

## FOTC Comments on NPDES Permits for CAFOs – Determination of Non-Significance

Thank you for this opportunity to comment on Ecology’s Determination of Non-Significance for the 2022 proposed National Pollutant Discharge Elimination (NPDES) Permits for Concentrated Animal Feeding Operations (CAFOs).

RCW 43.21C.020 clearly lays out the rights and responsibilities of Washingtonians, and the responsibilities of Washington State agencies regarding harmony between humankind and the environment.

RCW 43.21C.020 does not say that the right to a healthy environment is reserved for those who can afford legal council and fight for their rights in the courts.

RCW 43.21C.020 does not say that citizens must monitor the agencies to make sure the agencies enforce the laws. In fact, citizens should be able to rely on agencies such as the WA State Dept. of Ecology (Ecology) to protect our rights to clean air and water. See RCW 90.48 and RCW 90.44.

RCW 43.21C.020 does not say that Washington State agencies have the discretion to only apply SEPA when it is easy.

WAC 197-11-340 requires Ecology to withdraw a Determination of Non-significance if, “there is significant new information indicating, or on, a proposal’s probable significant adverse environmental impacts.”

Because Ecology’s draft NPDES permit for CAFOs would cause the agency to issue permits to CAFO dairies that have significant adverse impacts on the environment, the Friends of Toppenish Creek (FOTC) argue that Ecology must complete an Environmental Impact Statement (EIS) before approving these general permits. That EIS should estimate the amount of pollution coming from CAFOs eligible to receive permits.

We submit that Ecology’s Determination of Non-significance is unlawful because Ecology has not quantified or evaluated:

- leakage of pollutants from out of date manure lagoons that would be allowed under the proposed permits
- discharge of pollutants to impaired water bodies from tile drains
- discharge of pollutants to impaired water bodies when manure is applied too close to rivers and streams
- overtopping of manure lagoons during flood events when Ecology permits construction of CAFOs in flood plains.
- emission of hazardous air pollutants and greenhouse gases that result from CAFO manure management
- public health costs when people drink contaminated water or breathe polluted air
- other, unspecified impacts

Here is one example of significant discharge from CAFO dairies that are drylot operations. There are many others.

### **Significant Discharge from Open Lot Dairies**

Best estimates tell us there are 50 cows per acre on drylot dairy CAFOs.<sup>1</sup> Let's picture a dairy with a 100-acre drylot and 5,000 milk cows. Does this CAFO discharge to groundwater? What happens to nitrogen excreted by the 5,000 cows in this small area?

Each milk cow produces about 1 lb. of nitrogen per day in urine and feces.<sup>2, 3</sup> This equates to 5,000 lbs. of nitrogen (organic nitrogen, nitrate, nitrite, ammonia) per day on 100 acres.

Over half of the excreted nitrogen is in urine.<sup>4</sup> For purposes of discussion let's say half. This equates to 2,500 lbs. of nitrogen per day on 100 acres or 25 lbs. of nitrogen per acre per day in urine.

To put this into perspective consider this. If this land was planted in corn, experts recommend applying about 250 lbs. of nitrogen per acre per year or 0.7 lbs. per acre per day.<sup>5</sup>

The nitrogen in urine cannot be captured by manure solids separation or flushing into a lagoon. There are no flush systems in pens and corrals. Choices are:

- Evaporation
  - Runoff
  - Absorption into the soil beneath the open lot
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<sup>1</sup> Viers, J.H., Liptzin, D., Rosenstock, T.S., Jensen, V.B., Hollander, A.D., McNally, A., King, A.M., Kourakos, G., Lopez, E.M., De La Mora, N., Fryjoff-Hung, A., Dzurella, K.N., Canada, H.E., Laybourne, S., McKenney, C., Darby, J., Quinn, J.F. & Harter, T. (2012) Nitrogen Sources and Loading to Groundwater. Technical Report 2 in: Addressing Nitrate in California's Drinking Water with a Focus on Tulare Lake Basin and Salinas Valley Groundwater. Report for the State Water Resources Control Board Report to the Legislature. Center for Watershed Sciences, University of California, Davis. Page 139. Available at <https://ucanr.edu/sites/groundwater/nitrate/files/139110.pdf>

<sup>2</sup> Ninth Circuit Court (2015) Order RE Cross Motions for Summary Judgement. CARE v. Cow Palace, page 44/111. Available at <http://charlietebutt.com/files/CP/320%20-%20Order%20Granting%20in%20Part%20Mtn%20for%20Summary%20Judgment.pdf>

<sup>3</sup> Lower Yakima Valley Groundwater Management Area (2019) GWMA Final Report. Volume I, page 25. Available at <https://www.yakimacounty.us/DocumentCenter/View/22177/GWMA-VolumeI-July2019>

<sup>4</sup> Rotz, C. A. (2004). Management to reduce nitrogen losses in animal production. *Journal of animal science*, 82(suppl\_13), E119-E137. Page E132. Available at [https://www.researchgate.net/profile/Ca-Rotz-2/publication/8243583\\_Management\\_to\\_Reduce\\_Nitrogen\\_Losses\\_in\\_Animal\\_Production/links/549af0830cf2b803713716b2/Management-to-Reduce-Nitrogen-Losses-in-Animal-Production.pdf](https://www.researchgate.net/profile/Ca-Rotz-2/publication/8243583_Management_to_Reduce_Nitrogen_Losses_in_Animal_Production/links/549af0830cf2b803713716b2/Management-to-Reduce-Nitrogen-Losses-in-Animal-Production.pdf)

<sup>5</sup> Lower Yakima Valley Groundwater Management Area (2019) Nitrogen Availability Assessment. Page 40. Available at <https://www.yakimacounty.us/DocumentCenter/View/17514/June-2018-Final-Nitrogen-Availability-Assessment->

Because reactive nitrogen is an air pollutant, and nitrogen in many forms is a water pollutant, Ecology must consider the impact of these products of CAFO operations. The nitrogen must go someplace. It does not disappear.

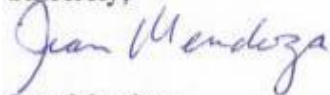
The State of Washington spends over \$1.2 million every two years on a dairy nutrient management program. Surely this program can inform Ecology and the public about the movement of nitrogen from urine to air, water, and soil.

In fact, the WA State Dept. of Agriculture (WSDA) does estimate that 35% of excreted nitrogen from dairy production areas is volatilized.<sup>3</sup>

And so, in the case of pens and corrals, this means regulators do not know what happens to about 16.25 lbs. of nitrogen per acre per day from urine. Are there ditches within or pipes beneath open dairy lots that transport runoff from the lots to manure lagoons? They are not addressed in the draft NPDES permit for CAFOs. If runoff does not exist then approximately 16.25 lbs. of nitrogen per acre per day either soaks into the soil and leaches to groundwater, or significantly increases the 35% volatilization rate that is predicted in WSDA calculations. This is not just a potential to discharge. This is an actual discharge.

Ecology must follow SEPA and prepare an Environmental Impact Statement that evaluates the impact of this discharge. Only then can Ecology legally write a proper Determination of Significance or Non-Significance. There are many other serious impacts to the environment from Washington CAFOs. FOTC is happy to share further examples with Ecology. The current DNS is unlawful.

Sincerely,



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