

Attachment 1: Questions re NPDES Permit for CAFOs, January 2021



Morris, Chelsea (ECY)

To: Jean Mendoza

Jan 22, 2021 at 6:40 PM

[Details](#)

RE: CAFO General NPDES Permit

Good Evening Jean,

Thank you for your interest in Ecology's CAFO general permit and the permit reissuance process. Paste below in red text are our responses to your questions.

I look forward to hearing your comments on the current permit and what Ecology could consider in issuing the next one.

Best,

Chelsea

Chelsea Morris (she/her)

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Dear Ms. Morris,

Thank you for informing people about plans for revising Ecology's National Pollutant Discharge Elimination System (NPDES) general permits for Concentrated Animal Feeding Operations (CAFOs). You may recall that Melanie Redding introduced us during one of the later meetings of the Lower Yakima Valley Groundwater Management Area (LYV GWMA).

I have some questions regarding the development of Ecology's next NPDES general permit for CAFOs in Washington State. Your answers will help Friends of Toppenish Creek and others contribute knowledgeably at the upcoming meetings.

1. How does Ecology determine whether a CAFO discharges to groundwater and needs a permit?

We rely on our field staff, our water quality partners, and reports submitted to our Environmental Report Tracking System to document discharges from facilities, including CAFOs. The investigator notifies the CAFO Permit Administrator when the activities of the facility match those in S1. *Permit Coverage* of the permit. The CAFO Permit Administrator then makes the determination regarding further action, which can include permit coverage.

2. How does Ecology determine whether a CAFO discharges to surface water and needs a permit?

See response above.

3. How does Ecology distinguish between significant and non-significant discharge?

Ecology must make a significant contributor of pollution determination for small CAFO operations. A CAFO operation is considered small if the number of animals is less than the threshold listed in 40 CFR parts 122.23 (b)(4) or (6). When making a significant contributor determination, Ecology considers the factors listed in 40 CFR part 122.23(c)(2). If Ecology determines a small CAFO operation to be a significant contributor, they are required to apply for permit coverage.

4. Condition S4.A. states: The Permittee must prevent all discharges to surface water from its production area. If a CAFO is located next to a river or stream, how does the CAFO meet this requirement during flood events?

A Permittee is responsible for how it meets this condition because each operation must consider site specific factors. If a Permittee fails to prevent discharges from the production area during flood events that do not meet the definition of a 25-year, 24-hour rainfall event, then they are in violation of Special Condition S4.A. The Permittee may document their plan to comply with this condition in their Manure Pollution Prevention Plan.

5. Condition S4.A. states: The Permittee must keep manure, litter, feed, process wastewater, and other organic byproducts from being tracked out

onto public roadways. If there is documentation showing that a CAFO tracks manure onto public roadways, is this sufficient reason to require a CAFO to obtain an NPDES permit?

In order to qualify as a discharge requiring a permit, 'track out' at an unpermitted CAFO must discharge to either surface or ground waters. Permitted CAFOs must clean up material tracked onto a roadway because that is required by Permit Condition S4.A.

6. How does Ecology determine whether a CAFO has adequate storage for manure, litter, process wastewater, feed, and other organic by-products? If a CAFO does not have adequate storage, is this sufficient reason to require a CAFO to obtain a permit?

A Permittee (and their technical assistance provider), not Ecology, determines whether there is adequate storage and if not, how the Permittee will manage the excess manure, litter, process wastewater, or other organic by-products that are generated. If Ecology or the WSDA Inspector is concerned the condition is not met, we review the storage capacity and generated wastewater information provided in the NOI and Annual Reports. The requirement for adequate storage applies to permitted facilities. If an unpermitted facility does not have adequate storage, they will be required to obtain a permit if that facility has a discharge to surface or ground waters.

7. Is there anything Ecology can do about old manure lagoons that were not designed by engineers but are still in operation?

For permitted CAFOs, the existing lagoon assessment requirement at S7.B lays out a path should the existing lagoon be determined to be high risk. NRCS's Technical Note 23 assessment results in a risk category. Category 1A, 1B, 2A, 2B, or 2C are low risk and 3A, 3B, 3C, or 4 are high risk. If the lagoon is a high risk or the bottom of the lagoon is less than 2 feet from the water table, the Permittee must develop and implement a plan to fix deficiencies in the lagoon noted by the assessment. Additionally, S4.B.1.b requires that a CAFO must maintain the integrity of their lagoon.

8. How does Ecology determine whether CAFOs maintain the integrity of liners for 20 – 30-year-old lagoons?

Existing storage ponds are evaluated using NRCS Technical Note 23 which requires the condition of the liner be evaluated. The existing lagoon assessments received by Ecology under the current permit were completed

by technical staff at WSDA and licensed engineers at NRCS and private firms.

9. Is it true that CAFO's only must bring lagoons up to the specifications that were in place when the lagoons were constructed?

If the assessment results in a risk category of 3A, 3B, 3C, or 4, the Permittee has 6 months to develop a plan to address the deficiencies noted by the assessment and 18 months to begin implementing the plan. The plan must bring the risk category of the lagoon to category 1. If the lagoon assessment determines that there less than two feet of vertical separation from the bottom of the lagoon liner and the water table, then the Permittee must develop a plan to address this deficiency. See special condition S7.B 1-4 for requirements of this plan.

10. Re the NRCS Engineering Tech Note 23 Lagoon assessments:

1. How can you evaluate a lagoon if you don't know how thick the liner is?

Determinations of liner thickness is part of the assessment conducted under Tech Note 23 and is a determined by the personnel conducting the assessment.

2. Are you aware that being in a Sole Source Aquifer changes the rating for a manure lagoon?

Whether a lagoon is located within an EPA Region 10 Sole Source Aquifer or Source Area is a question included in the assessment found in Tech Note 23.

3. What is the normal lifetime for a manure lagoon?

The lifespan of a lagoon depends on its original construction and ongoing operation and maintenance.

11. How does Ecology measure groundwater pollution from manure composting? from animal mortality composting? from silage?

When there is a suspected discharge on a permitted CAFO, inspectors may collect samples for bacteria, since this is numeric water quality standard and can be indicative of a discharge from a CAFO. If warranted, an inspector may also collect readings of pH, dissolved oxygen and samples for turbidity and nitrogen.

12. Why doesn't the permit require soil sampling beneath manure composting operations for both the producer and third party composters?

In developing the permits, Ecology evaluated the risks of pollutants reaching groundwater from CAFO composting areas, and determined that including routine soil sampling for compost areas in the permits was not warranted. Should Ecology determine that such operations are resulting in the discharge of pollutants to groundwater, Ecology has the authority to require soil testing.

13. If a CAFO buries mortalities within 300 ft of surface water or in a flood plain, is this sufficient reason to require an NPDES permit?

The requirement to obtain permit coverage is triggered by a discharge to surface or ground waters. Whether the burial of mortalities results in a discharge at a particular location is a site-specific determination made by the permit administrator and the inspector.

14. If there is documented leaching of nitrate from compost areas, is this sufficient reason to require an NPDES permit?

The discharge of a pollutant to ground waters of the state may require a State Waste Discharge permit. The discharge of a pollutant to surface waters of the state may require a NPDES permit. Whether a discharge had occurred is a site-specific determination made by the permit administrator and the inspector.

15. If there is documented leaching from a manure lagoon, is this sufficient reason to require an NPDES permit?

See response above.

16. In Section S.4.1.3 CAFOs are required to sample to three feet unless sampling reaches groundwater before three feet. If sampling reaches groundwater before a depth of three feet, does this mean that nitrates are going directly into the aquifer?

This would be determined on a site-specific basis by the permit technical lead and the inspector.

17. In Section S.4.1.4 CAFOs are required to sample to two feet unless sampling reaches groundwater before two feet. Does this mean that nitrates are going directly into the aquifer in this situation?

See response above.

18. If tile drains are in place, would it be appropriate to sample effluent from the tile drains?

During an investigation related to a discharge, an inspector determines on a site-specific basis what sampling may be appropriate.

19. Does Ecology provide guidance for estimating nitrogen volatilization during land application?

Not at this time.

20. Do WSDA and the South Yakima Conservation District (SYCD) inform Ecology when soil nitrate tests are high and a CAFO is likely discharging to groundwater?

WSDA requires and reviews soil nitrate records on dairy CAFOs, and may notify Ecology where soil nitrates are high. If a WSDA inspector determines that there is a discharge to groundwater from over application of nutrients in a land application area, WSDA notifies Ecology before taking enforcement action.

21. What are accepted practices for compliance with S4.L. Irrigation Water Management?

Ecology refers Permittees to technical assistance providers for the most up-to-date practices, which can include (but are not limited to): monitoring soil moisture with water moisture sensors before and after irrigation.

22. Why are permits issued before Manure Pollution Prevention Plans (MPPP) are written?

The 2017 CAFO general permits incorporate into the permits themselves the nine required effluent limitations found in 40 CFR § 122.42(e)(1), and provide certainty and transparency in expectations to all interested parties. MPPPs are an enforceable, facility-specific document containing the steps and management measures applicable at a CAFO in order for the CAFO to meet the effluent limitations of the permits, but the MPPPs do not change the effluent limitations that must be met. Please refer to our [Fact Sheet section on Manure Pollution Prevention Plans](#) for more information.

23. Is there a process for rescinding a permit if the submitted MPPP is inadequate?

Yes, Ecology may revoke permit coverage under General Condition G4.

24. How many CAFOs have applied for an NPDES permit since 2017?

There are currently 23 CAFOs with coverage under the NPDES Combined permit. Their coverage and compliance history is available to the public through our [Permitting and Reporting Information System](#).

25. How many CAFOs in WA State are not permitted?

Ecology does not hold records of AFOs in the state, so we cannot established the number that are not permitted.

26. Where in Yakima County does Ecology test surface waters for nitrates and phosphorous?

Water quality monitoring sites and data is available through our [Environmental Information Management System](#).

27. How many CAFOs in the LYV are located in critical areas?

Counties and cities in Washington are responsible for defining critical areas under the state Growth Management Act. The CAFO permits do not excuse the Permittee from compliance with any applicable Federal, State, or local statutes, ordinances, or regulations. See general condition G9.

28. There are some large dairies in the LYV with histories of egregious pollution. Why don't these dairies have NPDES permits?

The requirement to obtain Permit coverage at a specific facility is triggered by a discharge to surface or groundwater. Whether a discharge has occurred at any facility is subject to a site-specific determination.

29. Does Ecology provide grants to CAFOs that violate the pollution guidelines?

Funding opportunities vary by funding source, funding category, and project type. Please consult Ecology's grant funding guidelines at our [water quality grants and loans site](#).

30. Does Ecology evaluate public health impacts?

Human health risks from various pollutants (not just those from CAFOs) are considered and included in the development of the state water quality standards (chapters 173-200 and 173-201A WAC). Permits are then written to comply with water quality standards.

31. Is there a pathway for reparation for people whose wells have been polluted?

NPDES and State Waste Discharge permits regulate discharges that are occurring at currently operating facilities and are not clean-up programs.

Thanks very much for your answers.

Jean Mendoza