting and payment of registration fees.
- 5. RCW 70.94.152 authorizes local authorities to require submittal of application to construct or modify an air pollution source and approve such application prior to construction or modification.
- 6. RCW 70.94.154 authorizes and describes a Reasonably Available Control Technology (RACT, as defined in 70.94.030(20)) determination.
- 7. RCW 70.94.380 mandates Local Authorities to have requirements for the control of air emissions that are no less stringent than those of the state.

## **B. STATE REGULATIONS**

Dairy Operations are sources of air pollution and are subject to the provisions of WAC 173-400 and WAC 173-460, which require controls to minimize emissions.

## C. LOCAL REGULATIONS

YRCAA Regulation 1, Section 1.03 declares agency policy to be secure and maintain air quality by:

- Protecting human health and safety;
- 2. Preventing injury to plant and animal life and property;
- 3. Fostering comfort and convenience;
- 4. Promoting economic and social development;
- 5. Facilitating the enjoyment of natural attractions;
- 6. Preventing or minimizing the transfer of air pollution to other resources;

**Comment [NME24]:** All dairy operations?, or just those large enough or close enough to neighbors to cause a problem? You may be challenged on this statement

- 7. Ensuring equity and consistency with the Federal Clean Air Act (FCAA) and the Washington Clean Air Act (WCAA);
- Educating and informing the citizens of Yakima County on air quality matters;
- Maintaining accurate and current policies, regulations, and rules;
- 10. Performing administrative actions in a timely and effective manner;
- 11. Cooperating with the local governments, the Yakama Nation, organizations or citizens on air
- quality matters;

  12. Developing strategies to avoid, reduce or prevent air pollution through innovative solutions, early planning and integration of air pollution control in the work of other agencies and businesses; 13. Preparing guidelines which interpret, implement and enforce regulations; and
- 14. Providing reasonable business and technical assistance to the community.

Section 1.04 declares that all activities, persons and businesses are subject to Regulation I, unless granted a variance or specifically exempted in the regulation.

Section 1.05 provides for the appointment of an advisory council to advise and consult with the Board.

Section 2.03 adopts and incorporates certain state and federal codes and regulations that may be applicable to dairy operations.

Section 3.00 requires operations and maintenance plans to prevent avoidable emissions.

Section 4.01 requires any source with a significant emission, as defined in Table 4.01-2 to register the source annually with the agency and pay the appropriate registration fee.

Section 5.02 provides for civil penalties to be assessed to any person who violates any of the provisions of YRCAA Regulation 1, the WCAA, any permit, order or condition of approval issued by the agency up to \$12,000 per day per violation.

## APPENDIX B - POLLUTANT-SPECIFIC BEST MANAGEMENT PRACTICES

The purpose of this Appendix is to present a list of best management practices (BMPs) as they apply to reducing emissions from specific air pollutants or pollutant groups. BMPs as they apply to specific dairy operation systems are presented in Appendix C. BMP descriptions are presented in Appendix D. Factors to consider in selecting and implementing BMPs are presented in Appendix E.

## General Principles

- The principle mechanism by which most BMPs operate is to maintain conditions which
  prevent emissions of pollutants addressed by the use of the BMPs; and
- Nothing in this policy should be construed to limit the ability of an Operation to be innovative or to use effective management practices that differ from those offered in this policy.

Following is a list of various BMPs for consideration in reducing emissions from each pollutant or pollutant group. The BMPs have not been prioritized for practicality, economic feasibility, ease of use, or efficacy. These are important factors to consider in the successful selection and implementation of BMPs

## I. Ammonia (NH<sub>3</sub>)

Ammonia (NH<sub>3</sub>) is formed when urea in the urine and the urease enzyme found in feces and manure laden soil are combined together. The two hydrolyze to form NH<sub>3</sub>. The reaction is very quick and the peak to volatilization is from 2 to 10 hours. Volatilization of NH<sub>3</sub> depends primarily on four factors: the protein (N) content in the feed, manure management strategies, the pH or the manure or soil, and the meteorology in general (i.e., temperature and wind speed). The lifetime of gaseous NH<sub>3</sub> is about 24 hours, which typically deposits near its source. This deposition can lead to eutrophication of surface water, soil acidification, airborne fertilization, and changes in ecosystems.

It is the objective of an NH3 BMP to reduce  $NH_3$  emissions and thus, its negative effects. Tradeoffs in  $NH_3$  reductions must be carefully considered. Tradeoffs are actions which reduce emissions of one pollutant, but cause an increase in another pollutant emission. Tradeoffs could result due to things such as changes in pH or a shift to aerobic conditions. Therefore, the most effective method of reducing  $NH_3$  is to target the source itself. In this case, the source is nitrogen (N) input into the dairy systems. BMPs which reduce  $NH_3$  follow.

- Reduce the amount of dietary protein (N) in the ration to match, rather than exceed, the animal's needs.
- 2. Practice phase feeding.
- 3. Increase animal efficiency.
- 4. Proper ventilate buildings.
- 5. Use straw bedding in drylot pens.
- Keep animals from urinating on freestall beds.
- 7. Scrub exit air from enclosed barns with biofilters.

Comment [NME25]: Reference?

- 8. Remove manure from freestall barns and drylot pens frequently.
- 9. Modify alleyway floor surface to prevent the mixing of urine and feces.
- 10. Provide shade for cattle in drylots.
- 11. Incorporate wood chips into the surface layer of drylots.
- 12. Use surface treatments in drylots that bind or inhibit NH<sub>3</sub> such as urease inhibitors.
- 13. Maximize the removal of solids from waste influent.
- 14. Cover lagoons or allow a natural crust to form on top of the lagoon surface.
- 15. Reduce the pH of lagoons and manure piles to below 6.
- 16. Apply N fertilizer or manure directly to the soil surface or below the surface rather than on top of plant leaf or residue. Do not use broadcast sprinklers for manure application.
- 17. Inject or incorporate fertilizer or manure into soil as soon as possible after application (up to 48 hrs) or apply fertilizer in a controlled-release or stabilized form.
- 18. Apply acidic fertilizers with non-precipitating anions (ammonium nitrate or ammonium chloride) to calcareous soils and place 2 to 3 inches deep.
- 19. Apply manure during cool weather (i.e., in the morning rather than afternoon) and on still rather than windy days whenever possible.
- Analyze manure and soil prior to application to match application rates with crop requirements and soil type.
- 21. Stock only the appropriate number of animals on pasture.
- 22. Irrigate pastures immediately after grazing.

## II. Nitrous Oxide (N<sub>2</sub>O)

Emissions of  $N_2O$  result from two different biological processes. There is a very small about of  $N_2O$  produced during nitrification (the biological, aerobic process of converting ammonium to nitrate) though this source is relatively insignificant. The primary pathway of  $N_2O$  formation is the anaerobic process of denitrification (the conversion of nitrate to  $N_2$  or nitrogen gas), in which  $N_2O$  is an obligatory intermediate product. Therefore, many of the emission reduction strategies are associated with minimizing these anaerobic conditions. BMPs which reduce  $N_2O$  follow.

**Comment [NME26]:** This is a BMP for grazing cattle in pastures.

**Comment [NME27]:** These two only apply if you are including grazing into your AQMP criteria. Otherwise, delete them.

- 1. Do not apply water to dirt pens after sustained dry periods (>30 days).
- 2. Remove manure from pens at frequent intervals.
- 3. Use nitrification inhibitors such as DMPP on drylot pens.

Comment [NME28]: Define.

- 4. Manage compost so that the temperature rises above 65° C during the initial stages of composting.
- Apply nitrogen fertilizer in accordance with agronomic recommendations suggested by soil test results.
- 6. Place fertilizer or manure as close to plant roots as possible without damaging them.
- 7. Do not over-irrigate.
- 8. Avoid furrow irrigation. Use sprinklers or other uniform application system.
- 9. Use cover crops which prevent buildup of soil mineral N.
- 10. Manage stocking rates using rotational grazing.
- 11. Move cattle pastures often for uniform grazing and manage pasture plants to increase yield and nitrogen uptake.
- 12. Move water, mineral, and shade to distribute cattle evenly over the pasture.
- 13. Inject manure and/or incorporate immediately (within 48 hrs) after application.

**Comment [NME29]:** Only include if you are requiring grazing operation to have an AQMP, otherwise remove.

## III. Hydrogen Sulfide (H<sub>2</sub>S)

H<sub>2</sub>S is produced in anaerobic environments from the microbial reduction of sulfate and/or the decomposition of sulfur-containing organic matter in manure. Most atmospheric H<sub>2</sub>S is oxidized to sulfur dioxide (SO<sub>2</sub>), which is then either dry deposited or oxidized to aerosol sulfate and removed primarily by wet deposition. The residence time of H<sub>2</sub>S and its reaction products is of the order of days. BMPs which reduce H<sub>2</sub>S follow.

- 1. Properly manage and minimize overfeeding sulfur containing feeds in the diet.
- 2. Scrub exit air from enclosed barns and manure storage facilities with biofilters.
- 3. Prevent excessive manure pack build up and excess moisture.
- 4. Keep freestall beds and drylot pen surfaces dry.
- 5. Remove manure from drylots frequently.
- 6. Cover lagoons or allow a natural crust to form on top of the lagoon surface.
- 7. Encourage purple sulfur bacterial formation in anaerobic lagoons with a surface aerator or

circulator.

- 8. Compost solid manures rather than stockpile.
- 9. Inject or incorporate manure at application to an appropriate depth when soil moisture is favorable.

## IV. Volatile Organic Compounds (VOC)

VOCs vaporize easily at room temperature and include fatty acids, nitrogen heterocycles, sulfides, amines, alcohols, aliphatic aldehydes, ethers, p-cresol, mercaptans, hydrocarbons, and halocarbons. The major constituents of dairy VOC emissions that have been identified include organic sulfides, disulfides,  $C_4$  to  $C_7$  aldehydes, trimethylamine,  $C_4$  amines, quinoline, dimethylpyrazine, and  $C_3$  to  $C_6$  organic acids, along with lesser amounts of aromatic compounds and  $C_4$  to  $C_7$  alcohols, ketones, and aliphatic hydrocarbons. Fresh manure and fermentation of feedstuffs have been identified as the primary sources of VOC emissions on dairy farms. BMPs which reduce VOC emissions follow.

- 1. Properly manage and minimize overfeeding nitrogen in the diet.
- 2. Properly manage and minimize overfeeding sulfur in the diet.
- 3. Properly manage (i.e. cover, confine, and reduce leaks in silage bags) ensiled feedstuffs.
- 4. Store feed in a weatherproof storage structure during the wet season.
- 5. Remove spilled and unused feed from feeding area on a regular basis.
- 6. Remove exposed, uneaten feed from bunks within 24 hours of rain events.
- 7. Scrub exit air from enclosed barns and manure storage facilities with biofilters.
- 8. Remove manure from barns and drylot pens frequently.
- 9. Keep freestall beds and drylot pen surfaces dry.
- 10. Remove manure from barns and drylot surfaces frequently (<12 h).
- 11. Keep freestall beds stocked with fresh bedding.
- 12. Use bedding with larger particle sizes in drylots to promote aerobic conditions in fresh excreta.
- 13. Knockdown and remove fence line manure buildup so that it is never greater than 12 inches in height.
- 14. Do not store wet manure solids for more than 72 hours. Treat via compost/aeration, digestion, or anaerobic lagoon instead.
- 15. Separate solids from lagoon influent.
- 16. Cover lagoons or allow a natural crust to form on top of the lagoon surface.
- Apply manure on a frequent basis using injection or immediate (w/in 24 h) incorporation of manure.

18. Do not use sprinklers or broadcast surface application.

## V. Odor

Odor from dairies is not caused by a single species, but is rather the result of a large number of contributing compounds including  $NH_3$ , VOCs, and  $H_2S$ . Hundreds of compounds may contribute to odor from a dairy operation. A further complication is that odor involves a subjective human response. Though research is under way to relate olfactory response to individual odorous gases, odor measurement using human panels appears to be the method of choice now and for some time to come. Since odor can be caused by hundreds of compounds and is subjective in human response, estimates of odor inventories are not currently possible. Odor is a common source of complaints from people living near livestock operations, and it is for local impacts that a reliable method for odor measurement should be pursued. BMPs which reduce odor emissions follow.

- 1. Properly manage and minimize overfeeding sulfur and nitrogen containing feeds in the diet.
- 2. Cover odorous feeds such as silage and fermented feedstuffs.
- 3. Maintain the surface moisture content of drylot pens at or below 26% to minimize odor.
- 4. Remove manure from barns and pens frequently to reduce build-up.
- 5. Cover lagoons or allow a natural crust to form on top of the lagoon surface.
- 6. Compost solid manure.
- 7. Inject or incorporate manure rather than surface apply with wagon or big gun sprinkler.
- 8. Use windbreaks to trap or redirect odor.

## VI. Particulate Matter (PM)

This policy considers particulate matter as  $PM_{10}$  and  $PM_2$ . PM<sub>10</sub> is commonly defined as airborne particles with aerodynamic equivalent diameters (AEDs) less than 10 µm. Similarly, PM<sub>2.5</sub> refers to particles with aerodynamic equivalent diameters (AEDs) less than 2.5 µm. Dairies can contribute directly to primary PM through several mechanisms, including: animal activity; animal housing fans; air entrainment from soil and manure; and indirectly to secondary PM by emissions of NH<sub>3</sub>, NOx, and H<sub>2</sub>S, which are converted to aerosols through reactions in the atmosphere. Particles produced by gasto-particle conversion generally are small and fall into the PM<sub>2.5</sub> size range. Key variables affecting the emissions of PM<sub>10</sub> include the amount of mechanical and animal activity on the soil-manure surface, the moisture content of the surface, and the fraction of the surface material in the 0-10 µm size range.

The diameter of PM is critical to its health and radiative effects. PM<sub>2.5</sub> can reach and be deposited in the smallest airways (alveoli) in the lungs, whereas larger particles tend to be deposited in the upper airways of the respiratory tract. Smaller particles are also most effective in attenuating visible radiation, causing regional haze. BMPs which reduce PM emissions follow.

- 1. Do not mix feeds during windy times.
- 2. Cover feed stuffs via enclosures, feed bags, and the like.

Comment [NME30]: Many of the BMPs listed are for course (>10um) particulates. This is typically referred to as "dust". You many want to list this category for cohesiveness.

- 3. Maintain proper ventilation in closed buildings.
- 4. Maintain the surface moisture content of drylot pens at ~26% to minimize dust and odor.
- 5. Provide shade in pens to distribute manure and increase the soil moisture of the pen.
- 6. Make sure dirt pens are compact. Remove the top manure layer for drylots.
- 7. Apply surface mulches to drylots.
- 8. Keep compost moist to aid in compost process.
- 9. Store manure in a liquid form, instead of stockpiles.
- 10. Use windbreaks to trap or redirect particulates.
- 11. Reduce field traffic.
- 12. Reduce tillage, use a no-till system.
- 13. Use cover crops rather than bare/fallow field management.
- 14. Inject or incorporate manure rather than surface-apply with wagon or big gun sprinkler.
- 15. Use cross-fencing in drylot pens.

## VII. Oxides of Nitrogen (NO<sub>x</sub>)

Nitrification in aerobic soils appears to be the dominant agricultural pathway to Nitric Oxide (NO). Direct emissions of NO from dairy manure are believed to be relatively minor, but a fraction of manure nitrogen applied to soils as fertilizer can be emitted as NO.

The fraction of fertilizer nitrogen released as NO depends on the amount and form of nitrogen (reduced or oxidized) applied to soils, the vegetative cover, temperature, soil moisture, and agricultural practices such as tillage. A small fraction of other reduced nitrogen compounds in animal manure can also be converted to NO by microbial action in soils.

NO and nitrogen dioxide (NO<sub>2</sub>) are rapidly interconverted in the atmosphere and the sum of all oxidized nitrogen species (except  $N_2O$ ) in the atmosphere is often referred to as  $NO_X$ . The residence time of  $NO_X$  is of the order of days in the lower atmosphere, with the principal removal mechanism involving wet and dry deposition. In terms of environmental effects,  $NO_X$  is an important (and often limiting) precursor in tropospheric ozone (O<sub>3</sub>) production. Furthermore,  $NO_3^-$  aerosol is a contributor to PM2.5, and nitrogen deposition in the forms of HNO<sub>3</sub>, and aerosol  $NO_3^-$  can have ecological consequences. Following are BMPs which reduce emissions of  $NO_X$ .

- 1. Replace or retrofit internal combustion engines.
- 2. Utilize alternatives to outdoor burning.

### VIII. Methane (CH<sub>4</sub>)

Comment [NME31]: While I agree with both of these BMPs, you didn't mention them anywhere in your introduction above. You may want to give a leading introduction to the contribution of combustion processes and burning to NOx.

CH<sub>4</sub> is produced by microbial degradation of organic matter under anaerobic conditions. The primary source of CH<sub>4</sub> from livestock production is enteric fermentation in ruminant animals. Ruminants (sheep, goats, camels, cattle, and buffalo) have unique, four-chambered stomachs. In one chamber, called the rumen, bacteria break down grasses and other feedstuff and generate CH<sub>4</sub> as one of several byproducts. The production rate of CH<sub>4</sub> is affected by energy intake, which is in turn affected by several factors such as quantity and quality of feed, animal body weight, and age.

CH<sub>4</sub> is also emitted during anaerobic microbial decomposition of manure. The most important factor affecting the amount produced is how the manure is managed, because some types of storage and treatment systems promote an oxygen-depleted (anaerobic) environment. Metabolic processes of methanogens lead to CH<sub>4</sub> production at all stages of manure handling. Liquid systems tend to encourage anaerobic conditions and produce significant quantities of CH<sub>4</sub>, while more aerobic solid waste management approaches may produce little or none. Higher temperatures and moist conditions also promote CH<sub>4</sub> production.

Methane is destroyed in the atmosphere by reaction with the hydroxyl (•OH) radical. Because of its long residence time (~8.4 years), CH<sub>4</sub> becomes distributed globally. Methane is a greenhouse gas and contributes to global warming with a potential 23 times that of CO<sub>2</sub>. Following are BMPs which reduce emissions of CH<sub>4</sub>.

- 1. Increase the level of starch in the diet.
- 2. Scrub exit air from enclosed barns and manure storage facilities with biofilters.
- 3. Remove manure from freestall barns and drylot pens frequently.
- 4. Do not stockpile manure under anaerobic conditions.
- 5. Separate solids from lagoon influent.
- 6. Cover lagoons or allow a natural crust to form on top of the lagoon surface.
- 7. Scrub exit air from enclosed barns and manure storage facilities with biofilters.
- 8. Install and properly maintain a methane digester.

### APPENDIX C – SYSTEM-SPECIFIC BEST MANAGEMENT PRACTICES

The purpose of this Appendix is to present a list of BMPs as they apply to reducing emissions from specific dairy systems. BMP descriptions are presented in Appendix D. Factors to consider in selecting and implementing BMPs are presented in Appendix E.

### I. Nutrition

- 1. Reduce the Amount of Dietary Protein (N) in the Ration to Match, Rather than Exceed, the Animal's Needs.
- 2. Increase the Level of Starch in the Diet.
- 3. Properly Manage and Minimize Overfeeding of Sulfur-containing Feed.
- 4. Practice Phase-Feeding.
- 5. Increase Animal Efficiency.

## II. Feed Management

- 1. Properly Manage Ensiled Feedstuffs.
- 2. Store Feed in a Weatherproof Storage Structure During the Wet Season.
- 3. Remove Spilled and Unused Feed from Feeding Area.
- 4. Do Not Mix Feed During Windy Times.

## III. Housing - Freestall Barns

- 1. Ensure Proper Ventilation.
- 2. Scrub Exit Air from Enclosed Buildings.
- 3. Properly Manage Bedding by Type and Stocking Rate.
- 4. Use Large Particle Bedding Material in Drylot Pens.
- 5. Design Freestalls to Limit Urinating on Bedding Material.
- 6. Treat Recycled Lagoon Water Used for Flushing.
- 7. Remove Manure from Barns Frequently.
- 8. Modify Alleyway Floors to Separate Urine and Feces.

## IV. Housing - Drylot Pens

- 1. Provide Shade for Cattle.
- 2. Remove Manure Frequently.
- 3. Use Straw Bedding.
- 4. Incorporate Wood Chips in Surface Layer.
- 5. Use Surface Treatments that Bind or Inhibit NH<sub>3</sub>.
- 6. Use Nitrification Inhibitors.
- 7. Avoid Over-application of Water to Pen Surface After Sustained Dry Periods.
- 8. Avoid Standing Water.
- 9. Maintain the Surface Moisture Content at or Below 26%.
- 10. Knock Down and Remove Fence Line Manure.

# V. Grazing Management

- 1. Stock Appropriate Number of Animals.
- 2. Use Rotational Grazing.
- 3. Move Water and Feeding Areas Frequently.
- 4. Lightly Irrigate Immediately after Grazing.
- 5. Manage Pasture Plants to Increase Yield and Nitrogen Uptake.
- 6. Inject Manure into Pasture.

### VI. Manure Management

- 1. Maximize Removal of Solids from the Waste Stream.
- 2. Cover or Allow Crust on Lagoon.
- 3. Maintain Covered Lagoons to Prevent Leakage.
- 4. Scrub Exhaust of Enclosed Waste Containers.
- 5. Install and Properly Maintain a Methane Digester.
- 6. Reduce the pH of Lagoons and Manure Piles Below 6.

**Comment [NME32]:** Again, only include this section if grazing is included in an AQMP.

- 7. Manage Compost Temperature and Moisture Levels.
- 8. Prevent Excess Manure Build-up and Moisture.
- 9. Encourage Purple Sulfur Bacterial Formation in Anaerobic Lagoons.
- 10. Compost Solid Manure.

## VII. Land Application - Fertilizer

- Apply N Fertilizer Directly to or Below the Surface Rather Than on Top of No-Till Residue.
- 2. Inject or Incorporate Fertilizer into Soil within 24 Hours of Application.
- 3. Apply Liquid Urea Instead of Granular Urea.
- 4. Apply Acidic Fertilizers to Calcareous Soils and Place 2 to 3 Inches Deep.
- 5. Use Urease Inhibitors.
- 6. Apply Ammonia Fertilizer Only to Acidic Soils.
- 7. Apply N Fertilizer According to Agronomic Recommendations Based on Soil Test Results.
- 8. Place Fertilizer as Close as Possible to (without damaging) Plant Roots.

## **VIII.Land Application - Manure**

- 1. Analyze Manure and Soil and Match Application Rates to Crop Requirements and Soil Type.
- 2. Do Not Over-irrigate.
- 3. Avoid Furrow Irrigation, Switch to Sprinklers or a More Uniform Application System.
- 4. Utilize Cover Crops.
- 5. Apply Using Injection or Incorporate within 24 Hours.
- 6. Apply During Cool Weather and on Still Rather than Windy Days.
- 7. Dilute with Irrigation or Rain Water.

8. Use Windbreaks to Trap or Redirect Odor and PM.

Response: All comments were regarding policy content. Each comment was evaluated individually and many resulted in changes the original text.

## Commenter #2

## **Comment # 2.C1:**

I have lived in the Yakima Valley for 40 plus years and am glad to finally see some attention given to the effects of the large Dairy operations on our clean air and quality of life. I have a 1000 cow dairy ½ mile east of me and 900 FT. East of my Mother's home. When they spray to brown lagoon water I cannot even go out in my yard. We have an office located at my Mothers farm and one cannot open the doors because of the stench and Flies. Even when the brown water is not being sprayed one smells the lagoons constantly. Especially with our consistent westerly winds. The nitrate levels at my Mother's home well have been climbing. The latest MCL is 19.7 well above the 10 MCL threshold.

This is but one example of the effects of the large concentration of Cows in the lower Yakima Valley. All one need to do is drive from Yakima to the lower Valley and you notice the consistent smell that permeates the Lower Valley when you approach Granger. I agree that everyone deserves the right to make a living, but when it negatively effects the quality of many individuals' lives and our drinking water there needs to be checks and balances developed.

It is my hope that serious consideration is given to addressing the many issues that the Large Dairy operations are causing.

## No Response

#### Commenter #3

## Comment #3.B1:

Why is there not one public member, or environmental representative or legitimate health representative on the Clean Air task force working with the dangers of Dairy feedlot emissions in Yakima County?

Response: Participants in the YRCAA Dairy Emissions Work Group were chosen by the Air Pollution Control Officer to best accomplish the purpose of the Work Group.

## Comment #3.B2:

Why is the Yakama Nation not included on these proceedings?

Response: The Work Group now includes a representative of the Yakama Nation.

## Comment #3.C1:

list?

No Response

## Comment #3.B3:

How can you say you represent all people when there are no public members represented?

Response: It is because we represent all people that YRCAA is undertaking this effort.

#### **Comment #3.B4:**

Why was Tony Veiga invited as a stakeholder?

Response: He represents members of the Washington State Dairy Federation.

### Comment #3.C2:

This is an environmental Justice issue.

## No Response

#### **Comment #3.C3:**

How is it legal or fair to exclude the public with your negotiations on the affects of CAFOs in the Yakima Valley?

## No Response

#### Comment #3.C4:

We do not believe the Yakima Valley Clean Air board is qualified to represent the public.

## No Response

## Comment #3.B5:

We are formally requesting a Seattle EPA, Environmental Justice representative be allowed to be part of Clean Air Proceedings along with two public representatives. Response: Such a request should be made by you directly to EPA.

## **Comment #3.A1:**

A public comment period is not sufficienct enough.

Response: Although this pilot project is not a rule, the same 30-day comment period is all that is required for rulemaking per RCW 34.05.

## Commenter #4

#### Comment #4.C1

I have read the *Air Quality Management Policy and Best Management Practices for Dairy Operations* several times and am submitting my comments for your consideration.

First and foremost let me propose an analogy. As a practicing Catholic it is heart breaking for me to tithe every Sunday, knowing that much of this money will be spent defending the Church in court and compensating victims of abuse by a handful of wicked priests. I think we have a similar situation here. For my purposes I will use the term *Rogue Dairymen* to describe those farmers who have no sense of human decency, who spray manure into the air during 30 mph winds, who poison birds and drop them onto their neighbors homes, who dispose of diseased calves by dumping them on public lands or the waterways in the dead of night. If it were not for the *Rogue Dairymen* we would, in my opinion, not require these contentious discussions at all.

It appears to me that the dairy industry desires collegial discussions over best practices for air quality management. Those discussions have a place. However, this document, in my mind, is first and foremost a way to protect the public health in a civilized manner. With that in mind policies must be clear, measurable and impose accountability. The intent of the Washington Clean Air Act "is to protect human health and safety, including the most sensitive members of the population." Highlighting the most sensitive members

of the population really places high expectations on the Yakima Clean Air Authority. Please remember that I have both *Rogue Dairymen* and dying children in mind when my words appear harsh.

## No Response

## **Critique of the Best Management Practices**

### Comment #4.A1

Is the AQMP any different from the BMP's already in place for dairies in Washington State?

Response: YRCAA is not fully aware of BMPs already in place. Implementation of this policy will discover which BMPs are already in place.

### Comment #4.C2

Is there discussion about coordinating inspections conducted by the WSDA and the YRCAA, and if so, what are the implications for public safety?

## No Response

### Comment #4.A2

It appears that the WSDA has had problems funding their inspection program. How will this be different for the YRCAA?

Response: Dairies will pay a fee adequate to fund YRCAA work.

### Comment #4.A3

Air Quality research considers carbon dioxide, nitrous oxides and methane to be the major contributors to greenhouse gasses. Should carbon dioxide be included in the Air Quality Management Policy and Best Management Practices for Dairy Operations? Response: YRCAA selected only those GHGs with the greatest warming potential, nitrous oxide and methane.

## Comment #4.A4

There have been situations in which large herds of cattle have been "depopulated" due to disease. Is there an air quality plan to address pollution if large numbers of animals are incinerated?

Response: State regulations require best available control technology for incineration.

#### Comment #4.C3

LeBlanc et al,(2006) state, "The high density of cattle within farms, increasing concentration of dairy farms in regional clusters, and the movement of animals at different stages of life and within the production cycle may increase the propagation of infectious disease within and between farms." What is the status of testing for disease on the dairies of the Yakima Valley?

## No Response

## Comment #4.A5

Is there a focus of BMP's that requires education of dairy workers so that they do not carry infectious diseases to their families and communities?

Response: No, worker safety and public health are addressed by other state agencies.

In Appendix B, Section IV- Volatile Organic Compounds the Best Management Practices are:

### Comment #4.A6

1. Properly manage and minimized overfeeding nitrogen in the diet. *How will YRCAA* assess this practice?

Response: Actual observation and/or review of recordkeeping.

## Comment #4A7

2. Properly manage and minimize overfeeding sulfur in the diet. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

### Comment #4.A8

3 Properly manage (i.e. cover, confine, and reduce leaks in silage bags) ensiled feedstuffs. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

#### Comment #4.A9

4. Store feed in a weatherproof storage structure during the wet season. *How will YRCAA* assess this practice?

Response: Actual observation and/or review of recordkeeping.

### Comment #4.A10

5. Remove spilled and unused feed from feeding area on a regular basis (at least once every 2 weeks). *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

## **Comment #4.A11**

6. Remove uneaten feed from bunks within 24 hours of rain events. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

## **Comment #4.A12**

7. Scrub exit air from enclosed barns and manure storage facilities with biofilters. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

## **Comment #4.A13**

8. Remove manure from barns and drylots frequently. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

## **Comment #4.A14**

9. Keep freestall beds and drylot pen surfaces dry. *How will YRCAA assess this practice?* Response: Actual observation and/or review of recordkeeping.

## Comment #4.A15

10 Remove manure from barns and drylot surfaces frequently (<12 H). How will YRCAA assess this practice?

Response: Actual observation and/or review of recordkeeping.

### Comment #4.A16

11. Keep freestall beds stocked with fresh bedding. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

### **Comment #4.A17**

12. Use bedding with larger particle sizes to promote aerobic conditions in fresh excrets. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

### **Comment #4.A18**

13. Knockdown and remove fence line manure buildup so that it is never greater than 12 inches in height. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

#### **Comment #4.A19**

14. Do not store wet manure solids for more than 72 hours. Treat via compost/aeration, digestion, or anaerobic lagoon instead. *How will YRCAA assess this practice?*Response: Actual observation and/or review of recordkeeping.

## **Comment #4.A20**

15. Separate solids from lagoon influent. *How will YRCAA assess this practice?* Response: Actual observation and/or review of recordkeeping.

## Comment #4.A21

16. Cover lagoons or allow a natural crust to form on top of the lagoon surface. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

### **Comment #4.A22**

17. Apply manure on a frequent basis using injection or immediate (w/in 24H) incorporation of manure. *How will YRCAA assess this practice?* Response: Actual observation and/or review of recordkeeping.

#### Comment #4.A23

18. Do not use sprinklers or broadcast surface application. *How will YRCAA assess this practice?* 

Response: Actual observation and/or review of recordkeeping.

## **Enforcement of the Best Management Practices**

## Comment #4.A24

Section III. 1. "A Dairy Operation must prepare an Air Quality Management Plan and submit it to YRCAA for approval, along with completed annual registration forms, and pay a fee." The Yakima Clean Air Authority has publicly stated that they lack the expertise to determine whether broadcasting manure into the air during heavy winds is

dangerous to the public health. How will the YRCAA analyze these documents in order to approve them for effectiveness?

Response: See Section IX.

### **Comment #4.A25**

Section III. 3. "YRCAA and the dairy operators are expected to work together in good faith toward development of an AQMP which is acceptable to both the Operation and the YRCAA" Can you insert language that addresses the Rogue Dairymen? For example, if a dairyman makes false statements to the YRCAA, how will this be handled?

Response: No, it is common knowledge that making false or misleading statements to this agency is a violation of state (WAC 173-400-105(7)) and YRCAA (Regulation 1, 1.07.B.1) regulations.

### **Comment #4.A26**

"Should a dispute arise as to compliance with this policy, YRCAA may request the dairy workgroup that developed this policy to review the dispute and provide input as to an acceptable outcome" I recall discussion at one of the monthly meetings for the YRCAA Board regarding the status of the working group. This statement gives that group a great deal of regulatory and judicial authority. Is that the intent?

Response: The authority given to the work group is limited to providing input. No decision-making authority is given.

### **Comment #4.A27**

Section VI. 2. "Failure of the YRCAA to notify the Operation or request additional information shall constitute approval." It is unfair to keep an operation waiting for approval for an extended period of time. However, thirty days is not very long. Given the YRCAA's acknowledged lack of expertise in dairy operations, the possibility that a hazardous facility could receive approval by default exists.

Response: First, YRCAA staff and the Air Pollution Control Officer have a combined experience of over 50 years of dealing with dairy operations. Second, anything is possible, but what you suggest is highly unlikely. YRCAA staff have been doing what we do successfully for over 42 years.

## **Comment #4.A28**

Section VI. 5. "The purpose of good faith negotiation is to share information and resolve differences of opinion regarding an Operator's AQMP. Both the Operator and YRCAA need to be able to exchange information freely and in good faith. Information obtained by YRCAA in the course of negotiation is not obtained for the purpose of any future enforcement activity." This is a compelling but idealistic model. Keeping Rogue Dairymen in mind, can you define Good Faith?

Response: *Honesty; a sincere intention to deal fairly with others.* 

I believe there is precedent in labor law. From my point of view the following constitute a lack of Good Faith:

- **4.A28.a** Giving false testimony or false statements to the YRCAA or the public
- **4.A28.b** Concealing relevant information
- **4.A28.c** Intimidation of potential witnesses to hazardous practices
- **4.A28.d** Bribery or coercion (These need to be defined)

Response: YRCAA agrees.

### **Comment #4.A29**

Section IX. 1. "Compliance – After an AQMP has been approved, on Operation will be inspected to determine if the BMPs and their operational plans are in effect." Who will conduct the inspections, how often and how will this be funded? "

Response: YRCAA staff, no less than once per year, funded by fees remitted with the AQMP.

## **Comment #4.A30**

If inspection determines that the AQMP is not fully implemented or reasonable precautions are not being taken to prevent emissions, a Notice of Violation may be issued." What happens if the Operation chooses to ignore the Notice of Violation? Response: Depending on the specifics of the case, a civil penalty may be issued.

#### **Comment #4.A31**

Section IX. 2. "Effectiveness – After the plan is in place, inspection results may be used to evaluate the effectiveness of the plan in reducing emissions. If inspection indicates that the plan is not effective, YRCAA will request information from the Operation or propose additional or alternative BMPs." Will this evaluation be done based on analysis of air quality or assessing implementation of BMPs based on paper work or by some other method? It appears that this section needs clarification.

Response: The evaluation will be accomplished as any of the 325+ other full compliance evaluations conducted by YRCAA annually and will be based on credible evidence.

## Hazards to the Public Health

## Comment #4.C4

Please let me contribute some information describing zoonotic disease relevant to confined animal feeding operations and most specifically dairy operations. The Dairy Industry acknowledges the following pathogens that may cause infectious diseases on the farm:

- Mycobacterium avium sp. paratuberculosis which causes Johnes disease.
- Salmonella
- E. coli
- Rotavirus
- Coronavirus
- Coccidiosis
- Cryptosporidiosis
- Leptospiriosis
- Clostridial Disease
- Mycoplasma which causes tuberculosis
- Contagious mastitis often a staphylococcus aureus
- Foot & Mouth Disease
- Bovine Viral Diarrhea (BVD)
- Infectious Bovine Rhinotracheitis (IBR)
- Bovine Respiratory Syncytial virus (BRSV)
- Bovine Leukemia Virus (BLV)

#### Clostridial Disease

Many of these infections can be passed on to humans.

## No Response

## Comment #4.C5

Here is some relevant information with source citings.

#### **Bovine Tuberculosis**

In January 2008, animal health officials from USDA and the California Department of Food and Agriculture (CDFA) expanded the epidemiological investigation of a large central California dairy herd that was infected with bovine tuberculosis (TB). The disease confirmation was made in December 2007 following whole-herd tuberculin skin testing. The herd, composed of 5,016 dairy cattle, was depopulated.

The ensuing investigation of this index herd resulted in the identification of 3,209 potentially exposed cattle that had moved to 143 other premises or to slaughter before officials knew that the herd was infected. Additional investigations to determine the origin of this herd's infection identified 110 cattle from 56 premises as potential sources for the disease. Epidemiological investigations conducted on the index herd during 2008 identified two other large dairy herds in California as TB-infected. One of these herds, which contained 1,014 dairy cattle, was depopulated. The other herd, composed of more than 12,000 cattle, is undergoing a test-and-removal program to rid the herd of TB. The resulting investigations of these 2 herds identified at least 14,410 potentially exposed cattle that, between 2003 and 2008, had moved to 354 other premises or to slaughter (whereupon they were subject to inspection by USDA's Food Safety and Inspection Service to ensure food safety). These movements required investigatory activities in 16 U.S. States and Canada.

During calendar year (CY) 2008, USDA and CDFA officials conducted 271 herd tests for TB involving more than 377,000 cattle in California alone in response to this outbreak. Nearly \$20 million in Federal funds was used to purchase known exposed cattle, depopulate infected herds, and cover expenses for personnel assigned to conduct herd testing, epidemiological investigations, and identification.

Epidemiological investigations and further herd test activities continue in 2009.

2008, USDA Animal Health Report

### Salmonella

Eleven characteristics of Salmonella and salmonellosis to keep in mind

- 1. Salmonella infection of a farm is maintained primarily by transmission of the agent from the feces of infected animals to the mouths of susceptible animals.
- 2. Salmonella infection and subsequent clinical disease (the two are not synonymous) is a result of:
- 1) The innate resistance of the host animal.
- 2) The infectious dose received by the animal.

- 3) The infectivity and virulence of the particular strain of the organism.
- 3. Salmonella infects anything in the livestock environment that has an intestinal tract.
- 4. The majority of salmonella infections in a herd over time are subclinical; the clinical infections are only the tip of the iceberg, even during outbreaks of clinical disease.
- 5. Septicemic animals shed the agent in oral and nasal secretions and urine as well as feces. These animals don't necessarily have clinical signs associated with enteric salmonellosis at the time.
- 6. Salmonella has a complex relationship with its animal host, which is only beginning to be understood.
- 7. Salmonella are a small part of an extremely competitive, complex, dynamic microbial environment in intestinal tracts and this competition is a very important part in resistance to infection.
- 8. Salmonella are usually killed by exposure to the volatile fatty acids of fully functioning normal rumens.
- 9. Salmonella survives for long periods under environmental conditions common on the livestock farm.
- 10. Salmonella replicates in moist environments (< 85% dry matter) even with scarce nutrients.
- 11. Salmonella Typhimurium DT104 in livestock is a significant zoonotic disease risk for in-contact people, particularly young children.

(Washington State University, 2009)

### Johne's Prevalence is Up Dramatically!

According to USDA, 22 percent of U.S. dairy herds were infected in 1996 with Mycobacterium paratuberculosis, the cause of Johne's disease. That number jumped to 68 percent in 2007. Among herds with 500+ cows, the number of infected herds is at an alarming 95 percent. Random sourcing for dairy replacements in expanding herds is a major contributor to this significant increase.

Healthy Cows for a Healthy Future in Johne's Disease Newsletter 2010

## Infectious Diseases in Humans in Yakima County

## Campylobacteriosis

Rates per 100,000 population	2003	2004	2005	2006	2007
Yakima County	53.1	38.7	50.6	87.1	52.7
Washington State	15.5	14	16.7	15.6	15.7

## Cryptosporidiosis

Rates per 100,000 population	2003	2004	2005	2006	2007
Yakima County	< 5 cases < 5 cases		3.1	2.6	6.4
Washington State Giardiasis	1.1	1	1.5	1.5	2.1
Rate per 100,000	2003	2004	2005	2006	2007
Yakima County	11.5	12.7	12.2	13.4	20.1
Washington State	7.1	7.2	7	7.1	9.1

## Salmonellosis (Non-Typhoid)

Cases per 100,000 population	2003	2004	2005	2006	2007
Yakima County	24.3	15.4	22.7	14.7	14.5
Washington State	11.5	10.7	10	9.8	11.7

From the 2007 Washington State Communicable Disease Report

No Response

## **Economics – Who pays the price?**

## Comment #4.C6

Do the dairies of the Yakima Valley provide health insurance for workers and their families?

No Response

## Comment #4.C7

Tuberculosis and multi-drug resistant tuberculosis are major health concerns. The Mycobacterium organism can live for up to eight weeks in moist feces and is most often an airborne infection. The signs and symptoms of the disease may not emerge until years after exposure. Government, and in our case county government, is mandated to pay for treatment. A single case of multi-drug resistant TB can cost tax payers a million dollars a year.

No Response

## Comment #4.C8

Do dairies test workers for various zoonotic diseases?

## No Response

### Comment #4.C9

If there is an outbreak of contagious disease in a local dairy herd, who is responsible for measures to protect the public health?

## No Response

### Comment #4.C10

What measures are in place to deal with "depopulation" of thousands of cattle in Yakima County and who pays for these actions?

## No Response

#### Comment #4.C11

## **Concluding Remarks**

I thank everyone who has taken the time to read my contribution to the discussion regarding the *Air Quality Management Policy and Best Management Practices for Dairy Operations* in the Yakima Valley. This work required many hours of research. Please consider this a community contribution to the analysis with scientific weight that equals the work, whether paid or voluntary, that has been contributed from the agricultural sector.

## References

Chalk, P. (2001) The US Agricultural Sector: A New Target for Terrorism? *Rand Objective Analysis. Effective Solutions*. Retrieved from <a href="https://www.rand.org">www.rand.org</a>

Gay, J.M. (1999, updated 2009) Bovine Herd Salmonellosis. Field Investigation Unit. Washington State University. Retrieved from www.vetmed.wsu.edu

Johne's Disease Newsletter (2010) Voluntary Johne's Disease Control Program Revised. Retrieved from www.agr.wa.gov

LeBlanc, S.J., Lissermore, K.D., Kelton, D.F. Duffield, T.F. & Leslie, K.E. (2006) Major Advances in Disease Prevention in Dairy Cattle. *Journal of Dairy Science* (89) pp. 1267-1279.

U.S. Department of Agriculture. (2010) Questions and Answers about Johne's Disease in Cattle. Retrieved from <a href="https://www.aphis.usda.gov/publications/.../faq">www.aphis.usda.gov/publications/.../faq</a> **johnes cattle**3-06.pdf

U.S. Department of Agriculture (2009) 2008 Animal Health Report. *Agricultural Animal and Plant Health Inspection Service Veterinary Services Centers for Epidemiology and Animal Health*. Retrieved from <a href="http://USanimalhealth.aphis.usda.gov">http://USanimalhealth.aphis.usda.gov</a>

Washington State Department of Health (2008) 2007 Washington State Communicable Disease Report. Retrieved from <a href="https://www.doh.wa.gov">www.doh.wa.gov</a>

## No Response

### Commenter #5

I am a farmer residing and operating in the western end of Benton County. I spend a great deal of time doing business in and out of the eastern end of Yakima County and, as a result, travel past several 500+ cow dairy operations. It is with significant pleasure that I come to realize you and the YRCAA are trying to address the issue of emissions from these operations. I have repeatedly experienced such overwhelming ureaic emissions along the county road as to cause me concern over whether I was even going to manage to exit the other end of the cloud. In my personal opinion these emissions are often so bad as to present a driving hazard. I would like to point out that these experiences came in direct connection with the sprinkler application of liquid wastes at the dairy sites. Somehow that aeration process or the spraying of that waste through the circulating air and especially during the warmth of Summer exaccerbates the already bad situation at hand. These experiences have only served to make me wonder how people living in homes within such emission areas can even tolerate it. Their lives and fortunes have been affected in many instances. In light of a general acceptance of the issue of people suffering from second hand smoke from a cigarette smoker, we definitely face a situation with these dairy emissions of something far more hazardous to the health.

## Comment #5.A1

I would leave it to your expertise to address the greater issues but offer this letter as a suggestion that all sprinkler application of liquid wastes be ended as a matter of public health, itself.

Response: YRCAA supports your suggestion and BMPs to that effect are on the list in the policy appendices.

### Commenter #6

### Comment #6.A1

1. The copy of the draft on Dairy Emissions does not include an enforcement section. Is there such a thing? The entire document reads as to what "should" be done and what "should be" contained in Best Management Practices but I see these statements as ideals rather than "shall be" "must be" and will be enforced and by whom? The Purpose of the Policy section states the policy is to..."provide guidance for effective prevention and control of air contaminant emissions at dairy operations."

ADD "enforcement" after guidance.

Response: During the pilot project phase of the policy-making, enforcement of the policy is not contemplated. However, violation of existing regulations may be addressed by enforcement action.

## Comment #6.A2

2. Section V: What must be contained in an AQMP (Air Quality Management Plan). The proposed policy suggests that a description of the area via a map, aerial photo or

drawing is adequate. My suggestion is that the dairy owners/operators must be required to obtain and provide this information by using Geographic Information System software (GIS). This system will provide much more detailed geographical information such as distance to schools, recreation areas, residences, rivers, streams and wells for the dairy operation. It is the absence of this specific information that has allowed dairies to contaminate air and water and therefore dump their raw untested manure wherever there appears to be an open field, particularly on the Yakama Nation Reservation.

Response: YRCAA supports your suggestion.

### Comment #6.C1

If the Best Management Practices are to become believable, they must include ALL aspects of the dairy operation which definitely includes the dumping of dead animals and manure. Presently,once the manure is dumped, it is no longer the responsibility of the dairy operator/owner; therefore a Best Management Practice must include origination and destination.

## No Response

#### Comment #6.A3

3. Disputes are to be resolved by the dairy work group that developed this policy? This does not comport with environmental justice practices nor good common sense. The Yakima Regional Clean Air Agency can not be a partner to the dairies and then be counted on for enforcement or resolution of disputes.

Response: The authority given to the work group is limited to providing input. No decision-making authority is given.

## Comment #6.B1

4. FINAL COMMENT: The stated VISION of the Yakima Clean Air Organization is "An unceasing commitment to build and maintain partnerships in the continuous improvement of air quality for all [emphasis added]current and future generations in Yakima County." Why was the Public not considered to be part of the partnership building of the group that developed this policy? Elsewhere in your agency's mission it is stated ..."Constituency is made up of private individuals, business and industry and public offices."

The exclusion of the public in the development of this policy is an egregious practice and an absolute violation of your own stated VISION and CONSTITUENCY. This policy development smacks of cronyism and a perpetuation of the "good old boys" network. Permitting a few weeks of public comment does not constitute public input. Furthermore, denying the public participation in the policy development is not a Best Management Practice for a Governmental entity.

Response: Although this pilot project is not a rule, the same 30-day comment period is all that is required for rulemaking per RCW 34.05.

## Commenter #7

I have read the policy document and I think you have done a great job. I am sorry I did not realize the process was moving a long this quickly - otherwise, I would have tried to give you some feedback a lot earlier. In any event, I have three main points that I wanted to bring to your attention:

#### Comment #7.A1

1. Background: You seem to indicate a threshold herd size of 500 cows. I think it is important to include all dairies at this point until we have more information on what size of operations needs to be exempted from regulations. If all the producers did their bit to control emissions, the sum total would be GREAT!

Response: The policy text has been changed to include all dairies.

### Comment #7.A2

2. Pollutants to be addressed: In my opinion, this list is too long. If this policy focused on a few pollutants that either regulated (e.g. ammonia and hydrogen sulfide) or that distort citizens perception (e.g. particulate matter and odor), that approach may be more effective. The rest could be incorporated in future in steps depending need. On the other hand, controlling these four pollutants will effectively control emissions of all others. Response: YRCAA included all pollutants listed as pollutants of concern in the 2003 National Academy of Sciences Report. Diaries may choose to target any or all of the pollutants.

## **Comment #7.A3**

3. How compliance and effectiveness will be determined: This is likely to be problematic because it is SUBJECTIVE! The producers could implement all the BMPs on the list but will not be in a position to demonstrate (or know) how much they have reduced the respective emissions, i.e. will not be sure when they are in compliance or not. In the same breath, the AGENCY will be in a similar dilemma. I am not sure if the workgroup considered the 'point system' introduced in Idaho a few years ago. In this approach, every BMP was assigned 'points' and compliance was reached when the producer had earned a predetermined number of points based on which BMPs were implement on their operation. The workgroup may want to study the Idaho system some more.

Response: A point system is under development and will be tested during the pilot phase of the policy development.

## Commenter #8

### Comment #8.B1

Leaving the public out of these proceedings was a travesty! Response: The public was not left out of these proceedings.

## Comment #8.B2

You claim that having the public involved in the Clean Air Task Force proceedings would have somehow interfered with a consensus. What you seem to be saying is that there is a conflict of interest between the CAFO/dairy industry and the public which would slow the proceedings? Hogwash! I thought we lived in a democracy where all entities had an EQUAL say!

Response: Your opinion is welcomed and important.

## Comment #8.B3

Why not leave the CAFO/dairy industry out of the proceedings rather than the taxpaying/impacted public?? That would speed things up!

Response: Your opinion is welcomed and important.

#### Comment #8.C1

Leaving the public out of the proceedings would lead one to think that our local government officials are in bed with the industry. Perhaps it is time for the Feds to step in again as they did with the water contamination issue, then perhaps we would get some equal representation and reasonable action to protect the public.

## No Response

### Comment #8.B4

Comments from the public AFTER policy has been formulated by the industry and local government is not equal representation and should not be tolerated by the public or public servants.

Response: Although this pilot project is not a rule, the same 30-day comment period is all that is required for rulemaking per RCW 34.05.

### Commenter #9

Comments on YRCAA Draft Air Quality Management Policy and Best Management Practices For Dairy Operations

#### Comment #9.A1

Leading up to the creation of the Dairy Emissions Workgroup and the YRCAA Draft Air Quality Management Policy and Best Management Practices For Dairy Operations I asked Mr. Pruitt in May of 2010 to "consult with a recognized third-party expert to determine what constitutes substantial adverse effect on public health as per RCW 70.94.640 from odors and fecal dust".

His reply was "Bear in mind that if a violation is determined, we must consult with a recognized third-party expert in the activity prior to issuing any notice of violation."

What determines "substantial adverse effect on public health" and what determines if a violation is determined and by who? YRCAA or a third party? This needs to be clarified in your policy.

Response: This subject is not intended to be addressed by the policy. Substantial adverse effect on public health should be determined by a person with public health expertise.

**Comment #9.C1.a** Are there any off site monitors in place in the lower valley to measure and record fecal dust from the dairies going into the neighboring homes? **No Response** 

**Comment #9.C1.b** If there are none are you going to install some? **No Response** 

**Comment #9.C1.c** Are there any off site monitors in place in the lower valley to measure and record offsite odors and VOC, some of which are odorless?

No Response

**Comment #9.C1.d** Does YRCAA have any test equipment capable of testing for fecal dust, odor or VOC coming offsite into the neighboring homes?

## No Response

#### Comment #9.A2

If the answer is no, what are you going to use for a base line to measure your successes or failure of your BMPs?

Response: See Section IX.

### Comment #9.A3

There is nothing in your plan to control offsite drift of fecal matter dust, odor or VOC. How do you plan on controlling offsite drift of fecal matter dust, odor or VOC? Response: BMPs will prevent, not control, emissions.

**Comment #9.C2.a** Dust and odor does not wait around for hours and days for YRCAA to come out and investigate. How will it be investigated?

## No Response

Comment #9.C2.b Are odor complaints, pictures and video of fecal dust by the neighbors good enough to warrant a violation or does YRCAA have to see and smell it? Remember Hydrogen Sulfide (H2S) paralyzes the nerve cells of the nose to the point where your inspector would not be able to smell the gas. Methane (CH4) is extremely difficult to detect without gas detection instruments because it is odorless and again your inspector will not be able to smell it.

## No Response

**Comment #9.C2.c** Are you going to install offsite testing monitors and are YRCAA inspectors going to have portable test equipment? Having your inspectors measuring odor and gases using their noses is not going to work. In fact it could make them sick and is probably illegal for you to send them out without protective clothing and masks.

## No Response

**Comment #9.A4.a** All dairies are required to have a NMP which is unique to each dairy. Are you going to verify the BMPs for each dairy against their NMP to insure there is no conflict between their NMP and your BMPs for that particular dairy?

Response: BMPs which prevent air emissions will have no effect on NMP activities.

**Comment #9.A4.b** Also Yakima County has placed requirements against dairies in their MDNS. Are you going to verify your BMPs for that particular dairy against the MDNS from Yakima County?

Response: No.

## Comment #9.B1

Are these documents and BMPs going to be in Spanish also? We have a large population of Latinos who also need to know what is going on in this valley.

Response: YRCAA has no such plan.

## Commenter #10

#### Comment #10.C1

I think it's about time something is done to control the emissions from dairies – there are too many animals in a space and that needs to be changed. The air (just as water) belongs to all of us and the consumer should be protected from harm. I think this is the role of the Clean Air Agency. There must be cooperation with the dairy industry but at the same time Clean Air must be sure to enforce regulations and protect the people of this valley. The dairy industry cannot be trusted to enforce itself – it won't happen.

## No Response

## Commenter #11

Comment #11.A1 The scoring of BMPs is important not only because it gives us a more objective guide, but also because it tells us the degree of importance you place on specific BMPs. I anticipate we may disagree on some, and the dialogue that results should lead to improvements, so it is important that the scoring be flexible and easily updated. I understood that Idaho only addressed ammonia because almost all of the BMPs that reduce those emissions also mitigate many other pollutants, though not to the same degree. Scoring each BMP separately for each pollutant will make for a more complicated system, and probably will make implementation more difficult.

Response: The scoring will be difficult, but not impossible. The scoring system will be

Response: The scoring will be difficult, but not impossible. The scoring system will be tested and updated throughout the pilot phase.

**Comment #11.A2** I strongly suggest you develop a very specific policy on the release of information such as the Air Quality Management Plans, inspection reports etc. and that you have that reviewed by legal council. I assume the state AG office is available to you? Producers are going to be very reluctant to cooperate if they don't know what can and cannot become public information.

Response: Certain information which will be contained in an AQMP is exempt from disclosure by RCW 42.56.610.

**Comment #11.A3** With respect to the manual you anticipate developing, I suggest that your description of BMPs be very general and intentionally vague. There is going to be a lot of difference between producers in how these are implemented based on equipment available, facility restrictions, economic resources etc. I do think that a comment on which pollutants are targeted by each BMP and how it is mitigated, would be valuable to both dairy producers and the general public.

Response: The manual will be developed during the pilot phase in keeping with your suggestions.

### Commenter #12

**Comment #12.C1** 1. I am wondering how it is that the YRCAA has the authority to write this policy, when previous phone conversations have led me to believe that agriculture (including dairies) is exempt from the rules as they are currently written and that that is why the YRCAA has not been able to act on complaints in the past. What has changed that has provided YRCAA with the statutory authority to write policy on this issue at this time?

No Response

**Comment #12.A1** 2. Please include a section with definitions of key terms. This is very important. There are many terms in the policy that will impact the effectiveness of the policy. For example; Best Management Practices, Economically Feasible, Technically Feasible, Reasonably Available Control Technology, Fugitive Dust, etc...

Response: The final policy should have a definitions section.

**Comment #12.A2.a** 3. This policy looks very similar to what the dairies already do under their Dairy Nutrient Waste Management Plans, is there anything new or different here? If not, how can this be effective in reducing emissions?

Response: This policy addresses air emissions and the Nutrient Management Act deals with discharges to water and soils.

**Comment #12.A2.b** Will these plans be available for public review under FOIA? Response: Certain information which will be contained in an AQMP is exempt from disclosure by RCW 42.56.610.

**Comment #12.A3** 4. What qualifications will be required of the person or persons that will be the experts on determining health effects of dairy emissions:

Response: Response: This subject is not intended to be addressed by the policy. Substantial adverse effect on public health should be determined by a person with public health expertise.

**Comment #12.A4** and thus what the appropriate levels of emissions will be allowed? Response: EPA has the responsibility to set such standards.

**Comment #12.A5** Who will determine if the policy is sufficient to "...protect human health and safety, including the most sensitive members of the population" RCW 70.94.011

Response: Protection of public health should be determined by a person with public health expertise.

**Comment #12.A6** (It seems to me that you will need to include someone on the board who is a public health specialist or epidemiologist in addition to your specialist from WSU, probably a specialist from a school of public health who is well versed in animal agriculture issues).

Response: We would welcome any information from such a person capable making a facility-specific determination.

**Comment #12.B1** 5. Will you include representation from the community and from the environmental organizations or community based organizations to be on the advisory council to the board from this point forward?

Response: Yes.

**Comment #12.B2** 6. Will you provide the draft policy in Spanish and allow time for anyone who would need to respond in Spanish? (This may require extending the comment period)

Response: No.

**Comment #12.** 7. Where will you find funding for both

C2.a implementation of the policy,

C2.b assisting dairy operators to develop and implement their plans, and for

**C2.c** inspections and enforcement as necessary?

**C2.d** How will the funding be distributed between development of plans, inspections, and enforcement?

C2.e Will it be equally distributed amongst these?

#### No Response

**Comment #12.B3** 8. Will you cooperate with Yakama Nation in developing the policy on air quality matters as is stated on page A-2, number 11, under section C-Local Regulations?

Response: Yes.

**Comment #12.C3** 9. Will you ensure that you follow RCW 70.94.380 which "...mandates local authorities to have requirements for the control of air emissions that are no less stringent than those of the state." page A-1, number 7. Response: Yes.

**Comment #12.C4** 10. If the federal government adopts a policy on air emissions from dairies that is more stringent than what the YRCAA policy is, will you be required to make changes to your policy that reflect this and meet federal standards?

Response: Yes.

**Comment #12.C5.a** 11. Please describe what the exemptions are that are under RCW 70.94.030 Sections 640?

No Response

Comment #12.C5.b p.A-1, Section A, number 2.

No Response

**Comment #12.C6** 12. Have any of you read up on the literature of health effects from emissions from Dairy operations? There is beginning to be some interesting literature on the topic. I can forward you a literature review on air emissions from the Oregon Task Force if you are interested. I will forward it to you in another email.

No Response

**Comment #12.C7** This is all my comments for now; I may have some more comments to add later. Again, I appreciate that this matter is now receiving the appropriate attention; I hope that you will look at all the comments from the public and make appropriate revisions as necessary.

No Response

**Comment #12.C8** I also hope that you will reconsider having some additional members added to the advisory board so that the policy is written with a broader representation that should include the public, public health advisors, environmental activists, and community based organizations.

No Response

# Commenter #13

**Comment #13.C1** - Note: the following letter was received in a form which did not allow the breakdown or arrangement of comments by topical relevance, so the letter is presented in its entirety as a single "other" comment. However, the following response is offered.

Response: Your opinion is welcomed and important. Bear in mind: The policy is not:

- A rule or regulation;
- Subject to the rulemaking requirements of RCW 34.05, the Administrative Procedure Act;
- Intended to satisfy any person, group or the subject industry sector;
- Intended to be implemented outside the jurisdiction of YRCAA; and
- A final policy until after:
  - the pilot phase or trial implementation period is completed;
  - an effectiveness assessment has been completed;
  - need for modification has been determined;
  - needed modifications have been accomplished; and
  - the policy is resubmitted to the Board for approval and approval is accomplished.

# The policy (including the process) is:

- A pilot program as contemplated in RCW 34.05.313;
- Authorized by RCW 70.94.141;
- A means to:
  - assure a uniform degree of compliance with existing rules; and
     minimize air pollutant emissions.
- A means of defining "reasonable precautions" as used in WAC 173-400-040(3)(a), which states:
- (3) Fugitive emissions. The owner or operator of any emissions unit engaging in materials handling, construction, demolition or other operation which is a source of fugitive emission:
- (a) If located in an attainment area and not impacting any nonattainment area, shall take reasonable precautions to prevent the release of air contaminants from the operation.

# Law Offices of Charles M. Tebbutt, P.C. 451 Blair Blvd., Eugene, OR 97402 Ph: 541-344-3505, Fax: 541-344-3516 charlie.tebbuttlaw@gmail.com

December 8, 2010

Via E-Mail (gary@yrcaa.org) & U.S. Mail

Gary Pruitt
Executive Director & Air Pollution Control Officer
Yakima Regional Clean Air Agency
329 North First Street,
Yakima, WA 98601-2303

Dear Mr. Pruitt:

On behalf of the Community Association for Restoration of the Environment ("CARE"), the Law Offices of Charles M. Tebbutt, P.C., submits these comments concerning the Yakima Regional Clean Air Agency's ("YRCAA") proposed Air Quality Management Policy and Best Management Practices for Dairy Operations (the "Policy").

The goals that should have guided YCRAA in its drafting of the Policy are well known and longstanding. The intent of the Washington Clean Air Act is to "secure and maintain levels of air quality that protect human health and safety, including the most sensitive members of the population[.]" R.C.W. § 70.94.011. To that end, it is the purpose of the statute to "safeguard the public interest" through, among other things, "improv[ing] cooperation between state and federal government, public and private organizations, and the concerned individual." Id. (emphasis supplied). In addition, YCRAA's own mission is to "build and maintain partnerships in the continuous improvement of air quality for all current and future generations in Yakima County."

YCRAA's proposed Policy on Dairy Operations clearly and directly contradicts these legislative goals both substantively and procedurally. Substantively, the Policy is incredibly weak: it essentially authorizes dairies - the regulated industry - to decide how, when, and to what extent they wish to comply with the "requirements" of the rule. The Policy requests dairy owners and operators to, on their own initiative, formulate what they believe are the Best Management Practices ("BMPs") they can utilize in reducing fugitive air emissions. They are then to submit these BMPs to YCRAA in the form of an "Air Quality Management Plan" (AQMP). Telling of the process through which the Policy was created (see below), dairies are authorized by the Policy to unilaterally modify their approved AQMPs without notice to YCRAA, so long as the

Notably absent from the Policy are the sections that actually describe the BMPs and tell the dairies how to select appropriate BMPs.

dairy determines that the modification does not diminish the effectiveness of the AQMP.2

The inadequacies do not stop there. The Policy also allows YCRAA to essentially do nothing with regard to approving or enforcing an AQMP. As part of the "approval" process, if YCRAA does not respond to a proposed AQMP within 30 days, the plan is automatically approved. Considering that the Policy was basically drafted by the dairy industry (see below) in conjunction with YCRAA personnel, the inclusion of this "do-nothing" provision further indicates the extent of dairy control over the process. In terms of enforcement, there are absolutely no provisions contained in the Policy that require YCRAA to initiate compliance actions against noncomplying dairies. Instead, in all instances YCRAA "may" initiate enforcement of the Policy. There is also no provision governing the timing or procedures for inspections of dairy facilities. YCRAA apparently will be able to determine its own schedule of inspections, as well as creating the guidelines used by inspectors to ascertain compliance with the Policy. If one of these inspections should take place, YCRAA is empowered to issue a notice of violation only where an AQMP "is not fully implemented[.]" (emphasis added). Partial implementation of an AQMP is apparently sufficient to constitute compliance under YCRAA's Policy. This language is far from appropriate.

Overall, it would be quite challenging to devise a weaker means of controlling fugitive air emissions from dairy operations than the scheme concocted by YCRAA.

Procedurally, a number of shortcomings plagued the process utilized by YCRAA, and partly explain why the proposed Policy ended up being so incredibly weak. In drafting the Policy, YCRAA decided to include only dairy owners and operators in its workgroup along with agency personnel. It did not include members of the concerned and interested public, nor did it include any member of the environmental community. Instead, YCRAA allowed the dairy industry to use its overwhelming and disproportionate representation to create a Policy that does nothing to reduce fugitive air emissions. Just like the dairy industry did when it strong-armed the outcome of the Washington CAFO permits in 2006, here it has specifically tailored YCRAA's Policy to create the illusion of environmental compliance while ensuring that it can continue "business as usual."

Outside of these procedural inadequacies, environmental justice issues abound. At no

Only "substantive" modifications need be reported to YCRAA. Those modifications include "significant changes in operational procedures; changes in BMP selection; and changes in criteria used to determine BMP implementation." It appears that dairy owners and operators hold the power to determine whether a modification constitutes one of the enumerated categories of substantive modifications.

<sup>&</sup>lt;sup>3</sup>Even more concerning is a provision governing the use of information by YCRAA in enforcement actions, should one ever arise. The provision states that "Information obtained by YCRAA in the course of [AQMP proposals] is not obtained for the purpose of any future enforcement activity." Thus, YCRAA will be left in an informational vacuum should it take any enforcement action.

<sup>&</sup>lt;sup>4</sup>Indeed, in creating an advisory council to create policy, the local authority must appoint at least one member "whom shall serve as a representative of the environmental community." RCW 70.94.240. YCRAA decided only to include members of the regulated industry, in blatant disregard of the statute's requirements.

time were members of the Yakama Nation, who have consistently borne the brunt of dairy pollution, allowed access to the Policy workgroup. Neither were the region's Hispanic residents, who were likely unaware of proceedings because of the lack of Spanish-translated public notice. See El Pueblo Para El Aire Y Agua Limpio v. County of Kings, Superior Court of California, County of Sacramento, No. 366045, Dept. 14, p. 10 (1991) (inadequate public participation in environmental decision-making by public officials when public notice was given only in English; translation and publication in Spanish was justified given that large portion of the interested population was monolingual in Spanish and were denied meaningful participation). These two segments of the region's population have been unjustifiably denied their constitutional due process rights of notice and meaningful participation in this matter.

Given the vast procedural and substantive shortcomings of the Policy, CARE insists that YCRAA immediately scrap the current plan, form a new workgroup that includes representatives from the Yakama Nation, the region's Hispanic population, members of the environmental community, and other interested persons, and redraft the proposed Policy so that it actually deals with the issues of fugitive emissions and noxious odors from dairy operations. The regulated industries cannot and should not be allowed to draft their own rules and regulations. CARE also requests that YCRAA hold a public hearing on this matter, allowing those members of the community who are unable to effectively communicate their thoughts through the written word the opportunity to voice their concerns orally before the board. Spanish translators should also be available at the hearing.

It is time to put an end to the dairy industry's complete domination of the Washington regulatory agencies that are supposed to be protecting public health, welfare and the environment. You have the power to take steps in the right direction. The proposed Policy does nothing more than allow the industry to avoid accountability by claiming that they are heavily regulated, when in fact the regulations are so vague as to be meaningless. Please start over and make the process one that protects public health rather than the industry that has decimated, and continues to decimate, the lower Yakima Valley.

Sincerely,

Charles M. Tebbutt,

Law Offices of Charles M. Tebbutt, P.C.

451 Blair Blvd. Eugene, OR 97402

541-344-3505

cc: Governor Christine Gregoire Dennis McLerran, Regional Adminstrator, U.S. EPA, Region 10

Ted Sturdevant, Director, Washington Dept. of Ecology

# Commenter #14

**Comment #14.C1** I'm submitting comments regarding the proposed – AIR QUALITY MANAGEMENT POLICY and BEST MANAGEMENT PRACTICES for DAIRY OPERATIONS. The Policy needs to protect the public's interests, and it must meet the intent of the Washington Clean Air Act.

No Response

**Comment #14.B1** The Policy was NOT DRAFTED WITH Adequate public participation. As a result, I believe it will be ineffective in protecting the public's right to clean, healthy air.

Response: Your opinion is welcomed and important.

**Comment #14.B2** Your agency needs to start-over with public participation in developing a POLICY to protect clean air.

Response: Your opinion is welcomed and important.

#### Commenter #15

**Re:** Comments regarding *Proposed Air Quality Management Policy and Best Management Practices for Dairy Operations, November 2010.* 

Comment #15.A1 1. With regard to "Policy, Section II, Who Must Comply with the Policy?" page 3. We suggest language that more specifically denotes that dairies located within the Yakama Nation Reservation will not be subject to expectations or enforcement of compliance with the policy. This would necessarily describe the jurisdictional boundary of YRCAA within Yakima County. E.g., as with all policies, the jurisdiction of the YRCAA is within Yakima County excluding Yakama Nation Reservation Lands.

Response: Text added on page 2 to address.

Comment #15.A1.a a. If it is the intent of YRCAA to encourage voluntary practices among dairy farmers on the Yakama Nation Reservation lands, that should be stated plainly and become a matter of consultation with the Yakama Nation leadership.

Response: If it is the desire of the Yakama Nation leadership to encourage or discourage voluntary practices, YRCAA is willing to consult. Otherwise, YRCAA will neither encourage, nor discourage, such voluntary practices.

**Comment #15.A2** 2. Intent and Purpose of the Proposed Policy: The issue of what could be described as, "actual improvements expected" is unclear. At this time, there is no encompassing data to quantify or even tell us for certain which emissions are currently present due to the dairy operations in the Yakima Valley. Moreover, there is no U.S. policy to limit emissions of certain contaminants. Therefore we do not have a

means to measure the exact reductions these proposed best management practices will provide, nor is there a measure of compliance, specifically, with Clean Air Act Standards. This issue could be explained more fully in the policy and a statement(s) made that logically answer the expectations and constraints of these proposed practices.

Response: The intent of the pilot project is to identify and implement economically and technically feasible BMPs known to be effective at reducing air emissions. There is no intent to quantify such reductions. See response #15.A6.

Comment #15.A3 3. It is unclear whether this policy applies only to diaries with 500 head or greater and if this is a total population or a mature cow population.

Response: Policy text has been changed to include all dairies.

**Comment #15.A4** Also, it clearly excludes feedlots and grazing systems but includes several BMPs applicable only to grazing systems. This needs clarification.

Response: Policy text has been changed to clarify.

**Comment #15.A5** Are the dairy heifer feeding operations covered under the existing fugitive dust control plan along with beef feedlots because you are assuming no emissions from these types of operations?

Response: No.

**Comment #15.A6** 4. The plan calls for describing the criteria for selection of the implemented BMP and which pollutant group will be reduced as a result of implementation. There are serious flaws in this component. It cannot be reasonably expected for operators to have this information without prior monitoring. It is generally accepted that further studies are needed to collect viable data.

Response: YRCAA agrees that further studies are needed and are being conducted. However, by policy YRCAA is pursuing the recommendation of the National Academy of Sciences: "Best management practices (BMPs) aimed at mitigating AFO air emissions should continue to be improved and applied as new information is developed on the character, amount, and dispersion of these air emissions, and on their health and environmental effects. A systems analysis should include impacts of a BMP on other parts of the entire system."

Comment #15.A7 At this time we do know that there are many variables to measuring these emissions, including but not limited to diurnal and seasonal fluctuations, climatic influences and animal stress factors. An operator may, in good faith be implementing practices from the BMP "menu" for a pollutant emission that he in fact contributes very little to and ignoring the real problem from that particular site. We can't know this without intensive monitoring and data collection.

Response: Facility-specific problems will be discovered through implementation of the pilot project and any AQMP which does not address the real problem will not be approved.

**Comment #15.A8** The policy calls for describing the method of monitoring the implementation of each BMP, which essentially is monitoring the functionality of the practice rather than monitoring the expected reduction in emissions.

Response: Agreed.

**Comment #15.A9** 5. Several of the BMPs are not applicable to diaries and several contradict each other, so it is important to understand the emission constituents at each site before establishing a policy to reduce them.

Response: YRCAA already understands the emission constituents of concern for dairies as a sector. Facility-specific emissions of concern will be discovered during the pilot project.

**Comment #15.A9.a** A major concern is that several practices designed to protect air quality may negatively affect water quality; therefore it is extremely important to provide a full technical manual of all these practices including the potential unintended environmental consequences to other natural resources.

Response: Agreed and planned.

**Comment #15.A9.b** This was also recommended in The National Research Council of the National Academies report on Air Emissions from Animal Feeding Operations; Current Knowledge, Future needs:

"Recommendation: Regulatory and management programs to decrease air emissions should be integrated with other environmental (e.g., water quality) and economic considerations to optimize public benefits."

For example; there are consequences to injecting manure if you are in a floodplain or high water table area and excessively well drained soils. Also several practices discourage applications on fields with crop residue, yet conservation tillage is encouraged for natural resource protection.

"Recommendation: Best management practices (BMPs) aimed at mitigating AFO air emissions should continue to be improved and applied as new information is developed on their character, amount, and

dispersion of these air emissions, and their health and environmental effects. A systems analysis should include impacts of a BMP on other parts of the entire system." ii

Response: Agreed and planned.

Comment #15.A9.c These issues warrant an evaluation of this plan with a more holistic view to account for those unintended consequences and including a complete technical manual which operators can use to guide them to implementing practices that will provide the most environmental benefit, and not just to collect ranking points.

Response: Agreed and planned. As with most efforts, once you decide what the right thing is, you must decide how and when to do the right thing. This agency now has a principle of doing the right thing, at the right time, the right way, the first time, every time.

#### Commenter #16

#### Comment #16.C1

RCW 43.21C

Assure all people Of Washington a safe, healthful, productive, and aesthetically and culturally pleasing surrounding.

Maintain environment which supports diversity and individual choice The legislature recognizes that each person has fundamental and inalienable rights to a healthy environment.

No agency of the government has the authority to allow or permit any operation that creates trespass, nuisance, that creates health effects and environmental effects upon other citizens. This is the taking of Private Property under any color of the Law.

# No Response

# Comment #16.C2

Quality of the Environment cannot be EXEMPT

# No Response

# Comment #16.C3

WAC 173-400 regulations for air pollution sources

#### No Response

#### Comment #16.C4

THE RIGHT TO FARM ACT DOES NOT GIVE A PERSON THE RIGHT TO POLUTE, AIR WATER, NOISE.

#### No Response

#### **Comment #16.C5**

i http://milk.procon.org/sourcefiles/EPA AFO Final Report.pdf

ii Ibid

This policy does nothing for the people that live around a dairy, but it gives the dairy another layer of paper that they can point at and say we are so over regulated and we are complying with YRCAA policy.

# No Response

#### **Comment #16.C6**

This is written buy the dairy for the dairy and give the public nothing. This policy is nothing more THAN A LOT OF SMOKE AND MIRRORS. THIS POLICY IS AS CLOSE AS YOU CAN GET TO PROTECTIONISM

# No Response

#### **Comment #16.C7**

The civil rights and property rights of people who have to live by the dairies who by the way, most of the time moved in on them and changed their way of life need to be addressed.

# No Response

#### **Comment #16.C8**

At the very least the dairies are a public nuisance and trespass on peoples property and are a threat to public health.

# No Response

# Comment #16.C9

Policies are not enforceable as are BMP's and NMP's but are feel good measures that are used as a means to skirt the real issues taking place.

# No Response

#### **Comment #16.C10**

POLITICS HAVE NO PLACE IN RULE MAKING, it should be all about what is good for the publics health and well being not about what is good for a certain group.

#### No Response

#### **Comment #16.C11**

They just want to be good neighbors, they need to look up the term. If they say it enough then it must be true.

#### No Response

#### **Comment #16.C12**

The YRCAA has stated that they are trying to do something about air quality around calfos, and this policy is about not doing anything, but it looks good on paper and nothing else.

# No Response

# Comment #16.B1

START OVER AND DO IT RIGHT OR DO'NT DO ANYTHING AS YOU HAVE DONE IN THE PAST.

Response: YRCAA disagrees that we have done nothing in the past and believes that a pilot project to determine what best to do in the future is appropriate.

#### **Comment #16.C13**

I thought YRCAA was about clean air not BMP. You need to make up your minds on what you are to be doing.

# No Response

#### **Comment #16.C14**

All we asked for was a third party with the expertise to help YRCAA because Gary stated they did not have the expertise to do anything about air quality around calfos, and this is what we got, a worthless policy.

# No Response

# Commenter #17

I wish to comment as a citizen on the proposed guidelines for the regulation of large dairy operations in Yakima Valley. As to my background, I received a MA from the University of Washington in Economics with two special fields, Public Finance and Natural Resources. During my years as an academic I was a Junior Agricultural Economist at Washington State University and a Senior Research Associate at the Institute for Social and Economic Research at the University of Alaska.

**Comment #17.C1** From an economic standpoint granting an emissions permit to a dairy introduces two serious inefficiencies. First, there is a transfer of significant costs from the dairy owner to those citizens who will be harmed by the pollution. Second, the market for bulk dairy product will be distorted in favor of polluting operations against non-polluting operations. It is a basic principle of economics that all the external costs of production need to be internalized to the owners to the extent that there is no longer any profit derived from polluting. Clean air is simply not to be squandered for anyone's profit.

# No Response

Comment #17.C2 It is a breach of public trust for the YRCAA to protect emitters from litigation by putting up a legal buffer in the form of this regulation. Under current rules and law the owners of concentrated feedlot operations have an unlimited liability for the deleterious effects on the health of those exposed to their pollution. Section I of the Draft implies that YRCAA will take on much of the burden of liability. What is actually stated is that YRCAA will accomplish or achieve compliance with the Clean Air Act. Those words can be construed to mean that YRCAA shoulders much of the burden of liability, because that liability cannot simply vaporize. The issue of liability needs to be addressed frankly in this regulation, in terms that a court will understand.

The Washington Department of Ecology has a memorandum of understanding with the Washington Department of Agriculture with respect to the regulation of dairy operations. Washington Department of Agriculture clearly has the experience and capacity to regulate farm operations.

# No Response

**Comment #17.C3** I suggest that the YRCAA approach the Washington Department of Agriculture about drafting another memorandum on dairy regulation in order to reduce

the duplication and cost of government enforcement. YRCAA's primary responsibility to protect regional air quality might continue to be done with air monitoring and the issuance of notices of violation.

# No Response

**Comment #17.A1** In Section VI of the draft there is a statement that the failure of YRCAA to act within a limited time frame constitutes approval of plans submitted by the dairy.

The YRCAA should not give away that authority. There may be reasons and conditions for delays and extensions.

Response: Agreed. Text was changed to address.

Comment #17.A2 In the same section the authority of YRCAA to enforce standards is obviated if the information about a violation is obtained through cooperation on the part of the polluter. It is often the case that enterprises are required to provide information that leads to enforcement and I believe that needs to be the case with dairies given the difficulty the agency would have in getting information by direct observation.

Response: No authority is obviated or waived. This passage merely states what is the purpose and what is not the purpose of good faith negotiations. Enforcement action will be taken when called for according to agency enforcement policy.

**Comment #17.A3** Also in this section, the descriptor "adequate" grates with my sense of what is necessary to "achieve" compliance. It tells me that YRCAA is aiming for the lowest permissible level of compliance.

Response: It is unclear how one could arrive at such a perception.

**Comment #17.A4** Lastly, scale is not addressed anywhere in the document. Scale needs to come into the picture. What YRCAA would permit for one large diary enterprise cannot possibly be acceptable for eighty or so similarly sized dairies.

Response: YRCAA implements laws, rules and policies on an agency-to-facility basis, not on an agency-to-sector basis.

#### Commenter #18

Thank you for the opportunity to comment on the document entitled, "Air Quality Management Policy and Best Management Practices for Dairy Operations." The following comments are presented as the opinions of individual members of the faculty and student researchers at Johns Hopkins Bloomberg School of Public Health (JHSPH) and do not necessarily reflect the position of the School or University. Among the authors of this comment and colleagues here at the school, we have extensive expertise relating to the protection of the health of persons residing in agricultural communities in proximity to large-scale poultry, swine, dairy cattle and other animal production facilities.

We would like to express our support to the Yakima Regional Clean Air Agency (YRCCA) for proposing policies to control emissions from dairies. However, it is our position that the proposed policy, as described in the December 3<sup>rd</sup> version of the draft,

has numerous shortcomings that will likely limit its ability to reduce emissions, and therefore to protect public health.

**Comment #18.A1** In particular, it is our professional judgment that employment of best management practices, in the absence of well-designed monitoring, measurement and enforcement plans, is likely to achieve little in the way of mitigating community exposures.

Response: Your opinion is welcomed and important.

The following bulleted points encompass some fundamental issues identified during our review of the proposed draft policy:

**Comment #18.A2** The proposed policy for minimizing emissions does not include any requirement for monitoring, and as a result, offers no evidence upon which to:

- **.a** Characterize baseline emissions (in terms of pollutants and their respective magnitudes)
- **.b** Determine what types of best management practices are needed to reduce emissions
- .c Establish goals for reductions
- .d Determine whether emissions reduction goals have been met, and evaluate whether employed BMPs have been effective or useful in achieving those goals Without real data to bolster AQMP development and evaluation, it is unlikely that determination of whether emissions reductions have been achieved can be made with any certainty. Further, if reductions cannot be demonstrated, it is unclear how YRCAA can determine that potential community risks stemming from air emissions have been mitigated.

Response: The decision to develop and implement this policy is based largely on the findings and recommendations of the National Academy of Sciences found in its 2003 report, Air Emissions from Animal Feeding Operations; Current Knowledge, Future Needs. There exists no means to absolutely measure the effects of taking an aspirin to relieve a headache. That fact doesn't prevent one from doing so. The aforementioned report states:

"Best management practices (BMPs) aimed at mitigating AFO air emissions should continue to be improved and applied as new information is developed on the character, amount, and dispersion of these air emissions, and on their health and environmental effects. A systems analysis should include impacts of a BMP on other parts of the entire system."

**Comment #18.A3** The approval process for AQMPs is unlikely to result in significant emission reductions without a data-driven methodology for plan approval. The currently proposed approval process appears to be largely subjective and disproportionately influenced by the burden placed upon dairy operations.

Response: Your opinion is welcomed and important. However, YRCAA disagrees.

**Comment #18.A4** There does not appear to be a clear description of anenforcement plan intended to address compliance failures in regards to implementation plans or for violations of approved plans.

Response: YRCAA does not intend to take enforcement action for noncompliance with the policy. Enforcement action, if needed to assure compliance, would only be taken for failure to comply with existing laws, rules or orders.

**Comment #18.A5** There is a lack of mention of involvement of the community in the proposal. Mechanisms should be in place to perform inspections and issue citations based on community complaints, and the community should be engaged and given a voice in the policy approval process.

Response: Citizen complaints, alleging dairy violations of existing laws, rules or orders, have and will be addressed according to agency compliance assurance policy. Policy approval authority is given only to the agency governing Board of Directors.

**Comment #18.A6** There does not appear to be a plan for providing dairy operators with technical assistance in AQMP development. Dairy operators may lack the technical expertise necessary to evaluate the appropriateness of BMPs for reducing specific pollutants, and in some cases, operators may lack the knowledge needed to determine the nature of pollutant emissions from the various components of dairy production. If operators are expected to develop plans that will be successful in reducing emissions, it is important that the State or someone else make available someone with the appropriate expertise, even if a fee is charged for these services.

Response: Agreed. However, it is not within the intent of this policy to establish business relationships. YRCAA staff can provide technical assistance and can refer operators to technical service providers.

In addition to these points, we have attached an appendix detailing specific comments corresponding to noted excerpts of the text from the draft policy document.

**Comment #18.B1** Based on our review of the draft policy document, it is our recommendation that the YRCCA revise the document and provide a second public comment period for the revised proposal. Please contact us if our technical expertise can assist in this process.

Response: As a pilot project, this is exactly what is planned. Once the pilot project is completed, YRCAA staff will revise the policy, based on an improved knowledge base, and present a final draft policy for public comment and consideration for Board approval. Section III.C of the policy plan states:

"The development of this policy is in itself a pilot program. This process will enable both dairy operators and the YRCAA to determine how effective the practices and standards are before formalizing the Policy by Board adoption. After an assessment of the effectiveness of the Policy, the need for any adjustments will be determined and decisions made whether an amended Policy should be put into dairy-specific regulations.

The pilot phase will make the ultimate adoption of regulations, if necessary, less subject to dispute over what is needed and effective."

Sincerely,

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**Appendix: Specific Comments (organized by page and section numbers)** 

# Page 3: How Does the Policy Work?

**Comment #18.A7** The draft policy document does not specify how compliance with the AOMP will be assessed.

.a The policy should detail a formalized evaluation strategy that hinges upon the collection and examination of air monitoring data collected using accepted measurement methods. If requested, we would be willing to advise the YRCAA on accepted methods to assess real-time air emissions. We also would like to offer our help to evaluate any strategies proposed by the YRCAA to address real-time measurements of air emissions for policy evaluation.

Response: The policy does not contemplate, nor does it support, air monitoring of fugitive emissions.

.b In the event of a dispute regarding the compliance of a particular dairy operation with an approved plan, resolution should be conducted by a neutral and objective mediator and should involve all stakeholders, including members of the community. It is inadvisable that the outcome of the dispute be determined or influenced by the Dairy Workgroup.

Response: YRCAA will make all determinations as to compliance with the policy. Requesting the work group to provide input to such determinations in no way relieves YRCAA from that authority or responsibility.

# Pg 5 c. iii. (A description of BMPs to be used under the plan to reduce emissions of targeted pollutants.)

**Comment #18.A8** The methods that this policy will use rely on self-monitoring and self-report; as such, acceptable monitoring methods and protocols must be adequately

described, defined and used. Standardized and uniform monitoring reports must be generated by objective parties and should be based on current scientific understanding.

**.a** Specifically what are the standards and parameters that will be monitored to reduce emissions?

Response: The policy does not intend to establish standards and parameters. Rather it intends to identify and implement known practices which reduce emissions and verify the practices are utilized, either by actual observation or by credible recordkeeping.

**.b** We recommend penalties for a failure to monitor and report effectiveness of BMPs.

Response: YRCAA does not intend to take enforcement action for noncompliance with the policy. Enforcement action, if needed to assure compliance, would only be taken for failure to comply with existing laws, rules or orders.

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# VI. How are AQMP Developed and Approved?

**Comment #18.A9** The failure of the YRCAA to notify dairies about their submitted AQMP should not constitute approval. If the YRCAA receives the AQMP plans on February 15<sup>th</sup>, 30 days may not be sufficient to thoroughly evaluate all of the submitted plans. A phased approval process should be implemented. Deadlines could begin on February 15<sup>th</sup> and continue until all dairies have been completely evaluated. This could begin with the largest facilities to provide the YRCAA with adequate time to completely evaluate AQMPs and work with dairies to ensure the efficiency and feasibility of the submitted AQMPs. Acceptance of AQMPs should be officially stated by written correspondence between agency/dairy.

Response: YRCAA agrees and text has been changed. However, review/approval of a plan and a full compliance evaluation of compliance with the policy are two entirely separate processes.

#### VII . How and What Changes Can be Made to an Approved AQMP?

Comment #18.A10 The use of the term "non-substantive changes" is ambiguous and may lead to confusion or abuse. The policy should require that all changes in dairy management, BMPs, AQMP and other processes must be made in writing and submitted to YRCAA and receive approval before being made. Alternatively, a precise definition of non-substantive change should be provided.

Response: YRCAA believes the descriptions of substantive and non-substantive changes are adequate for the pilot project. However, knowledge gained in the pilot phase may cause revisions to be made.

**Comment #18.A11** Failure to comply with YRCAA notification regarding changes to approved AQMP should be subject to a defined schedule of penalties. Disincentives should be clearly stated in writing and details must be written which describe the steps that the YRCAA will take to correct and/or enforce this policy.

Response: YRCAA does not intend to take enforcement action for noncompliance with the policy. Enforcement action, if needed to assure compliance, would only be taken for failure to comply with existing laws, rules or orders.

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How will YRCAA Determine When an AQMP is Acceptable?

Comment #18.A12 What are the specific methods to be used to determine compliance?

Response: Actual observation and/or review of recordkeeping.

**Comment #18.A13** How will implementation be evaluated or measured?

Response: Actual observation and/or review of recordkeeping.

**Comment #18.A14** How will effectiveness be evaluated?

Response: As described in Section IX.1.

**Comment #18.A15** What are the target values?

Response: There are no target values.

**Comment #18.A16** The YRCAA should keep and review the records of community complaints to aid in selection of specific BMPs for currently identified problems at specific locations.

Response: Agreed.

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**Comment #18.A17** Why would a variance be awarded or any

facility exempted from Regulation 1?

Response: YRCAA is not aware of any reason.

**Comment #18.A18** There should be no exemptions to Regulation 1.

Response: Agreed.

**Comment #18.A19** What constitutes a violation of the AQMP?

Response: Failure to comply with either the operational plan or the AQMP.

**Comment #18.A20** Is the determination of a violation up to the discretion of the YRCAA, the local police or other agencies?

Response: YRCAA.

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**Comment #18.A21** The BMP recommendations are incomplete and do not provide sufficient guidance to producers for criteria to select on BMP over another. We recommend providing scientific references or links to agricultural extension documents describing techniques and expected efficacy in more detail. Before policy

implementation, we recommend that YRCAA provide a review of BMPs and training for implementation for producers and their operators on BMP.

Response: During the pilot project, YRCAA anticipates development of a manual, complete with enough information to allow informed decisions as to BMP selection. Training sessions and technical assistance will also be offered.

#### **Community Concerns:**

Comment #18.A22 This policy makes no provisions for resolving community complaints. This is a major omission of the current draft policy. Steps must be developed which describe the steps that community members must take to submit complaints, who will address these complaints, what support community members can anticipate to address their complaints and concerns, and what clearly defined steps will occur between the YRCAA or enforcing agency and dairy indicated in the complaint.

Response: The policy is not intended to rewrite existing YRCAA policy for complaint response, compliance assurance and enforcement.

# **Community Health:**

Comment #18.A23 These BMPs which are designed to prevent violations of the CAA target chemicals and particulate matter. However, these policies will not fully address odors and hazardous biological agents, endotoxins, and allergens, which are important unregulated contaminants. Exposures to these unregulated contaminants have been associated with health effects in agricultural workers and communities which are exposed to industrial scale animal facilities. These health effects include but are not limited to asthma, sinusitis, rhinitis and upper airway diseases, eye and nasal membrane irritation; in addition, malodor has been associated with disturbance of psychosocial factors and reduced quality of life.

Response: Agreed.

# **Environment and Agricultural Engineering:**

These facilities impact air and water quality and can have major impacts on local and regional environmental quality.

Comment #18.A24 This draft policy does not adequately lay out the combined use of any or all of these BMP to effect emissions. Many of the BMPs that are recommended to reduce emission for one pollutant may increase the emissions of others; may be inconsistent with other programs, such as NPDES; or may impact animal health. For example, to reduce fugitive dust emissions, policy recommendations include maintaining the surface moisture content of drylot pens to minimize dust and odor, and to control the emissions of NH3 it is recommended to avoid over-applications of water to drylot pens after sustained dry periods. These are mutually exclusive practices and these contradictions in BMPs must be thoroughly evaluated for each individual facility this policy to be effective.

Response: Agreed.

# Commenter #19

Comment #19.C1 As you and I know, air knows no boundaries and is free to move about. Consequently even people that are not in close proximity to the source of air emissions, such as my family living in Richland, Washington are impacted by these dairy emissions. And I suspect the holistic impact of the air emissions from the dairy operations have unknown and latent effects on the local and regional environment and ecology - affecting also the water, flora and fauna. Quality of life or well-being goes beyond the immediately obvious, observable, and known health effects due to the recognized air emissions from dairy operations. Aesthetics, haze, odor and other human values also suffer. And yes, I do use and enjoy dairy products.

### No Response

**Comment #19.A1** I agree with the policy to use BMP to mitigate and regulate the air emissions from dairy operations, as I feel these operators or anyone else does not have the carte blanche right to pollute the air we breathe.

Response: Thanks.

**Comment #19.C2** Our regulatory bodies and officials (local, regional, state and federal) who have responsibility to look out for the public and environment have been far too slow in addressing the issue.

# No Response

**Comment #19.B1** I feel the BMP should be periodically reviewed (say every 5 years) and updated as new information, methods and technologies become available to deal with the problem.

Response: Agreed, but more frequently.

**Comment #19.A2** I also feel that long-term air quality monitoring for specific air pollutants produced by dairy operations need to be implemented and/or expanded in order to measure trends in pollutant concentration and performance of the BMP. If you don't measure how do you know? At least a portion of this AQ monitoring cost should be borne by the dairy operators.

I wish to close by acknowledging and thanking all those involved in trying to improve the quality of air, including the dairy operators, their trade association and the YRCAA. Much more can be accomplished in shorter time if we all work together with a common goal in mind.

Response: Agreed, however air monitoring for fugitive emissions is not feasible. In terms of working together, YRCAA believes that those working together should remain focused on the interest of air quality and avoid taking hard positions.

# Commenter #20

Northwest Dairy Association appreciates the opportunity to submit these comments to the Draft Air Quality Management Policy and Best Management Practices for Dairy Operations. The Northwest Dairy Association (NDA) is an integrated milk marketing and processing cooperative that is owned by approximately 525 dairy producers. NDA is

the dominant agricultural dairy cooperative in the State of Washington and is comprised of many dairies that will be affected by the YRCAA's' draft policy.

Comment #20.A1 Because of the importance of this policy to NDA's members, NDA requests that the YRCAA carefully consider the approach it is taking, as well as the content and implementation of its proposed policy. NDA supports identifying and implementing appropriate and feasible best management practices that are cost-effective and designed to reduce dairy emissions. We welcome the opportunity to work with the YRCAA to refine the draft policy and best management practices, as well as to develop a worksheet to assist dairies in implementing the policy. We do not, however, believe that it is appropriate or reasonable to finalize this policy now for the following reasons: Response: Agreed, the pilot project will allow for development of a worksheet, a manual, technical assistance and training sessions.

**.a** First, without the worksheet, which YRCAA agrees is a critical component to implementation of the plan, dairies are deprived of an opportunity to understand how the policy and the selection of best management practices for the plan will be implemented and evaluated by the YRCAA.

Response: Agreed.

**.b** Second, the regulation of the air constituents proposed in policy, without consideration of whether those constituents exceed regulatory thresholds, seems to go beyond the federal or state Clean Air Acts.

Response: YRCAA disagrees. See RCW 70.94.141.

.c Third, finalizing this policy before EPA has concluded its national dairy emissions study is premature and subjects dairies in the Yakima area to air quality requirements that do not exist for dairies anywhere else in the country.

Response: YRCAA disagrees. California, Oregon and Idaho have regulatory requirements for dairies. Although the policy is not expected to be final until sometime in 2012, It will then be only a policy, not regulation.

.d To the extent that these plans require Yakima dairies to spend money developing and implementing plans that are not required elsewhere, the Yakima dairies are placed at a competitive disadvantage in the marketplace.

Response: With the increased expectation from major retailers that suppliers be environmentally conscious, it would seem to provide a competitive advantage.

While we understand that it is important for the dairy industry and the YRCAA to move forward with reasonable measures that will improve air quality in the Yakima area, we do not believe that the YRCAA's policy is a reasonable approach at this time. We offer our comments as an alternate approach, which allows the YRCAA to make progress reducing dairy emissions, without creating unreasonable expectations or objectives.

Response: Acknowledged, not agreed.

**Comment #20.A2** We suggest that the policy and management practices remain in draft form, with the revisions identified below, and

- **.a** that the policy be implemented as a pilot project for a period of 12 months. This approach provides an opportunity for the YRCAA to implement and evaluate the policy and its associated best management practices over an entire annual weather cycle. Response: Agreed and planned.
- **.b** As part of the pilot project, the plans created by dairies who participate in the pilot project and inspections conducted as part of the pilot project should not be subject to the Public Records Act.

Response: Agreed, see RCW 42.56.610.

c Inspections conducted on dairies that prepare plans as part of the pilot project should be inspections for purposes of evaluating the pilot project, not inspections of dairies for purposes of determining compliance with the dairy's individual plan.

Perpose: Agreed in part Without determining compliance with A OMPs, the project

Response: Agreed, in part. Without determining compliance with AQMPs, the project itself cannot be adequately evaluated. YRCAA however, has no intent, even after the policy is final, to take any enforcement action for failure to comply with the policy.

**Comment #20.A3** As part of the pilot project, the YRCAA should work with the dairy industry to develop a worksheet and scoring system that will facilitate preparation of the plans.

Response: Agreed and planned.

**.a** Once that worksheet is developed, NDA will work with the dairies in the Yakima Valley to identify volunteer dairies willing to prepare plans based on the worksheet and implementation of the plans.

Response: YRCAA disagrees with the chronological order.

**.b** The YRCAA will be able to inspect those dairies after implementation of the plans to evaluate the effectiveness of the pilot project and to then determine how best to finalize the policy.

Response: Agreed and planned.

Consistent with our comments above, we offer the following specific text revisions to the draft policy and best management practices:

**Comment #20.A4** Background: We suggest deleting most of the background text, which is unnecessary. Additionally, dairies are highly individualized businesses and practices can seldom be summarized. For that reason, we suggest the following revised text:

"YRCAA began working with local beef cattle feedlots in 1993 to minimize dust emissions by developing and implementing fugitive dust plans. Since then, the plans and their effectiveness have improved each year. In 2001, YRCAA worked with heifer replacement and calving operations to develop a fugitive dust control policy for dairy heifer feeding operations. Because dairy operations generate fugitive emissions, YRCAA has developed this draft policy using the same approach it has taken for cattle feedlots, heifer replacement, and calving operations. Implementation of the policy will constitute "reasonable precautions" to minimize emissions from dairy operations. This draft policy only applies to dairies where cows are confined for feeding and milking and where

significant emissions of air pollutants exist. This policy specifically acknowledges that air emissions from dairy operations cannot be eliminated and that all management practices must be economically and technically feasible. As part of the development of the final policy, YRCAA will work with dairies to develop a pilot project, which will voluntarily implement the draft policy through developing and implementing flexible, site-specific Air Quality Management Plans. The Plans will be developed by each dairy." Response: The text has been changed.

**Comment #20.A5** Policy: NDA requests the following revisions to this section of the draft policy:

**.a** Replace the text of the first sentence with the following: "The purpose of this policy is to provide guidance for the effective prevention and control of air contaminant emissions at dairy operations that confine cows for feeding and milking and have significant dairy emissions."

Response: No text change. Addressed in Section II.

**.b** Replace all references to "Dairy Operations" to "dairy operations regulated by this policy."

Response: No text change. Addressed in Section II.

- .c II.1: Delete the text and replace with the following: "Dairy operations that confine cows for feeding and milking and have significant dairy emissions."

  Response: No change.
- .d Delete II.2 which goes far beyond the requirements of the federal or Washington Clean Air Act. The pilot study and EPA's national air study will provide sufficient information from which to determine which dairies should be regulated by the YRCAA policy consistent with applicable statutory and regulatory authority.

  Response: There is no II.2.
- **.e** IV.2: Delete existing text and replace with the following: "Once the draft policy is finalized, existing dairy operations regulated by this policy must submit plans annually, no later than February 15th."

Response: No change.

**.f** V.2: Replace the first sentence with the following text: "The following pollutants are targeted for emission reduction and must be identified in the AQMP. The YRCAA acknowledges that neither the federal Clean Air Act nor Washington's Clean Air Act regulates these pollutants unless they exceed regulatory thresholds set forth in the federal Clean Air Act and/or Washington's Clean Air Act. Nothing in this plan should be interpreted as making any statement or finding that any dairy preparing an AQMP exceeds any regulatory threshold for any constituent identified in the plan or in this policy."

Response: No change.

**.g** VI.5: This section should be deleted. The failure to comply with the policy should not give rise to any compliance/enforcement action because the policy is not a rule.

# Response: Text changed, not deleted.

**.e** IX.1: The last sentence should be deleted from this section for the same reasons as those stated in Section VI.5 above.

Response: Text changed, not deleted.

**Comment #20.A6** Appendix B: NDA strongly objects to the narrative descriptions summarizing the various air pollutants, which is unnecessary and, in some cases, inaccurate or misleading. NDA requests that the narrative descriptions be deleted. Response: Not deleted.

Alternatively, text revisions to Appendix B are as follows:

**.a** I. Ammonia: Delete the entire first paragraph after the words "temperature and relative humidity in specific."

Response: Not deleted.

**.b** V. Odor: Delete the following sentence: "Odor is a common source of complaints from people living near AFOs, and it is for local impacts that a reliable method for odor measurement should be pursued." This draft policy does not and should not propose to measure odor. Consequently, recommendations for future actions involving odor measurement should be deleted from this draft policy so that people reading the policy do not mistakenly presume that dairies subject to this policy are responsible for developing a method to measure odor.

Response: Agreed. Text deleted.

**.c** VIII. Methane: Revise the text in the third paragraph, third sentence to read as follows: "Methane is a greenhouse gas that, under certain circumstances, contributes to global warning."

Response: Text added.

#### Commenter #21

Our comments are on your process and lack of inclusion of the public.

**Comment #21.B1** 1. Include Helen Reddout, CARE (Community Association for the Restoration of the Environment) as a contributing voice and source of information from the perspective of those who are impacted by poor air quality. Helen's experience should be utilized and respected. The board needs to have an information and listening session with Helen.

Response: Attempts to arrange a meeting with Helen in July, 2010 failed.

**Comment #21.B2.a** 2. Reach out in written form and publicly invite the Yakama Nation to be a recognized part of the process.

Response: A Yakama Nation representative has been appointed to the work group.

**.b** Invite a Tribal Council Member to be an active member of your process. Include them in the talks and in the informational meetings.

Response: A Yakama Nation representative has been appointed to the work group.

**Comment #21.C1** Even though you do not have authority on the Reservation, you are not able to stop Yakima County air from polluting Yakama Reservation air.

### No Response

**Comment #21.C2** There are dairies from off the Reservation, under the jurisdiction of Yakima County, that are dumping polluted, liquid feces and urine within the boundaries of the Yakama Reservation bringing fecal bacteria into the air.

# No Response

**Comment #21.B3** Including the Yakama Tribe in your process, listening to Tribal concerns and recognizing the Tribal Government and peoples of the Reservation would be beneficial and might help lower the level of anger in the community.

Response: Agreed and in progress.

**Comment #21.B3** 3. Reach out and invite a Hispanic community leader, giving the Hispanic Community a voice in the process. The Hispanic community is hugely impacted by this issue.

Response: We would welcome a Hispanic community leader.

**Comment #21.C3** 4. Stop the negative comments towards Jan Whitefoot, Jim and Larry in your in house emails to each other. Regardless of their positions, it was unfair to accuse them of wanting to get rid of all dairies. That has not been and is not true. Some of the Board's email responses re: valid concerns from frustrated citizens who feel they do not have a voice, have been less than professional. This has stirred up more anger and frustration.

#### No Response

#### Commenter #22

Comment #22.B1 This letter is to inform you that the Community Association for Restoration of the Environment (CARE) vehemently objects to the policy making process the Yakima Valley Regional Clean Air Agency (YRCAA) developed and implemented to create the Draft Air Quality Management Policy and Best Management Practices (BMPs) for Dairy Operations. Specifically, CARE is opposed to the work group that was formed to develop the policy because it consulted only dairy industry stakeholders and not one representative from the public or the affected community.

Response: Acknowledged.

**Comment #22.B2** As stated in the YRCAA Public Notice for the Draft Air Quality Management Policy and BMPs for Dairy Operations:

Public concerns about the possible health effects of air emissions from dairy operations have grown with the increasing size and geographic concentration of these operations ... Emissions from dairies are a significant concern, not only for new residents in these areas, but for many long-time residents ...

Despite this, it appears the policy work group consulted only "local dairy operator expertise" and "local dairy technical service provider expertise." The work group did not consult area residents, the impacted community, or public health and environmental experts.

As you are aware, it is the policy of the YRCAA to "secure and maintain levels of air quality" that will not only "protect human health and safety and prevent injury to plant and animal life and property," but also to "cooperate with the local governments, the Yakama Nation, organizations or citizens on air quality matters." Regulation 1 of the YRCAA, Section 1.03 (A) 1,2, and 11 (March 2000).

It is unclear as to how consulting only with the regulated industry to draft its own regulations furthers this policy objective.

Response: First, in addition to the end users of the policy, also involved were two scientists with direct expertise in air emissions from dairies. Second, the policy was written by the YRCAA Air Pollution Control Officer. Third, as of December 27, 2010, comments received during the public comment period have resulted in significant changes in policy text. Lack of trust in the policy-making process is not with the influence of YRCAA. Trust is a belief born of experience and those which are most critical have little or no experience with YRCAA. Fourth, neither this pilot project policy, nor the final policy is a regulation.

**Comment #22.C1** Further, it is the role and responsibility of the Board of Directors to "consult, cooperate, or contract with other agencies, departments, educational institutions, governments, and *interested persons or groups."* Id. at 1.05 (B) 11. By not cooperating and consulting with citizens and other interested persons or groups aside from the dairy industry in the development of the Draft Policy, the Board has excluded those persons who prompted this action.

The Board has clearly failed in its responsibility to consult, cooperate, or contract with other agencies, departments, educational institutions, governments, and interested persons or groups in developing said policy. The Board has also failed to meet its responsibility to cooperate with the local governments, the Yakama Nation, organizations or citizens on air quality matters.

# No Response

**Comment #22.B3** By this letter, we formally request that the YRCAA retract the Public Notice for the Draft Air Quality Management Policy and BMPs for Dairy Operations and reconvene the policy workgroup.

Response: Request denied.

**Comment #22.B4** The policy workgroup should be reconvened to consult with an equal number of representatives from the public health and environmental communities, affected citizens, and interested persons or groups as dairy industry consultants.

Response: YRCAA disagrees.

**Comment #22.C2** The YRCAA should seek input from these stakeholders and make revisions to the Draft Policy based on this input prior to reissuing the Public Notice. **No Response** 

#### Commenter #23

According to your draft policy statement, the purpose of this policy is to "provide guidance for effective prevention and control of air contaminant emissions at Dairy Operations." (p. 3)

**Comment #23.A1** In order to do this, one would presume that BMP's would be suggested, applied, and then the emissions would be monitored to determine if the BMPs did, indeed, "provide guidance for effective prevention and control of air contaminant emissions at Dairy Operations." (p. 3)

In fact, the draft goes on to say that this process will "achieve prevention and control of emissions by describing a menu of operation and pollutant-specific best management practices (BMPs) for Dairy Operations [and] ...inform [dairy] owners and operators on effective prevention and control of emissions and provide a means by which Dairy Operations can demonstrate that they are taking reasonable precautions to protect the air quality in Yakima County. (page3)

Response: A presumption that effective air monitoring of fugitive emissions is feasible is fallacious.

**Comment #23.A2** Clearly, none of this can be accomplished if the results of the actual application of BMPs are not monitored.

However, instead of incorporating an emissions monitoring regime into this draft policy, and instead of dealing with "the possible health effects of air emissions from dairy operations" which, you have explicitly stated, is the rationale for this exercise, on page B-5 you use the claim that "estimates of odor inventories are not currently possible" (B-5) to avoid instituting a monitoring regime in this proposed policy.

Response: A presumption that effective air monitoring of fugitive emissions is feasible is fallacious.

Comment #23.A3 The health effects of dairy emissions are related to ammonia, hydrogen sulfide, and a number of other constituents, all of which can be monitored very accurately and <u>are</u> monitored very accurately in many other areas of the United States. I would call your attention to Cerex Corporation which manufactures instruments that do this type of monitoring. Their instruments are in use today in many industrial applications monitoring precisely the same constituents that, in dairy emissions, pose a health hazard to the neighbors of the dairy.

Response: Such instruments are useful in determining whether or not a pollutant is present. However, for measuring the rates of fugitive emissions, they are useless.

**Comment #23.C1** The draft's claim about the difficulty of measuring odor is being used, in a very transparent way, as a straw man to avoid any other monitoring of dairy emissions.

#### No Response

**Comment #23.C2** This remarkable lack of curiosity about the measurable constituents of dairy odor on the part of an agency that bills itself as a "Regional Clean Air Agency" allows those harmful constituents to be spread to the neighbors of the dairy where they can constitute a health hazard and where they do constitute a trespass on the private property of the neighboring

owners. If these types of emissions occurred in an urban area, no one would tolerate them. In fact, a number of Cerex machines are currently used to monitor oil and chemical plants in close proximity to urban areas-sin real time--to insure that harmful emissions are not released in these areas.

### No Response

**Comment #23.A4** Section B follows this misleading use of odor with a flawed discussion of several BMPs, in each case conveniently omitting those things that would actually control emissions. For example:

.a The list of BMPs is nothing different than what is done right now and the dairies still produce huge emissions of odorous gases.

### Response: YRCAA disagrees.

**.b** The list ignores the difference between dry manure and wet manure systems. Response: YRCAA disagrees.

.c The BMP that suggests regular removal of manure from the barns completely ignores where that manure goes after removal and what emissions result from that choice of storage.

# Response: Agreed.

.d The windbreak BMP does not acknowledge the time required to grow a tree-line (the most popular form of windbreak in the bread-basket states) or where the windbreak would be located to (a) allow for dilution of air pollutants inside the bam (ventilation) and (b) to cause the exhausted air pollutants from the bam to go somewhere other than the neighbors house.

The only real way to achieve (b) is to capture the gases and shoot them up an exhaust stack. But how do you capture gases from a bam with no walls or an open feedlot? You don't.

#### Response: Agreed.

**.e** The BMP to cover odorous feeds such as silage and fermented feedstuffs is just stupid. You can't ferment something unless it is covered. The silage HAS to be covered to prevent exposure to oxygen so it won't spoil and grow mold.

# Response: Disagree.

.f The BMP to maintain the surface moisture content of drylot pens at or below 26% to minimize odor completely ignores the fact that the worst smelling manure systems are lagoons that are submerged in water 2417 and also ignores the fact that neither the owner of the facility nor the BMP checker could reliably measure the moisture content of a whole dry-lot pen - but they could easily wander around a find a spot where moisture was less than 26%.

# Response: Agreed.

.g The BMP to cover lagoons or allow a natural crust to form on top of the lagoon surface ignores the fact, already well established, that the dairy industry simply refuses to pay to cover their lagoons and won't pay to cover their lagoon unless they get a government subsidy to do so.

#### Response: No response.

And on it goes.

Comment #23.C3 The problem here is quite obvious-you have a system of dairy production that is responsible for dangerous emissions that pose a health hazard to people around the dairies. But you also have no political will to fix the problem. So you propose a system of BMPs that is already in use and is already failing to control the problem. And then you set up a straw man to justify not monitoring your new initiative to so you won't have data on how badly it failed. This misguided and unfortunate exercise needs to be called exactly what it is-a sham.

No Response