



Focus Sheet: Concentrated Animal Feeding Operation Permit



The Concentrated Animal Feeding Operation (CAFO) General Permit is for industrial animal feeding operations, including dairies, beef finishing feedlots, and poultry growing operations. These type of facilities confine livestock for long periods of time in pens or barns and may discharge waste to surface water or groundwater. Slaughterhouses, meat packing and other food processing facilities are mostly regulated by individual permits.

We use a system of water quality permits to manage when, where, and how wastewater and stormwater enters the environment.

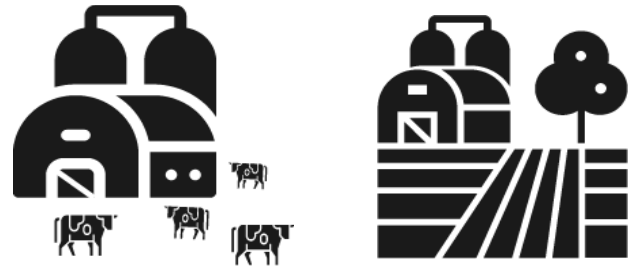
What's the problem?

Many animals in one place, means a lot of poop (manure) that these facilities need to manage. Animal manure (even human poop) has bacteria and nitrogen in it. Nitrogen is needed for plant and animal growth but too much nitrogen, especially in the form of nitrate, can be harmful to ecosystems and human health. If the manure is not managed in the right way, bacteria and excess nitrates can contaminate groundwater, rivers and streams (surface water), and affect drinking water and shellfish harvesting.

Also, groundwater can be a source of drinking water for many people. Once nitrate enters deep groundwater, it can take a long time to restore water quality. This permit is only part of the solution to nitrates in drinking water – it will help us reduce the risk of additional contamination.

What does the permit cover?

The permit focuses on two areas on a CAFO facility: the production area (where animals are housed and fed) and the land application fields (where crops are grown and manure nutrients are applied).



There are two main ways that facilities manage the manure:

Store it: cover it to prevent rain from washing it away or contain it in lagoons.

Spread it: use it to fertilize crops (application)

We set requirements to help protect Washington's water and the public from potential risks. The permit requires regular inspections and maintenance of:

- The waste collection system and storage structures, including lagoons, to make sure they are not leaking.
- The manure applications to make sure nitrogen is not applied in excess or when it can cause polluted runoff.

CAFOs describe their plan to meet these requirements in their Manure Pollution Prevention Plan. They report their pollution prevention work in a report to Ecology each year.

Who makes sure facilities are following water pollution laws?

All facilities, regardless of size, are expected to meet requirements in Federal and State laws to protect water quality.

We partner with Washington State Department of Agriculture (WSDA) Dairy Nutrient Management Program to conduct regular inspections of permitted CAFOs.

Many facilities are too small to need this permit. We use a permitting threshold to determine if they need a permit. For example, commercial operations with more than 200 head of dairy cows, 750 pigs, or 9,000 chickens would need a permit if they discharge animal waste to surface water or groundwater. However, if there is a water pollution problem at a smaller facility Ecology works with them through our nonpoint source pollution prevention program, rather than require a permit. We often partner with local groups such as conservation districts, to give technical assistance, advice, and financial assistance to ensure they are following best practices to protect water quality.

How do you know the manure applied to crops isn't just going into groundwater?

Planning ahead is a big part of the permit. The CAFO facility is required to calculate a budget for each field every season before they begin to apply manure. This budget compares the crop's nutrient needs to the available nutrients in the soil (collected from a soil test). The difference is the total amount of nitrogen and phosphorus that can be added to the field.

Also, there are additional land application restrictions and procedures to ensure the nutrients are used by the plants. CAFO operators test the soil after crop harvest to learn how well their site-specific management practices worked during the season. They must review the soil test results and adjust their actions and crop practices or they will be out of compliance with their permit.

Ecology requires sampling for nitrate close to the surface, before it reaches deep groundwater. Soil sampling is effective to manage nitrate levels so that the nutrients stay where plants can use them without getting into groundwater. If a field has repeated high nitrate levels in fall soil tests, the permit requires the facility to stop applying manure or monitor groundwater.

Additionally, medium and large CAFOs located in areas that are most vulnerable to nitrate contamination are required to monitor the groundwater around their facility.

Yearly nutrient budgets, application rates, and soil and groundwater test results are submitted to Ecology at the end of each year and are publicly available through our [permit reporting system PARIS](#)¹.

Can I see a CAFO nutrient management plan?

The CAFO permit requires permittees to develop a manure pollution prevention plan. This plan contains facility-specific information, including infrastructure and best management practices (BMPs) used to prevent pollution. The plans are submitted to Ecology and are publicly available through our permit reporting system PARIS.

What do I do if I see an issue?

If you see pollution or an environmental problem, you can report it anonymously via web form, email, or phone. We can receive reports in multiple languages. Let us know if you see:

- manure applications when it's raining or when the field is saturated
- animals with direct access to streams
- foul smelling or foaming water in streams or roadside ditches

After you make a report, our [Environmental Report Tracking System \(ERTS\)](#)² staff can follow up.

What do I do if I suspect my drinking water well is contaminated?

[Washington Department of Health](#)³ officials emphasize that if people are drinking from a private well, they should get the well water tested at least once a year.



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To request an ADA accommodation, contact Ecology by phone at 360-485-3919 or email at cafopermit@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility>. For Relay Service or TTY call 711 or 877-833-6341.

¹ <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-database>

² <https://ecology.wa.gov/Footer/Report-an-environmental-issue>

³ <https://doh.wa.gov/community-and-environment/drinking-water/contaminants/nitrate>