

SITING AND MANAGEMENT OF POULTRY BARN

This factsheet outlines recommendations that are designed to help producers avoid costly changes that may be required to poultry operations as a result of negative impacts on neighbours such as noise, dust, odour, flies, or rodents.

Introduction

Proper siting and management of facilities play a crucial role in ensuring good neighbour relations both within farming areas and along urban-agricultural boundaries. The recommendations in this factsheet are designed to help producers avoid costly changes that may be required to poultry operations as a result of negative impacts on neighbours such as noise, odour, dust, or flies. In addition, background information is provided on the *Farm Practices Protection (Right to Farm) Act* (FPPA) and how the FPPA has been interpreted in previous complaint hearings by the British Columbia Farm Industry Review Board (BCFIRB).

Recommendations

Planning and Siting Barns

1. Consult with industry peers, producer associations, and provincial government specialists on issues of siting and management before applying for a building permit.
2. Set buildings back as far as possible from neighbours' residences while at the same time allowing for future expansion.



3. Use the natural advantage that fences, berms and evergreen tree buffers offer on a site.
4. Consider climate data such as wind speeds and patterns when siting your barn. Anticipate the potential wind tunnel effects on neighbouring properties when considering building location and orientation.
5. Locate driveways and working areas near barns to minimize farm traffic noise impact on neighbours.
6. Ensure that the new infrastructure does not result in increased flooding on neighbouring properties.

A producer's choice for a building site based only upon criteria such as topography, drainage or convenient access may change when impact on neighbours is considered. Longer driveways and increased costs associated with bringing in electrical services or more structural fill for improved drainage may be less costly in the long run than dealing with conflict and the legal implications of neighbourhood complaints. Development that considers the interests of both neighbours and farmer will result in plans that can be beneficial to all.

Management



1. Keep your farmyard neat. Aesthetics play a key role in neighbours' impressions of a farm. Well-kept premises indicate that the operation is well-managed.
2. Where applicable, have your farm certified under the Environmental Farm Planning Program, the "Poultry Industry Biosecurity Program", and "on farm food safety program" to demonstrate best management practices.
3. Implement integrated pest management programs to address pests such as rodents, flies and birds. Work with industry associations and qualified technical professionals to ensure compliance with industry standards and pesticide storage.
4. Communicate to neighbours about your implementation of best management practices.
5. Make manure management an integral part of planning your building new operation or expansion.
6. Follow provincial guidelines and waste management regulations when moving and composting manure. Develop a nutrient management plan for the poultry manure produced from your farm.
7. Consider notifying your neighbours of your cleanout and loading times. The willingness to communicate this information demonstrates neighbourly respect.
8. Turn off yard lights not needed for safety or security, particularly when they impact neighbours.

Production Management Committees of the poultry associations should encourage members to be considerate of their neighbors when farming. Ongoing communication with producers should be part of the responsibilities of these committees.

Noise Reduction



1. Use existing site features such as vegetation, buildings, wind direction, and distance to minimize noise.
2. Avoid running empty feed lines.
3. Carry out feed delivery and cleaning operations between 6 A.M. and 10 P.M.
4. Avoid idling engines and headlight use as much as possible during bird delivery and cleanout.
5. Situate loading doors on barns away from neighbours when possible.
6. Locate driveways as far as possible from neighbouring residences. Gravel roadways should be graded regularly.

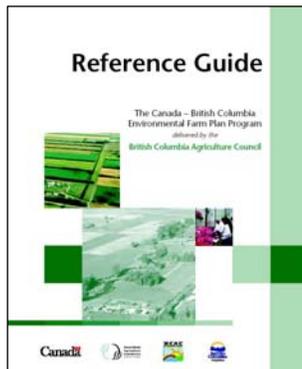
Dust Prevention



1. Tarp trucks and cleanout areas whenever practical when removing dry litter. Remove litter within the barn or in tarped areas immediately adjacent to exit doors.
2. Place exhaust fans on the side of the building away from neighbouring property lines whenever possible. Use fan hoods to deflect dust-laden exhaust barn air toward the ground. Use grasses, vegetation, hedges, and other nearby buffering agents to minimize the dust.
3. Establish and maintain hedges to intercept dust. The hedges should be within 15 meters of the barn, reach a finished height of at least 6 meters, and consist of a double row of mixed deciduous/coniferous planting with foliage from base to crown. The crown density should be 50 to 75%. An alternative would be to incorporate a berm with hedging.
4. Install solid walls, canvasses or curtains between parallel barns where wind tunnel effects cause dust to impact neighbours.



Odour Prevention



1. Follow waste management practices in accordance with the *Code of Agricultural Practice for Waste Management* and as outlined in the *Environmental Farm Plan Reference Guide*.
2. Avoid using liquid manure storage systems on poultry farms. Immediate incorporation of manure is recommended for bare land application.
3. Install manure drying fans in deep pit egg layer barns perpendicular to the manure rows under the cages, but at an angle to the rows to ensure maximum and uniform manure moisture reduction. For new barns, electrical power capacity should be sufficient to allow all pit fans to operate at the same time.
4. Locate solid manure storage facilities out of view of neighbours.
5. Apply manure when most nearby residents are working or are away from home whenever possible. Avoid spreading manure on weekends and during mealtimes.
6. Load and spread manure when winds are blowing away from neighbours.





7. Clean out layer operations after each cycle. It is helpful to notify your neighbours that you will be cleaning out so they are prepared and understand why strong odours will exist and a temporary increase in flies in the area may occur.
8. Remove poultry mortalities from the barn daily and store them in sealed containers. Incinerate mortalities in a timely fashion to minimize storage odours. Mortality incinerators must meet air quality standards for opacity and particulate matter as required under the *Code of Agricultural Practice for Waste Management*. Locate mortality storage out of sight of neighbours.
9. Compost dead birds using properly constructed composters and composting procedures. Compost, handle and process mortality out of the sight of road traffic, neighbors and passersby.
10. Store any broken eggs in sealed containers and dispose of them by applying them to the land and incorporating them on the same day.



Fly Prevention

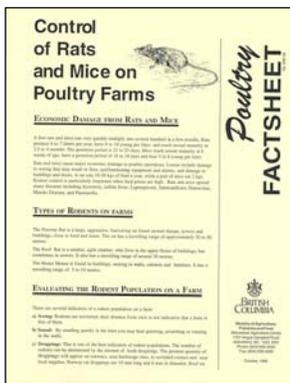
1. Remove moisture sources around buildings that contribute to fly breeding problems, such as poor drainage, high water tables around barn foundations, and leaking roof drainage systems. Slope grades away from the foundation walls to avoid standing water during and after heavy rains. Install roof gutters and down pipes to prevent standing water from collecting around or seeping into buildings and manure storages.
2. Manage older buildings with care to avoid fly breeding problems. This is particularly important where high rainfall, clay soils, and poor drainage conditions are prevalent, and in situations where barns may have been poorly designed with inadequate ventilation to control moisture content in the interior air space and in the manure.
3. Monitor waterers daily for leakage and repair or replace leaky waterers immediately.
4. Remove wet litter in deep pit cage layer operations or apply hydrated lime biweekly, and mixed with drying amendments to wet spots in the manure before they become areas for intense fly breeding. In turkey or broiler barns any wet caked litter around waterers should be removed on a regular basis.
5. Use Integrated Pest Management programs to keep fly populations as low as possible. Pesticide use and the implementation of parasitoid programs are often essential for adequate fly control. Monitor fly populations weekly to anticipate outbreaks and to incorporate preemptive action.



- Cover solid manure storage piles to prevent fly breeding.
- Avoid having lagoons and standing water in fields.
- Avoid manure cleanout operations during peak fly breeding seasons as much as possible.



Rodent Prevention



- Construct concrete floors to restrict rodent access.
- Construct barns to seal out rodents from easy access.
- Keep home and farm yards free of debris, long grass, rotting food scraps and other materials that create conditions which encourage rodents. Clean up bird feeder waste, secure pet food and other food materials, and manage compost in properly built boxes for ongoing control.
- Clean up exposed or spilled feed immediately. Install rodent baits and traps on all poultry farms and maintain them in operational condition. Rodent baits are particularly effective in reducing rodent populations when the feed is removed from the barn after each flock.
- Keep on-farm feed mill areas clean of feed and feed input materials.



Farm Practices Protection (Right to Farm) Act

(FPPA)

The *Farm Practices Protection Act*, or FPPA, was enacted in 1996 to protect farmers from nuisance actions brought by individuals or local governments provided farmers follow “normal farm practices”. The FPPA applies to land in the Agricultural Land Reserve (ALR), to land specifically zoned for agriculture, and in licensed aquaculture areas. The FPPA also allows neighbours to file a complaint with the BCFIRB where they believe a farmer is acting contrary to normal farm practice and adversely affecting them due to odour, noise, dust or another disturbance.

Both elements of the FPPA are intended to promote normal farm practice, making the FPPA a key component of the province’s Strengthening Farming Program.



The protection given to farmers by the FPPA recognizes the vital role farming plays in British Columbia’s future and its direct and indirect economic and social benefits to communities. The FPPA complaint process, and the requirements for normal farm practice, also recognize that farmers have a responsibility to apply due diligence in ensuring that dust, odour and noise levels are within the range of what is considered to be normal farm practice.

To obtain the protection of the FPPA by way of a nuisance or bylaw enforcement action, farming operations must also be in compliance with the *Health Act*, the *Integrated Pest Management Act*, the *Environmental Management Act*, or any land use regulation.

Section 1 of the FPPA provides the basic definition of a “normal farm practice” as a *practice that is conducted by a farm business in a manner consistent with*

- (a) *proper and accepted customs and standards as established and followed by similar farm businesses under similar circumstances, and*
- (b) *any standards prescribed by the Lieutenant Governor in Council,*

and includes a practice that makes use of innovative technology in a manner consistent with proper advanced farm management practices and with any standards prescribed under paragraph (b).



While the FPPA places an emphasis on farming practices that are consistent with proper and accepted customs and standards, it does not ignore the impact of certain practices on neighbours. The reference in the FPPA to “similar farm businesses under similar circumstances” requires an examination of the specific circumstances and location of the operation. The Act does not assume that because a farm practice is considered “normal” in one context, it will necessarily be “proper and accepted” in all situations.

British Columbia Farm Industry Review Board (BCFIRB)

Under the FPPA, BCFIRB hears complaints from persons who are aggrieved by practices arising from farm operations and may also study and report generally on farm practices. A person who is aggrieved by odour, noise, dust or other disturbance resulting from an activity conducted as part of a farm business can apply for a determination from the BCFIRB on whether the disturbance results from a normal farming practice. If the answer is “yes”, the complaint is dismissed. If the answer is “no”, BCFIRB may order the farmer to cease or modify the practice to be consistent with normal farm practice.

In reaching their decisions, BCFIRB compares farm practices on the farm in question to other operations in similar circumstances. BCFIRB also considers factors such as the number and proximity of the neighbours, geographical features, types of farming in the area, the size and type of operation that is the subject of complaint, the ongoing nature of the complaint, the magnitude of the disturbance, and the impact of the practices on neighbours’ ability to conduct day-to-day activities. Consideration of neighbours is part of “normal farming practice”.

In many cases, proper planning and siting of new operations and good management practices will prevent very costly changes required as a result of a farm practices complaint.

Lessons from BCFIRB Decisions

Various siting and management factors are important in reducing the impact of poultry operations on neighbours. BCFIRB has ruled that part of normal farm practice is the consideration of one’s neighbours when planning and managing a poultry operation.

Minimum adherence to statutory local government setbacks may not necessarily constitute due diligence in the choice of a barn location. The scale of the farm operation, design features of the barn, and prevailing winds can make a marked difference to a neighbour’s exposure. Where barns are close to neighbours, farm management practices must go beyond what would be acceptable with larger setbacks. Practices that produce intense odours, for example, may be acceptable where human population densities are very low, but not reasonable in situations where high numbers of neighbours live nearby. Effective land use and site planning by local governments and by farmers are therefore crucial. Past rulings by BCFIRB have ordered producers to modify farm operations, such as incorporating alternative manure handling systems or creating buffering features. It is in the interest of all producers to avoid the often costly consequences of inadequate site planning or poor management.

Farm operations do not automatically gain protection under the FPPA by showing that they follow these recommendations. Nor do they automatically lose protection if they are not following these recommendations. BCFIRB's task in a complaint is not to inquire into simply whether the farm practice is “proper” in the abstract, but also whether it is consistent with proper and accepted customs as established and followed by similar farm businesses under similar circumstances. The inquiry is both fact and site-specific. The same practice may qualify as a normal farm practice in one situation but not in another where the circumstances are different.

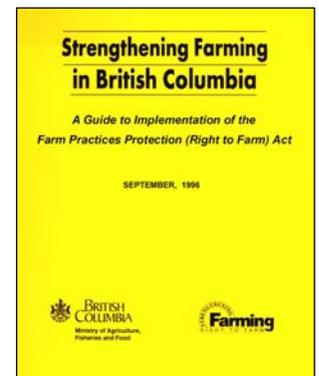
BCFIRB decisions can be found at www.firb.gov.bc.ca/complaints/complaint_decisions.htm



Conclusion

Producers entering the poultry business or expanding existing production operations can benefit from appropriate siting and good management plans. It is advisable to call on third parties to assist in making an objective or non-biased decision on site location. Building setbacks and orientation should take into account the impact of an intensive farm on neighbours. Producers have a role to play in ensuring that they stay abreast of technology and continue to improve their farm management practices. Guidance on proactively minimizing dust, odour noise, rodents, and flies are described in this brochure. Further detailed technical knowledge on controlling these and other nuisances from poultry farms are in publications available through BCMAL. Well thought out siting and management practices will go a long way to assuring that relationships between a poultry producer and neighbours remain cordial.

Broad outlines for normal practice definition and context are available for a variety of commodities and farming activities in the *Farm Practices in B.C. Reference Guide*. www.agf.gov.bc.ca/resmgmt/fppa/Refguide/intro.htm



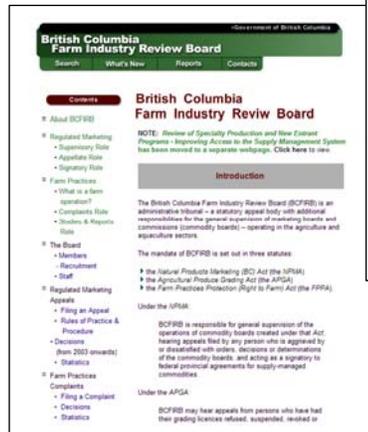
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Websites

Strengthening Farming Program
www.agf.gov.bc.ca/resmgmt/sf

Farm Industry Review Board
www.firb.gov.bc.ca



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