



**Jean Mendoza**

To: Board Position 2, Board Position 3, Board Position 4, Board Position 5, APCO & 3 more

Oct 6, 2022 at 3:52 AM

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## Request for Agenda Item

Dear YRCAA Board of Directors:

Investment groups see an opportunity to capitalize on Washington's recently adopted Climate Commitment Act (CCA) Cap and Invest Program by building Renewable Natural Gas (RNG) facilities in the Lower Yakima Valley (LYV) that would refine methane from cow manure into natural gas that could be pumped into the nearby Northwest Pipeline.

Friends of Toppenish Creek (FOTC) has studied reporting protocols to learn how much methane is emitted in the LYV from concentrated animal feeding operation (CAFO) dairies, how much can be captured, and how much will still be emitted into the atmosphere if RNG projects are approved. According to FOTC calculations methane emissions from animal agriculture in the LYV are over 29,000 metric tons per year or about 0.737 million metric tons (MMT) of CO<sub>2</sub> equivalents per year. Be aware that manure digestion converts nitrogen in the manure to ammonia, an undesirable addition to the already high ammonia levels in the LYV.

Methane is created when manure is stored under anaerobic conditions in large manure lagoons. An alternative solution to the methane problem is not to create it in the first place by moving dairies toward dry manure management systems that do not involve lagoon manure storage.

Recent legislation requires WA agencies to engage overburdened communities such as the LYV when the agencies address sources of pollution. This is a challenge because people in overburdened communities such as the LYV often have limited education and limited English proficiency. The WA State Environmental Policy Act (SEPA) also requires community participation in regulatory decision making. FOTC submits that early discussion of the potential impacts at the local level, along with careful implementation of the SEPA are the best ways to ensure thoughtful permitting and policy making with respect to RNG.

FOTC respectfully asks the YRCAA Board of Directors to discuss manure digestion to produce renewable natural gas at your October Board Meeting. We ask the board to instruct YRCAA to estimate the amounts of hazardous air pollutants and greenhouse gasses produced by Yakima County dairy cows and describe potential health and environmental impacts from manure digestion. This description should include upstream and downstream emissions.

Thank you.

Jean Mendoza

Executive Director, Friends of Toppenish Creek.

On Oct 10, 2022, at 11:11 PM, Marc Thornsby <marc@yrcaa.org> wrote:

Hello, Jean.

I imagine there is a potential for increased interest in manure digestion as a method for creating credits under the Climate Commitment Act (CCA). In a similar situation, a number of new digesters were constructed under California's Low Carbon Fuel Standard (LCFS), but California also provided grant funding that incentivized construction—something that hasn't happened in Washington to the best of my knowledge. Given the significant construction costs involved; the fact final rulemaking was not complete until a couple weeks ago and won't take effect until the end of the month; and the unfulfilled promises of earlier manure-to-electricity projects, I think it's fair to say the jury is still out as to the long-term interest in manure-to-RNG projects.

With respect to overburdened communities as that term is used in the CCA, it is my understanding that none have been identified at this time because the method used to do so has not yet been established. In fact (and correct me if I am mistaken), the comment period for this won't close for roughly another month and finalization will not take place until after that (likely sometime in winter 2022/2023). Until that occurs, whether one or more portions of Yakima County are or are not declared an "overburdened community" is speculation—though it certainly seems a distinct possibility.

Regarding the State Environmental Policy Act (SEPA) process, the Yakima Regional Clean Air Agency is almost never the designated lead agency (though it may have acted as such on one or two occasions some time back). I would imagine Yakima County would typically act as the lead agency and, as a result, conduct the SEPA process.

I did not receive any request from the board to alter the agenda for the next meeting so the matter of renewable natural gas will not be a topic of discussion. However, I would not be shocked if it appeared at a later date provided there is evidence of increased interest. At present, I believe the Environmental Protection Agency (EPA) reports two digesters in the region—a large digester in the Boardman (Oregon) area and a smaller one in Yakima County. Beyond that there are a few scattered across other parts of Oregon and Washington, but the real activity is in California (as noted above).

As for estimating the "amounts of hazardous air pollutants and greenhouse gasses produced by Yakima County dairy cows", I do not believe the Agency is able to do so with any appropriate degree of accuracy. In 2008, the Government Accountability Office (GAO) found the EPA was unable to assess the extent to which pollution from feedlots may be impairing human health and the environment because it lacked data on the amount of pollutants animal feeding operations release to the air. If the EPA, with the vast array of resources at its disposal, cannot make such a determination, the YRCAA is in no position to do so.

From 2007 to 2010, the EPA monitored 24 animal feeding operations (including two dairy operations located in Washington State) to measure emissions of particulate matter, ammonia, hydrogen sulfide, and volatile organic compounds under the National Air Emissions Monitoring Study. This appears to have been driven by several factors including the 2008 GAO finding (see above) and a 2002 report by the National Academy of Sciences that called on the EPA to develop scientifically credible methodologies for estimating emissions from AFOs. It was anticipated that once the EPA published its emissions estimating methodologies, these could be applied to AFO operations to determine compliance with the Clean Air Act. However, work appeared to stall for the better part of a decade and no such methodologies were released.

However, activity seems to have resumed and finalization of AFO emission models by the EPA is currently slated for late 2023 (though I wouldn't be surprised if that gets pushed to early 2024).

As you might imagine, I am swimming in a sea of things that need to be reviewed, addressed, resolved, or improved. I will catch up at some point, but at present my time is not my own. Once I manage to come up for air, perhaps we can meet for lunch (you pick the place and I'll pay).

Regards,

Marc Thornsbury