

Val Crispin

From: Val Crispin <vcrispin440@gmail.com>
Sent: Wednesday, October 15, 2014 8:56 AM
To: 'Kathryn N Walker'
Cc: sweber@tillamookor.gov; pwyntergreen@tillamookor.gov; info@tillamookchamber.org; media@Tillamook.com; bbaertle@co.tillamook.or.us; tjosi@co.tillamook.or.us; mlabhart@co.tillamook.or.us; info@kurtschrader.com; questions@betsyjohnson.com; Rep.DeborahBoone@state.or.us; sherry.vick@tillamookcountyswcd.org; mwustenberg@tillamookcheese.com; 'Rep Gomberg'; mitch.cummings@or.usda.gov; ron.alvarado@or.usda.gov; deq.info@deq.state.or.us; 'wmatthews@oda.state.or.us.'
Subject: RE: "The Dairylands" and manure odor

Kathryn N. Walker,

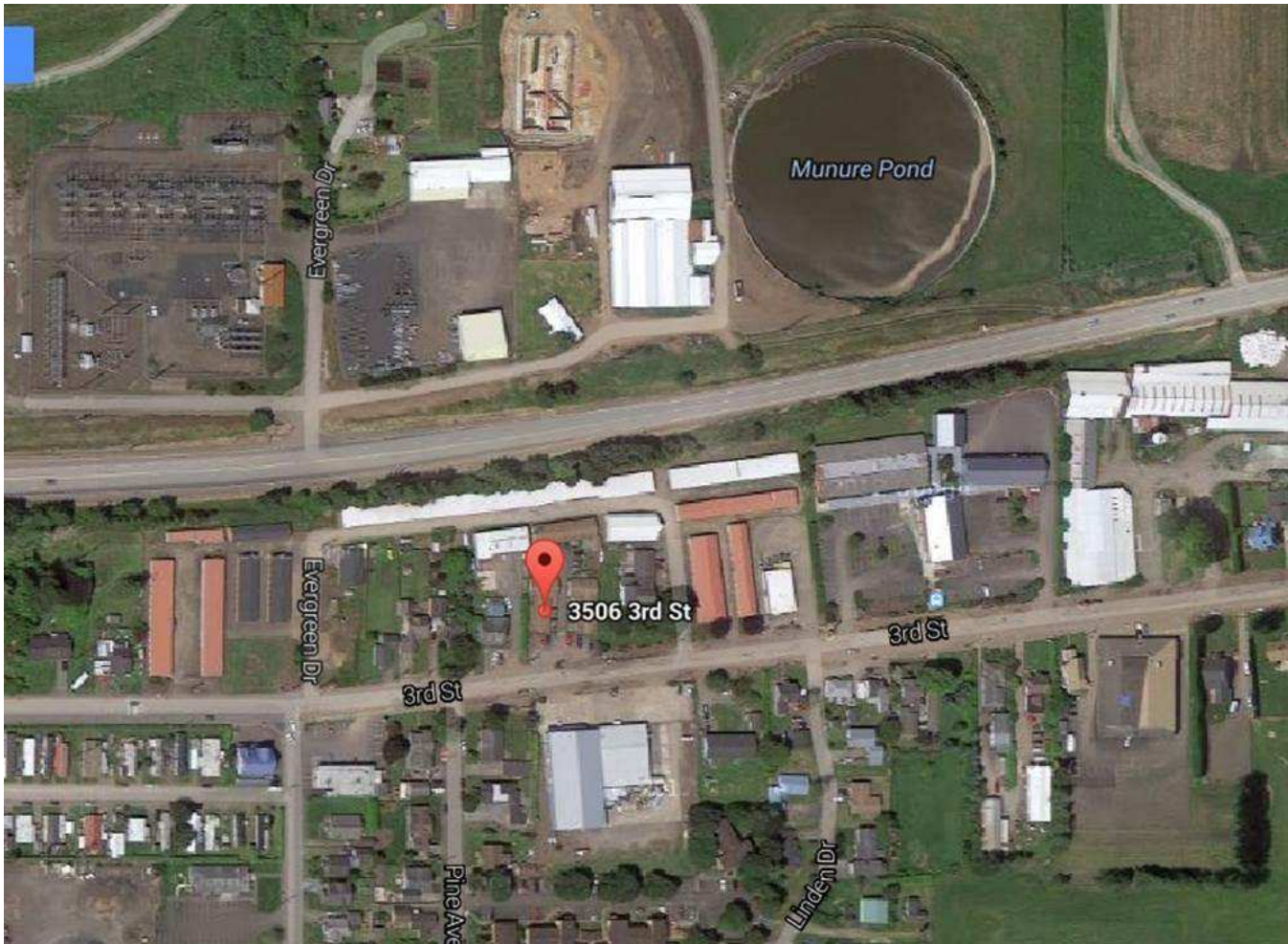
Thanks for the detailed history on the manure storage facility by Hwy 6 in Tillamook, Kathryn. We appreciate your taking time to provide all the helpful information which sheds a lot of light on the problem. I was surprised to learn that the operator has been working for a number of years trying to mitigate the odor problem and it is very telling that none of his efforts have worked.

The unsuccessful results of all the efforts together with a literature review lead me to conclude that reducing the odor to an acceptable level is essentially an impossible task with a storage tank or "pond" of this huge size. This is especially true in this climate of high winds and heavy rain and at a location so close into town. We have continued to experience the strong familiar pungent odor recently at our location on 3rd St. and it seemed just as potent as ever.

Shouldn't the prescription and permit provisions be considered a failure and re-designed? It seems to have been a grand experiment that may have seemed like a good idea at the time but it just hasn't worked out. There must be other more modern means of solving the problem. If not, perhaps several smaller storage tanks, none of which are located next to a main highway nor in town near residential and work areas, would be a better solution. A Canadian publication states, "For liquid manure storages the intensity of odors generated increases in direct proportion with the amount of top surface area." <http://www.omafra.gov.on.ca/english/engineer/facts/03-111.htm#4> . And a Purdue publication points out, "An effective way to minimize odor nuisance to neighbors is to establish a sufficient distance between livestock operations and neighbors. Odor decreases exponentially with distance." <https://www.extension.purdue.edu/extmedia/ID/ID-310.pdf> . Clearly the existing storage facility was very poorly designed in relation to these 2 primary criteria of size and location. From our perspective the only viable solution would be to discontinue use of it as soon as feasible. Anyone looking at the aerial photo (re-inserted below) showing the size and location of the "pond" would reasonably conclude that it doesn't belong there.

In the meantime the odor and associated problems persist and all the concerns in my original email below continue to be valid. It appears to be a situation needing more innovation and creative problem solving and perhaps everyone finding the courage to do the right thing. Couldn't more manure be transported to the biogas generator at the Port and help limit the need for manure storage?

Sincerely, Val Crispin



From: Kathryn N Walker [mailto:kwalker@oda.state.or.us]

Sent: Monday, October 13, 2014 10:53 AM

To: Val Crispin

Cc: sweber@tillamookor.gov; pwyntergreen@tillamookor.gov; info@tillamookchamber.org; media@Tillamook.com; bbaertle@co.tillamook.or.us; tjosi@co.tillamook.or.us; mlabhart@co.tillamook.or.us; info@kurtschrader.com; questions@betsyjohnson.com; Rep.DeborahBoone@state.or.us; James Wallace Johnson; Stephanie Page; sherry.vick@tillamookcountyswd.org; Tami Kerr; mwustenberg@tillamookcheese.com; Armando A Macias; Kathryn Walker

Subject: Re: "The Dairylands" and manure odor

Dear Mr. Crispin,

Thank you for contacting the [Oregon Department of Agriculture \(ODA\) Confined Animal Feeding Operation \(CAFO\) Program](#). The CAFO Program is responsible for protecting the quality of groundwater and surface waters of Oregon by preventing animal wastes from discharging into waters of the state from confined animal feeding operations. Therefore, every dairy farm located in Tillamook, and across the state, are permitted and regulated by the CAFO Program. The program also permits other livestock operations such as beef, poultry, swine operations.

The farm that you referenced in your email has been permitted with the CAFO Program since 1987 and is currently permitted to the Oregon CAFO National Pollutant Discharge Elimination System General Permit. As a permitted CAFO, the operator receives regular routine facility compliance inspections and is required to operate under an ODA-approved animal waste management plan.

In order to achieve compliance with the CAFO program, CAFO operators must manage animal manure in a manner such that it will not discharge into waters of the state. In order to achieve this, the operator, constructed several manure storage facilities, including the above ground liquid manure tank that you referenced in your email. With the addition of this manure storage, the CAFO operator is able to store manure during the wet, winter months and prevent discharges to waters of the state. The manure storage provides additional benefits of more timely and appropriate rate manure applications. Manure is an organic fertilizer that provides nutrients to crops. Maximizing the available nutrients from manure allows the CAFO operator to reduce the need to import off-farm nutrients sources, like commercial fertilizer.

Although the manure storage tank was constructed to improve water quality, the unintended consequence was the increase in odor.

The CAFO operator is very aware that the above ground manure storage facility has increased the odor associated with the dairy farm and has been actively working to address the issue. For your information, below are the items the operator has been doing to try to mitigate the odor issue:

- After the above ground manure tank was constructed in 2004, the CAFO operator used a combination of manure additives and aerators in an attempt to reduce odor. Unsatisfied with the results, the CAFO operator abandoned this technology in order to try another approach.
- The CAFO operator also planted trees around the perimeter of the tank^[1].
- Approximately three years ago, the CAFO operator started constructing an aerobic digester in an attempt to reduce the odor. The construction of the digester also included the installation of a floating- synthetic cover for the above ground manure storage tank. You are correct in your research. These strategies can mitigate odor on dairy farms, but unfortunately, with new projects, new challenges are often revealed. The digester has been running for a couple of years, but as with any new project, new challenges are revealed. The CAFO operator has reported that the manufacturer of the cover was not prepared for Tillamook's high rainfall and windy conditions, which has lead to the cover not functioning as designed. The manufacturer is trying to resign the covers in order to successfully function in Tillamook. CAFO operator has also recently identified other areas of the digester system that can be changed/managed in order to reduce odor and is working with the digester company to implement these changes.
- Although not directly associated with the above ground manure storage tank, the CAFO operator has also adopted low-pressure, low flow manure application system, which applies manure closer to the ground, reducing the odor associated with manure application.

I thank you again for contacting the CAFO Program. Although our program does not have the authority to regulate odors, we do encourage our permittees to adopt best management practices to mitigate odor. We will continue to work with this CAFO operator to encourage his pursuit of reducing odor.

If you would like to talk about the CAFO Program in further detail or have additional thoughts on odor mitigation, please do not hesitate to contact the CAFO Program manager, Wym Matthews, at 503-986-4792 or.

wmatthew@oda.state.or.us

Thank you again for your email.

Kathryn

According to the USDA Natural Resource Conservation Service, trees provide a filtration surface for dust and odor control, adsorb odor gases and create turbulence that disperses odor.

Kathryn Walker, CAFO Program Analyst
Natural Resources and Pesticides Program Area
Oregon Department of Agriculture
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On Oct 8, 2014, at 8:56 AM, Val Crispin <vcrispin440@gmail.com> wrote:

Dear Mayor Suzanne Weber,

October 8, 2014

We have no criticism of efforts by you and many others to increase tourism in Tillamook. It clearly would benefit the economy. However, from our perspective, the priority effort should be focused on reducing the prevailing manure odor in and around the city. We lived in Tillamook for 28 years and still own our apartment rental property there. One of our main motivations for finally relocating out of Tillamook was in the search of fresher air. Tourists and others entering Tillamook probably often guess they have entered "The Dairylands" as soon as they get a whiff of the sour manure smell.

We own and manage the Patio Apartments at 3506 Third St. We have been experiencing major odor problems from a huge manure storage pond across highway 6 (see inserted aerial photo below). The frequent and overwhelming sour smell makes one's eyes water and nostrils burn and it is detrimental to our business. We have worked for nearly 25 years to rehabilitate and improve our 3 four-plexes into one of the most desirable sources of housing in Tillamook. We have a mixture of professional and responsible blue collar tenants who appreciate the immaculate units and quality management. You can imagine the response when we are showing apartments to prospective tenants who experience that nasty smell. They ask if that is a frequent occurrence and we have to affirm that it is.

We had a lady engineer tenant a few years ago who said she was studying ways to alleviate the manure odor problem. If any measures have been implemented we haven't noticed any difference. Even our on-site manager is considering leaving Tillamook now that he is retired. He sits out in his patio to enjoy the beautiful Fall weather until the breeze shifts to carry the intense sour smell from the manure storage pond across highway 6. It is nauseating and forces him inside with all windows closed. It amazes me why that tank was ever approved on a main artery into the city and right in town. Imagine people entering town from Portland welcomed with that first impression of the City. Would they feel like hanging around in downtown Tillamook? And we all have experienced the acrid odor in many other areas from storage tanks and manure spreading on pastures. Even the area around Fred Meyer and the Cheese Factory is often impacted.

I worked in fish & wildlife for 25 years and my sister-in-law has a large dairy farm but I know relatively little about dairy management. I'm guessing the State Dept. of Agriculture and OSU have knowledge of odor mitigation techniques but a quick search located the attached PDF from Clemson University Extension with a variety of seemingly practical applications. For example, covering a manure storage tank reduced ammonia released by 95%. If the storage pond by highway 6 can't be closed right away, perhaps a cover would be a temporary solution. The status quo is unacceptable! We hope legal action is unnecessary. A majority of our tenants move in from out of town and they have a hard time understanding why Tillamook allows this situation to persist. I'm certain the odors in and around Tillamook will never be eliminated but a substantial improvement would likely help retain tourists in our area and improve the quality of life for us all.

Sincerely,

Val Crispin, president
Crispin Properties, Inc.
P.O. Box 232
OTIS, OR 97368

