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Ms. Chelsea Morris
Washington State Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

RE: COMMENTS ON DRAFT CONCENTRATED ANIMAL FEEDING OPERATION GENERAL PERMIT

Dear Ms. Morris;

Glorieta Geoscience, Inc. (GGI), on behalf of Dairy Producers of New Mexico is presenting these comments and proposed changes to the Draft Washington State Concentrated Animal Feeding Operation General Permit. Our comments follow the order of items as they appear within the Draft General Permit.

1. **S1. 1. Significant Contributors of Pollutants:** Ecology states, “a small CAFO must apply for coverage under this permit if Ecology has designated the CAFO to be a significant contributor of pollutants to surface water”. GGI request that Ecology specifically defines what constitutes a “significant contributor”.
2. **S2.A. 1. – Submit an Application** – The following sentence requires an appropriate period. “A Responsible Person, in accordance with General Condition G14 (Signatory Requirements), must sign the signature page of the NOI and submit it to Ecology.”
3. **S2.A. 2. Revise Application If Needed** – This paragraph states that Ecology will review the NOI and NMP for completeness... The term NMP is not used in the DRAFT permit and MMMP should be substituted for NMP to remain consistent.
4. **S2.D. 1. c. – Eligibility for Terminating Permit Coverage**– The link given in the first sentence is corrupted, therefore GGI requests its replacement.
5. **S2.D. 1. d. – Eligibility for Terminating Permit Coverage**– Same comment as above.
6. **S2.D. 2. – Facility Cleaning Requirements**– Same comment as above.
7. **S3. – Discharge Limits** – Due to the importance of water quality standards on this permit, GGI requests that Ecology incorporates a table or references the specific water quality standards to be enforced to be fully transparent.
8. **S4. C. 1. – Liquid Waste Storage Structures** – Grammatical error, please correct; “Permittee must have a depth gauge in each liquid...”
9. **S4. J. 1. – Soil Sampling Depth** – This paragraph states “drier climates must collect separate composite soil samples for the 0-12 inch depth and the 12-24 inch depth.” to

Sullivan et al (2003), states the 0-12 inch depth is the most valuable sampling depth, therefore GGI requests that the soil sampling for drier climates be changed to the same regulation as the wetter climates.

10. **S4. J. 3. – Late Summer-Early Fall Soil Sampling Analysis** – This paragraph states post-harvest soil sampling must be taken by October 1, after harvest of annual crops. Sullivan et al. (2019) state sampling by October 15 is reasonable and for drier climates, October 31 is perfectly acceptable. If a specific date is required by Ecology, GGI requests October 31 as the deadline for soil sampling as this date allows the farmers to complete their annual harvest.
11. **S4. K. 3. f. – Application Restrictions** – Ecology states there will be no land application between October 1 and prior to T-SUM 200. Implementing an application timeframe using T-SUM 200 greatly reduces the ability of the dairy farmer to plan ahead. Using T-SUM as a tool is not an exact science and there is a lot of variability (weather patterns, time of harvest, wet/dry climates, etc.) There are also many areas in Washington that see crop growth, uptake, and maintenance during the winter months (October-March). Therefore, GGI requests that manure application be at the discretion of the dairy/farmer as long as nutrient application criteria (590) are being adhered to.
12. **S4. L. 1. – Step 1: Determine Field Risk Level** – Same comment above (S4. J. 1.).
13. **S5. C. Table 8 – Pre-land Application Soil Monitoring** – Ecology states the requirement of Total Kjeldahl Nitrogen (TKN) and Nitrate-N + Nitrite-N testing during the pre-application soil monitoring event. TKN is not plant available and is oxidized to Nitrate as the green water percolates through the soil for uptake by plant roots. Nitrate is the plant-available form. GGI can assume that Ecology requires these parameters to calculate the Total N present in the soil, but only Nitrate is plant available. Therefore, GGI requests the removal of the TKN sampling parameter.

Please contact me at (505) 983-5446 ext. 106 or by email at carver@glorietageo.com or contact Jay Lazarus at lazarus@glorietageo.com with any questions concerning the comments.

Sincerely,



Samantha Carver
Environmental Scientist

XC Beverly Idsinga, Executive Director, Dairy Producers of New Mexico
Jay Lazarus, President, Glorieta Geoscience, Inc.

REFERENCES

Sullivan, D.M., Andrews, N., Heinrich, A., Peachy, E., and Brewer, L.J., 2019, *Soil nitrate testing for Willamette Valley vegetable production*, Oregon State University.

Sullivan, D.M., and Cogger, C. G., 2003, *Post Soil Harvest Nitrate Testing for Manured Cropping Systems West of the Cascades*. Oregon State University.