

**AGRICULTURE ENVIRONMENTAL CODE OF
PRACTICE**

AEMCOP

For Cattle Operations

PREPARED BY
BC CATTLEMEN'S
ASSOCIATION



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FREQUENTLY ASKED QUESTIONS

Who does the Code apply to?

This code applies to all agriculture operations in BC, from small hobby farms to large commercial operations.

When will the changes happen?

The code came into effect on February 28, 2019 (replacing the Agricultural Waste Control Regulation of 1992). Some components of the code like soil testing, record keeping and other various activities have already begun, while others will be phased in over the next ten years. To see the phase-in schedule, please visit: <https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/agriculture/regulation-requirements/nmp-under-aemcop>

Can my cattle still access water?

Cattle can have direct access to watercourses in seasonal feeding areas, grazing areas, and temporary holding areas, although there are new setback requirements for wells and drinking water sources. However, cattle cannot have direct access to watercourses and drinking water sources in confined areas.

What is a high-risk area?

High risk areas are important because they may require ranchers to adhere to additional protocols and documentation.

Phosphorous- Affected area: Surface water or land that is next to, or hydraulically connected to surface water that has been, or may be, adversely affected by high phosphorous loading. Operations in phosphorous-affected areas may need a nutrient management plan for the 2025 growing season depending on phosphorous soil test results.

Vulnerable Aquifer Recharge Areas: Land where surface water may seep through the ground into an aquifer, making it vulnerable to pollution or contamination. Depending on soil test results, these areas may require a Nutrient Management Plan or Nutrient Application Plan.

High- Precipitation: An area that has, on average, precipitation of 600mm or more in total rainfall between October 1 and April 30. There is specific agricultural by-product (eg. Manure, fertilizer) storage requirements and spreading rules for operations in these areas.

How do I know if I am in a high-risk area?

There is an interactive map on the government website:

<https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/agriculture/regulation-requirements/high-risk-areas-conditions> where you can locate your operation to see if you are in a high-risk area. If you do not have access to internet, please call the BCCA office, and we will provide you with a copy.

How will the Code be enforced?

The Code will be enforced by environmental protection staff designated as officers under the *Environmental Management Act*. An officer may do an inspection on an agricultural site in response to a complaint or as part of a planned inspection. Inspections may be scheduled or an officer may arrive unannounced.

To prepare for a site inspection, make sure you understand the requirements of the Code and have all relevant records available for review. If a non-compliance is identified during an inspection, the officer's response will depend on the level of environmental or human health impacts and the likelihood and willingness to comply. Details of the inspection and any non-compliances identified will be outlined in an inspection record that will be provided to the farmer.

RECORD KEEPING:

Keeping records of your farm activities will help show that you are meeting the expectations of the new regulation. Records are not submitted to anyone, but you are required to keep them for five (5) years for your own back up and they could be requested during an inspection by provincial environmental protection staff. If requested, you should be able to provide records within 5 days. The most relevant records farms with livestock need to keep include:

- Animal numbers and the amount of manure collected on farm. How much of the manure is used on farm and amounts of any exported to other operations.
- If manure leaves the farm operation, records are required to document the overall amount, and if in lots 5m³ (6.5 yards³) or greater, include documentation with lot size and receiver information.
- If you are storing manure temporarily in a field, keep a record of the date you started, location, material, and monitor weekly tracking conditions.
- Commercial fertilizers and other nutrient sources containing N and P, such as manure or compost in use on forage (hay, silage, pasture) land. Record how much, what product, when and where.
- Yields for fields that are fertilized (ie. How much hay did you produce- number and type of bales and weight).
- Soil test records

Records can take many forms and it is likely ranchers are already keeping the information needed. Records can include receipts, form 3's, and information documented in notebooks or pads. How records are kept are not as important as the information included in the records.

APPLICATION OF MANURE, FERTILIZER OR COMPOST:

- Manure, fertilizer, or compost must not be spread on frozen or snow-covered ground, where there is standing water or water-saturated soil, or during high-risk conditions (eg. strong winds, intense rainfall).
- Manure, fertilizer, and other sources of Nitrogen (N) must not be applied in excess of crop requirements.
- In high-precipitation areas:
 - No manure or fertilizer should be applied during November, December or January
 - If you are land-applying nutrients to a field any time during the months of October, February and March, a risk assessment needs to be done before each application.
 - To assess risk on your operation before applying nutrients, you can use the BC Application Risk Management Tool:
<https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment/soil-nutrients/nutrient-management/what-to-apply/manure-application-seasonal-restrictions>

FORAGE:

If your operation has a land base of 5 acres or more, you require records for:

- The application of commercial fertilizers and other nutrient sources containing N and P, such as land- applied manure or compost- how much, what product, when it was applied, and where.
- Yields and soil test results (see below) for fields that are fertilized.

SOIL TESTING:

Ranchers are required to have soil phosphorous test and post-harvest soil nitrate test results from within the last 3 years for soils that receive fertilizers or other nutrient sources containing nitrogen and phosphorous, including compost or manure. This does not include areas that receive manure directly from livestock, only manure that is collected and applied to land.

- The post- harvest nitrate test is intended to quantify any residual nitrate left in the soil at the end of the growing season. Samples for nitrate should be collected to a depth of 30cm (12"). Visit the post-harvest nitrate page for specific dates:
<https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment/soil-nutrients/nutrient-management/what-to-apply/soil-nutrient-testing/post-harvest-nitrate-testing#SoilSampling>
- If the post-harvest nitrate test is 100kg N/ha (25 ppm for 30cm/12in sample) or over, the area needs to be tested again the following year.
- Each sample for post-harvest nitrate should be representative of areas with similar management (crop, fertilizer applications, and irrigation) and soil. Fields or sections may be grouped if they are similar as long as all areas are sampled accordingly.
- In some instances, samples will have to be taken before a final harvest. In forages, a soil sample should be taken after the latest guaranteed harvest, providing a valid report on nitrogen use up to that point in the season.
- You are required to take soil samples every three years, unless you have high nitrate soil test results (ie. \geq 100kg N/ha), in which case the test must be completed again the following year. You must keep record of all soil tests.
- To find out more about how to take a soil test, visit:
<https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment/soil-nutrients/nutrient-management/what-to-apply/soil-nutrient-testing>

TEMPORARY FIELD STORAGE OF NUTRIENTS:

If you temporarily store piles of manure in a location for more than 2 weeks, the following requirements apply:

- Temporary piles must not be in low lying areas that may be flooded seasonally or closer than 20m to a watercourse or drinking water source.
- Change where your temporary piles are located after removing the pile. Using the same area continually will cause nutrient buildup.

- After a temporary pile is removed from an area, do not use that area again for at least 3 years and re-establish grass or another type of vegetation to remove any nutrients that may be leftover in the soil.
- Keep temporary piles off coarse-textured soil if you are in a vulnerable aquifer recharge area
- In high precipitation areas, cover temporary piles from October 1 to April 1
- Temporary piles are meant to be temporary (≤ 7 months), if not, a permanent structure must be used for storage.

Setback Requirements:

Activity	Drinking Water Source	Watercourse that is not a drinking water source	Property Boundary
Storing agricultural by-products (ie manure) using: <ul style="list-style-type: none"> • a permanent structure or temporary field storage < 2 weeks • Temporary field storage ≥ 2 weeks 	30m	15m	4.5m
	30m	30m	4.5m
Storing wood residue in a permanent structure or as temporary field storage, or applying wood residue to land in a layer measuring 30cm deep	30m	15m	Not on the property boundary
Applying wood residue to land in a layer measuring less than 30cm deep	30m from a well or diversion point 3m in any other case	3m	Not on property boundary
Applying nutrient sources other than wood residue or irrigation water to land	30m from a well or diversion point 3m in any other case, or if commercial fertilizer is used	1.5 if commercial fertilizer or sub-surface injection is used 3m in any other case	Not on the property boundary

If cattle have direct access to a watercourse in seasonal feeding areas, grazing areas, and temporary holding areas, ensure that measures are in place to:

- Minimize trampling and erosion along the watercourse
- Minimize contaminated runoff and manure from entering the watercourse

Fencing, off-stream watering or managed direct access points are some measures that would discourage loitering and help meet this expectation.

CONFINED LIVESTOCK AREAS:

Confined Livestock Area: Any outdoor area, other than a grazing area, seasonal feeding area, or temporary holding area, where livestock are confined by structures or topography.

- Cattle should not have direct access to a drinking water source or other watercourse while in a confined area.

Setbacks for Confined Livestock Areas (including feedlots):

	Drinking water source	Watercourse that is not a drinking water source	Property Boundary
If there are less than 10 animal units (1 animal unit = 1,000 lbs live weight) and they receive hay or feed	30m	4.5m	1.5m
If there are 10 animal units or more and they receive hay or feed	30m	30m	1.5m
Any confined area where cattle graze and do not receive supplemental feed	30m	5m	N/A

FEEDLOTS:

In addition to the noted requirements for confined areas, feedlots must follow added requirements: If animals are in a soil-based feedlot, accumulated organic material will form a self-sealing layer over time, preventing nutrients from leaching downwards. The new regulation requires that this layer is not damaged when cleaning out pens.

SEASONAL FEEDING AREAS:

Seasonal Feeding Area: An area, other than a confined livestock area, grazing area, or temporary holding area used for forage or other crop production, and used seasonally where livestock are sustained primarily by supplemental feed.

Cattle producers must make sure that on-ground feeding locations and mobile feeding bins are at least 30m way from drinking water sources, 30m away from a watercourse, and at least 4.5m from the property line. On-ground feeding areas must also not be located in areas that are prone to seasonal flooding during the flood season.

MORTALITY AND PROCESSING WASTE DISPOSAL:

- You may only dispose of mortalities that died on your own agricultural land base.
- In a year, you must not dispose of processing waste that comes from slaughter of 5 tonnes (live weight) or more of livestock.
- Ranchers must make every effort to prevent mortalities, processing waste, contaminated runoff, leachate, solids and emissions (ie. particulate, obnoxious odours) from entering watercourses and going below the seasonal high water table and crossing property lines.

Composting:

- Composting must only occur in a composting structure or in an outdoor agricultural composting pile.
- Contaminated runoff, leachate and solids from compost must not enter a watercourse, cross a property boundary or go below the seasonal water table.
- Composting must be carried out in a manner that deters the attraction of and access of domestic pets, wildlife and vectors.
- A composting pile must not be located in any area in which there is standing water or water-saturated soil, or in any low-lying area of a field prone to annual seasonal flooding.
- The compost pile must not remain for more than:
 - 15 months for mortalities
 - 12 months for manure
- No other pile may be erected in the same location for at least 3 years.

Burial:

- No more than 2.5 tonnes of mortalities or waste buried in a single burial pit (unless in a vulnerable aquifer recharge area, then reduce to 1 tonne per pit).
- Burial pits must not be located:
 - A) closer than 60m apart
 - B) in or over coarse- textured soil
 - C) in, or in the vicinity of, unstable soils that might allow buried material to escape
 - D) in any area where there is standing water or water-saturated soil
 - E) in any low-lying are of a field prone to annual seasonal flooding
 - F) in a field within 200-year flood plain
- There must be a vertical distance of at least 1.5m from the bottom of the pit to either the bedrock or the seasonal high water table (unless in a vulnerable aquifer recharge area, then increase to 2m between bottom of pit and noted layer).
- Buried material must be covered immediately after burial with at least 0.6m of soil and at least 1m of soil once the pit is no longer in use or has reached its capacity on terms of tonnes of mortalities.

- Records must be kept of:
 - A) Location of pit
 - B) The type and amount of materials buried
 - C) The date the pit is closed

Livestock Burial in Vulnerable Aquifer Recharge Areas

Ranchers must:

- Not bury more than 1 tonne of materials in a single pit.
- Ensure that there is a vertical distance of at least 2m from the bottom of the pit to either the bedrock or the seasonal high water table.

Setback Requirements for Waste Disposal:

	Drinking water source	Watercourse that is not drinking water source	Property Boundary
Dealing with mortalities or processing wastes using:			
a) composting structure	30m	15m	4.5m
b) an outdoor agricultural composting pile or burial pit	30m	30m	4.5m
c) an incinerator	15m	15m	7.5m

HIGH-RISK AREAS:

An interactive map for High-Risk areas can be found here:

<https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/agriculture/regulation-requirements/high-risk-areas-conditions> If you do not have access to internet, please call the BCCA office, and we will provide you with a copy.

CONTACTS:

For the full code, please visit: <https://www2.gov.bc.ca/gov/content/environment/waste-management>

For questions about the requirements of the Agriculture Environmental Code of Practice, please contact:

BC Ministry of Environment:

Email: AEMCoPenquiries@gov.bc.ca

BC Ministry of Agriculture:

Email: AgriServiceBC@gov.bc.ca

Ph: 1-888-221-7141

For questions on soil sampling, manure or fertilizer applications, or nutrient management, please contact:

BC Ministry of Agriculture (AgriServiceBC)

Email: AgriserviceBC@gov.bc.ca

Ph: 1-888-221-7141

For compliance and enforcement information, please visit:

<https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/natural-resource-law-enforcement/environmental-compliance>

For questions on Environmental Farm Plans (EFP) including accessing soil sampling or nutrient management planning through EFP program, please contact:

ARDCorp 1-866-522-3447 website: <https://ardcorp.ca/programs/environmental-farm-plan/>

NOTE: THIS IS NOT A LEGAL DOCUMENT

For specific regulatory requirements, please refer to the following:

Code of Practice for Agricultural Environmental Management:

http://www.bclaws.ca/civix/document/id/complete/statreg/8_2019