IN THE MATTER OF
THE FARM PRACTICES PROTECTION (RIGHT TO FARM) ACT, RSBC 1996 C. 131
AND IN THE MATTER OF TWO COMPLAINTS REGARDING ODOUR,
BIRDS, FLIES AND MANURE DUST FROM A FARM
IN KELOWNA, BRITISH COLUMBIA

BETWEEN:

DAVE YUNKER
JOHN NURKOWSKI

COMPLAINANTS

AND:

LONGHORN FARMS LTD.

RESPONDENT

BRITISH COLUMBIA
GRAPEGROWERS'ASSOCIATION

INTERVENER

DECISION

APPEARANCES:

For the British Columbia Farm Industry Review Board:	Carrie H. Manarin, Presiding Member Ron Bertrand, Vice Chair Andreas Dolberg, Member
For the Complainants:	Dave Yunker John Nurkowski David Schaeffer, Counsel for J. Nurkowski
For the Respondent:	Tim Marshall
For the Intervener:	Connie Bielert, General Administrator B.C. Grapegrowers'Association
Date of Hearing:	January 22, 23 and 24, 2014
Place of Hearing:	Kelowna, British Columbia

BRIEF SUMMARY OF DECISION:

1. The British Columbia Farm Industry Review Board (BCFIRB) hears complaints about farm practices under the *Farm Practices Protection (Right to Farm) Act* RSBC 1996, c. 131 (the *Act*). Under section 3 of the *Act*, a person who is aggrieved by any odour, noise, dust or other disturbance resulting from a farm operation conducted as part of a farm business may apply to the BCFIRB for a determination as to whether the disturbance results from a normal farm practice. If, after a hearing, a panel of the BCFIRB is of the opinion that the odour, noise, dust, or other disturbance results from a normal farm practice, the complaint is dismissed. If the panel determines that the practice is not a normal farm practice, the panel must order the farmer to cease or modify the practice causing the disturbance.

2. The *Act* was enacted to protect farmers from nuisance claims (especially in areas of encroaching urbanization) provided that they use proper and accepted farming practices. BCFIRB does not have jurisdiction to order a farm to cease or modify operations that otherwise accord with normal farm practices but that may have potential food safety, public health or pollution implications. Those matters are the subject of separate legislation under the jurisdiction of other agencies, all of which have the ability to make their own determinations and compliance orders.

3. Three farm practices complaints from two separate complainants were filed alleging that certain disturbances, including odour, manure dust, flies and nuisance birds, resulting from a feedlot operation did not result from normal farm practice. The complaint with respect to nuisance birds was dismissed as the panel could not conclude on the evidence that the complainant was in fact aggrieved as alleged. On the balance of the issues, the panel concluded that at the time the complaints were filed in 2012, the disturbances with respect to odour and flies resulted from the feedlot`s manure management practices which were not in accordance with normal farm practice. As a result, the panel issued a modification order. With respect to manure dust, the panel concluded that the feedlot's manure dust control practices were consistent with normal farm practices.

BACKGROUND:

4. On August 29, 2012, Dave Yunker filed a complaint with BCFIRB about odour coming from a feedlot located in Kelowna, British Columbia and operated by the respondent, Longhorn Farms Ltd. (Longhorn). On December 10, 2012, John Nurkowski filed his first complaint about odour, flies and nuisance birds from the same feedlot and on August 1, 2013, he filed a second complaint relating to manure dust coming from the feedlot.

5. The respondent farm is owned by Bill and Liz Marshall and is operated by them and their sons, Tim Marshall, Don Marshall and David Marshall. The farm site is located at the north end of the City of Kelowna, BC (in an area known as "Ellison") and is within the Agricultural Land Reserve (ALR). The farm's feedlot operations cover approximately 2.8 hectares (or 7 acres) of a 9.9 hectare (or 24.5 acre) parcel and 0.4 hectares (or 1 acre) of an adjacent 10.8 hectare (or 26.5 acre) parcel. The feedlot was formerly operated on another

property in Kelowna until 2006 when it was moved to its current location which property has been owned by the Marshalls for many years.

6. The complainant, Mr. Yunker, resides approximately 900 meters north-northwest of the respondent farm's feedlot operations. Mr. Yunker has resided in the Ellison area for over 20 years and moved to his current property prior to 2006. Mr. Yunker alleges in his filed complaint that prior to 2012 he could smell strong odours from the respondent's feedlot a few times a year but that more recently the odours prevented him from working outside. He also had concerns about "poisonous fumes" given that a worker on the farm had reportedly been overcome by noxious gasses in August of 2012.

7. The complainant, Mr. Nurkowski, resides on a 9 acre parcel of land to the immediate northeast of the respondent farm. He purchased this property in January 2008. The southwest corner of Mr. Nurkowski's property abuts the northeast corner of the feedlot property and his southern and western property lines abut pasture lands owned by the respondent farm. Mr. Nurkowski`s complaints allege that his use and enjoyment of his property is impeded and his and his family's health is put at risk by odour (or gasses) and dust coming from the manure on the feedlot. He also alleges that he is disturbed by "an uncontrolled fly population" from the feedlot that presents a potential health risk to people who consume the fruits and vegetables he grows on his property and has suffered losses of that produce due to "exploding starling and other pest bird populations" that are attracted to the feedlot.

8. The respondent's position is that its farm site is located in the ALR and is zoned for intensive agriculture uses including feedlots. The farm submits that odours are to be expected from a feedlot and that there are other farming operations in the area that also produce odours. With respect to the other disturbances alleged in Mr. Nurkowski's complaints, it is the farm's position that it is not the source of flies and that its manure management and bird control operations accord with normal farm practices.

9. Pursuant to section 4 of the *Act*, BCFIRB retained the services of two knowledgeable persons (KPs) to prepare a report for settlement purposes. The KPs conducted site visits to the Yunker and Nurkowski properties and the respondent farm site on three occasions and prepared three reports examining the farm practices and making recommendations. The hearing panel also conducted a site visit of the complainants' and respondent's respective properties prior to the hearing in order to put them in geographical context.

10. The oral hearing took place in Kelowna, B.C. on January 22, 23 and 24, 2014.

ISSUES:

a. Is the complainant, Mr. Yunker, aggrieved by odour coming from the respondent feedlot?
b. If he is, does the odour result from normal farm practices?
c. Is the complainant, Mr. Nurkowski, aggrieved by odour, manure dust, flies and nuisance birds from the respondent feedlot?

d. If he is, do the odour, manure dust, flies and nuisance birds result from normal farm practices?

KNOWLEDGEABLE PERSONS' REPORTS AND TESTIMONY:

11. The following knowledgeable persons were retained by BCFIRB:

- Jim Forbes (P.Ag) is a Regional Business Agrologist with the B.C. Ministry of Agriculture (the Ministry). He grew up in the Cariboo ranching industry and has been around large and small cattle operations for over 35 years. He received a Bachelor of Agriculture degree in 1986 and has spent the past 23 years working with the Ministry in the capacity of 4-H Specialist, Livestock Agrologist, Provincial Beef & Bison Industry Specialist, Land Use Agrologist and District Agriculturist. He was trained as an Environmental Farm Planning Advisor in 2005. He was qualified as an expert in the area of beef farming practices.

- Michael Schwalb (EIT) is a Waste Management Engineer in training with the Ministry. He graduated from McGill University with a Bachelor of Engineering (Bioresource) degree and has experience with manure and odour management as well as anaerobic digestion, composting and environmental risk assessment. He has conducted soil, manure and waste sampling as well as laboratory analysis for waste characterization. He has also worked on developing models for gas volatilization from manure storage and application and has been working with the Ministry to develop optimal manure handling practices. He was qualified as an expert in the area of manure storage and composting on livestock farms.

12. Both of the KPs conducted a site visit to the Yunker property and the respondent farm site on October 22, 2012 in response to Mr. Yunker's complaint. Mr. Forbes conducted a site visit of the Nurkowski property and a second site visit to the respondent farm on February 1, 2013 (in response to the first Nurkowski complaint) and Mr. Schwalb conducted a site visit to the Nurkowski property and a second site visit to the respondent farm on October 4, 2013 (in response to the second complaint). The KPs then prepared reports assessing whether the practices on the farm site are consistent with proper and accepted customs and standards followed by similar farms in similar circumstances. In accordance with the terms of engagement for knowledgeable persons, their reports were provided to the complainants and respondent shortly after their completion.

13. Both KPs were called by BCFIRB to give oral evidence at the hearing and their reports dated March 7, 2013 (first KP Report), June 18, 2013 (second KP Report) and the November 15, 2013 (third KP Report), respectively were all entered into evidence. It is important to note that the evidence contained in the KPs' reports and the testimony they gave at the hearing is not binding on the panel.

14. The KPs noted in the first KP Report that the elevation of the Yunker home is 456 meters above sea level and 900 meters to the north-northwest of the feedlot with an "obvious depression" in the landscape between the Yunker property and the feedlot and a slight rise

to 455m close to the feedlot. The KPs also noted in the second KP Report that the Nurkowski property is 482 metres above sea level and the house on it is located approximately 302 metres to the northeast of the feedlot.

15. According to the KP Reports, the feedlot is located in a natural bowl area in a hillside which slopes down onto hayfields also owned by the Marshall family. The elevation of the feedlot ranges from 452 meters in the lowest point near the northwest corner to 477 meters at the highest point in the southeast corner. The southwest and northeast corners are at a similar contour level being 463 and 461 meters respectively. The KPs testified that notwithstanding conflicts with neighbours, the fact that the feedlot was in the ALR, that its use was not prohibited by by-law and given the bowl topography of the feedlot site and soil type of the area, this was in their opinion an appropriate site for a feedlot.

16. The KPs also noted that the surrounding agricultural uses are primarily tree fruit orchards, field crops as well as a small livestock operation and forage crops and that non-agricultural uses include a couple of rural subdivisions and a golf course.

17. In their first Report, the KPs state that although the current site of the feedlot has been owned by the Marshall family for many years, the feedlot was located there in the fall of 2006. A large feed barn and corrals were completed by October 2006. The KPs describe the respondent feedlot as relatively small in terms of the number of animals (by beef industry standards), having approximately 250 head of cows in the pens at the time of the site visit although there could be up to 1000 head of cattle in the pens later in the year, when cull cows are purchased for feeding and resale or slaughter.

18. The KPs testified that the standard density for feedlots is one mature cow per 28 square meters or 357 mature cows per hectare and that given that the respondent feedlot is three hectares in size, it would accommodate just over 1,000 animals at full capacity. The KPs also testified that the respondent operates at much fewer than 1,000 animals for most of the year.

Odour & Manure Management:

19. The KPs reported that in August 2012, a dog and its owner were overcome by fumes on the feedlot and the dog died[1]. Following an investigation by an Air Quality Specialist from the Ministry of Health, a WorkSafe BC investigator and the Regional Stewardship Agrologist from the Ministry, it was determined that hydrogen sulphide (H_2S) was involved. Since that time some basic safety precautions (such as hydrogen sulphide monitors) have been instituted at the feedlot to ensure the safety of those working closest to the source of the hydrogen sulphide.

    The KPs also reported that during their site visits of the feedlot on October 22, 2012 and February 1, 2013, the smell was "as would be expected of a feedlot at those times of the year." On the October 22, 2012 visit, they reported that Tim Marshall moved some

[1] As explained later, the dog owner involved in this incident was Tim Marshall.

composting manure to demonstrate the increased odour and the functioning of the hydrogen sulphide monitor.

20. The KPs observed that the feedlot allowed manure and bedding mix to accumulate in the confined feeding area for a number of years and that it was significantly compacted by the weight of the cattle and the weight of the material itself once it was stored in piles. The KPs noted that the compaction of the material decreased the potential for aeration (or air exchange throughout the material) which resulted in the formation of odour compounds such as hydrogen sulphide. The KPs testified that a gypsum product used by the feedlot may also have contributed to an increased sulphur content in the manure. The KPs also noted that a relatively low carbon to nitrogen ratio of the manure and bedding mix was likely responsible for a release of ammonia.

21. The KPs testified that it was a usual practice of feedlots to compost the feedlot manure and sell it to others and to spread it annually on forage crops on their own operations. The KPs noted that while the feedlot had been selling some of its manure offsite, the volume removed from the site had not kept up with the accumulation with the result that the manure piles "were a bit high." The KPs also testified that they observed that some of the manure removed from the pens had been dumped in piles close to the property (or fence line) and therefore did not comply with the Ministry's recommended 30 meter setback from the property line for intensive agriculture.

22. The KPs also testified that the respondent's method of composting (leaving it in the pens) was not a usual feedlot practice which is to remove manure from the pens, but only down to the gleyed layer[2], approximately once or twice per year (or when replacing stock). The KPs noted that it is important to leave a 5 foot mound (or berm) of accumulated bedding material and manure as a dry area on which animals can bed and not to damage the impermeable gleyed layer, as exposing it could result in excessive odours. Consequently, the KPs recommended the following changes to the respondent's manure management practices:

    (a) That the accumulated manure and bedding mix be removed from the confined feeding area to begin with and then done at least once per year thereafter and composted in windrows of relative low height (i.e. less than 4 feet) to promote air exchange through the material (by limiting compaction and increasing the surface area) and reduce the formation of odour compounds.

    (b) Although runoff is unlikely given the dry soil and relatively low annual precipitation of the region (semi-arid), composting should be located in the natural bowl area on the hay fields adjacent to the feedlot as it appears to be a natural containment area. Compost sites should be monitored to ensure that pollution as a result of runoff does not occur. Berms or other rain diversion structures may be required upland from the compost areas to divert surface runoff from the windrows.

[2] Typically, a feedlot is made up of four layers, the initial pen surface, a compacted soil/manure layer, a gleyed hard pan layer, and the manure pack on the surface.

(c) While there are no specific provisions in the Central Okanagan Regional District Zoning Bylaws for the setback of compost piles from the property boundary, the KPs recommended that the Regional District's setback requirement of 30 meters for intensive agriculture be followed for the windrows.

(d) Windrows should be turned every six weeks (and the turning dates recorded) during the composting process by using a bucket loader to promote aeration and a consistent breakdown of material.

(e) The manure and bedding mix should be sampled to determine the carbon to nitrogen ratio, moisture content and bulk density and managed appropriately to ensure those factors are optimal for composting. Temperatures of the windrows should also be monitored and recorded every two weeks at three locations along each windrow during the composting process. Once temperatures at the core of the windrows decrease to near ambient air temperatures, the active composting process can be considered complete. The compost should then be matured for approximately two months after which time the composting process should be considered stable and ready for use or transport.

23. The KPs emphasized that the focus of their recommendations was not on the quantity of manure but on identifying ways to reduce odours. The KPs estimated that between 3,000 and 11,000 tons of manure would be produced on the feedlot annually (depending on the number of animal housed). The KPs agreed that more frequent removal of manure from the feedlot site would contribute to reducing odours but pointed out that odours were related to the surface area of the manure and not to the volume. The KPs also noted that in their opinion, the Code of Agricultural Practice for Waste Management (Code) allows field storage of composted manure for a period of 9 months, so it is only after that period that the composted manure must be removed.

24. The second KP Report stated that at the time of writing the report in June 2013 "the transition to more aerobic composting by implementing these recommendations is already underway." Mr. Forbes testified that he was advised by the local Agrologist for the Ministry (Carl Withler) that the feedlot had applied manure to its fields in April and May of 2013 and he hoped that all of these measures would be sufficient to reduce odours.

Flies:

25. With respect to the Nurkowski complaint about flies, Mr. Forbes stated that during his site visit on February 1, 2013, he observed significantly fewer (i.e. 75 – 80%) fly spots on the feedlot buildings than he had observed on the porch area of the Nurkowski residence. He stated that he could not identify the species of flies and therefore could not determine their source. He noted that while feedlots can attract a certain species of fly there was also a possibility that the flies could have come from culled fruit rotting on the ground in nearby orchards or from some other source. Mr. Forbes also testified that he was uncertain of the length of time over which fly spots had accumulated on the Nurkowski residence.

26. Mr. Forbes stated that it is usual practice for feedlots in southern climates to have a fly control program that involves the use of parasitic wasps and minimizing habitat areas. He observed that the bedding material used by the feedlot contained 30% cedar shavings and that the Marshalls believed this worked well as an organic fly repellant although he could find no scientific literature to support this claim.

27. Mr. Forbes noted that if an optimal composting process (as recommended) was undertaken, the manure piles would heat up to 55◦ C. or higher and that this would destroy the majority of fly eggs laid in the composting manure. He also noted that minimizing moist areas in the feedlot would assist in reducing fly breeding habitat. He recommended that the feedlot and Mr. Nurkowski each hire an entomologist to identify the fly species on their respective properties, their probable origin and determine the appropriate control measures.

28. Mr. Schwalb testified that while turning manure piles more frequently than recommended (i.e. every 6 weeks) might help to reduce flies, it could result in increased dust and odours.[3]

Birds:

29. With respect to the Nurkowski complaint about birds, Mr. Forbes stated that during his site visits on October 22, 2012 and February 1, 2013, he observed starlings, sparrows, pigeons, crows and magpies at the feedlot. He clarified that starlings and pigeons are attracted to feed and that the starlings are also attracted to fly larvae in the manure. He observed that the feedlot uses hay and silage supplemented with by-product type feeds such as fruit pomace, brewer's mash and screening pellets. He stated that birds can concentrate in large numbers and that while the farm is actively engaged in reducing their numbers, it is impossible to exclude them from outdoor feedlots unless netting was installed over the entire operation. It was his view that a change in feed to more grains could potentially attract more birds.

30. Mr. Forbes stated that on his February 1, 2013 site visit, he observed five large starling traps on the feedlot and reported that Don Marshall has a contract with the BC Grapegrowers Association (BCGA) to trap starlings under their Starling Control Program (BCGA Program) and has trapped approximately 45,000 starlings on the feedlot over the past three years. He noted that because feedlots provide an attractive food source for birds, they are a better place to trap starlings than locations with more dispersed sources such as orchards. Mr. Forbes testified that it is usual practice for feedlots to use cats to control pigeons and to use traps for starlings. It was stated in the second KP report that the respondent's participation in the BCGA Program goes beyond the bird control practices of other feedlots by actually reducing crop damage in the vicinity through the removal of "juvenile birds which cause the majority of the damage." Mr. Forbes` opinion is that because starlings and other pest birds can routinely fly many kilometers in search of food, they cannot be considered the responsibility of any one individual.

[3] After compost is turned and aerated, the internal temperature of the compost pile will rise to the point where fly eggs and larvae are killed. Therefore frequent turnings will result in internal temperatures sufficient to kill the eggs and larvae being reached more often than when the piles are turned less frequently.

Manure Dust:

31. With respect to Mr. Nurkowski's complaint of manure dust, Mr. Schwalb stated that on his site visit on October 4, 2013, Mr. Nurkowski reported that most of the dust from the feedlot appeared to be coming from the pens and that he observed minimal dust from the compost piles and wood shavings storage pile. Mr. Nurkowski provided Mr. Schwalb with some photographs he took in July and August 2013 (when the weather was dry) that show dust emissions from the feedlot moving toward the Nurkowski property. Some of these photographs were included in the third KP Report. Mr. Schwalb said that he observed no dust on that day and noted a significant amount of rainfall over the previous days. Mr. Schwalb testified that the weather conditions in July and August 2013 were drier and hotter than usual which would have resulted in an increase in dust emissions but that in his opinion the amount of dust shown in the photographs was not an "inordinate amount" but rather what would be expected.

32. Mr. Schwalb said the Marshalls reported that in order to minimize dust during the dry summer months on the feedlot, they did not disturb manure within the pens and limited the turning and screening of compost. He also said the Marshalls reported that dust emissions from tractors working in farm fields were normal in the area in July and August.

33. Mr. Schwalb said dust from cattle feedlots is relatively common in dry climates and can travel a significant distance to nearby properties depending on the particle size and wind velocity. It is known to be a lung irritant particularly for people suffering from asthma. The third KP report stated that a "prevailing breeze" of 4-7 km/h comes from the north with stronger winds having a tendency to come from the southeast, and that the winds coming from the southwest would impact Mr. Nurkowski's property.

34. Mr. Schwalb stated that the most effective way to reduce dust emissions from feedlots (in addition to limiting pen scraping and compost turning/screening in dry summer months) is to control the moisture content of the manure and bedding mix within the pens through the use of fine spray sprinklers. He noted, however, that this was not a common practice in the Canadian beef industry due to the cost and climate. It is more common in feedlots in the United States that have significantly more head of cattle than the respondent feedlot, are subject to climates that are significantly drier for longer periods of time (i.e. 6-9 months as opposed to 1-3 dry months in Canada) and are able to use a subsidy program to offset the cost. He cautioned that while the use of sprinklers could reduce dust it could also lead to more odours being generated.

35. The KPs, having not observed "an inordinate amount of dust" being emitted from the feedlot and noting that the feedlot had 250 or fewer head of cattle in its pens over the dry summer months, recommended that the feedlot continue to take measures to reduce dust in July and August by limiting the disturbance of manure in the pens and limiting the screening and turning of compost piles particularly when the wind is blowing from the south-west in the direction of Mr. Nurkowski's property. The KPs also suggested that if the feedlot decided on its own accord to explore the use of fine spray sprinklers that it do so with the assistance of a qualified professional given that there was a potential "to

exacerbate the problem" if it is not managed properly. They also suggested that there could be aesthetic and bio-filter benefits to Mr. Nurkowski if he planted a cedar hedgerow to mitigate the dust.

36. With respect to Mr. Nurkowski's complaint about the potential for the produce he grows to be contaminated by birds, flies and manure dust, the KPs clarified that issues relating to food safety and public health were beyond the scope of their reports and BCFIRB's jurisdiction (under the *Act*). However, they suggested that Mr. Nurkowski should follow the CanadaGAP Program regarding his produce and in particular, the Canadian Food Inspection Agency (CFIA) recommendation that all ready-to-eat products be put through a 3-wash cycle of which the second cycle must contain a sanitizer.

COMPLAINANTS' EVIDENCE AND SUBMISSIONS:

A. Dave Yunker

Odours:

37. Mr. Yunker testified that he has been on many farms over a 25 year period in his capacity as a farrier and is aware of farm odours. He also said that as a paramedic of 27 years he is knowledgeable about safety issues, and especially those involving hydrogen sulfide because he was employed as a safety officer in a mine in the Yukon.

38. Mr. Yunker testified that he could smell strong odours on his property from the feedlot shortly after it began operating in 2006. He said he was aware of the hydrogen sulphide incident on the feedlot in August 2012 and believed it would be a "wakeup call" to the farm to make improvements to their manure management practices but that he continued to be subject to odours approximately every other day. Mr. Yunker said he filed his complaint because he felt things were getting worse especially after an incident in October of 2012, where he stepped outside on his balcony and became physically ill due to a strong odour. Mr. Yunker said that he has not experienced a similar incident since that time and he now smells odours infrequently or when the winds blow from the southeast. He also said that he has observed that the feedlot seems to be cleaner than it was previously and therefore believes the feedlot is making advances in their practices.

39. Jason Yunker is the adult son of Mr. Yunker and he testified that he previously resided on the Yunker property for four or five years. He testified that he could not smell odours from the respondent's farm site until after the feedlot located there in 2006 and then he could smell an intense urine-like odour on a daily basis which made him reluctant to go outside. He also testified that he has experienced similar odours in the Chilliwack farming area, but that the intensity of the odours coming from the feedlot was much worse.

40. In summary, Mr. Yunker testified that he has resided in the Ellison area for 20 years and that while there are many kinds of farming in the area, it is only intensive farming that has raised issues. He believes the feedlot has changed the character of the area and says there will be further conflicts between the feedlot and its neighbours due to urban sprawl, if the

feedlot remains in its current location. Mr. Yunker stated that the respondent should move or alternatively make "drastic changes" to its operations by being proactive and adopting new technology (such as methane generators) in its manure management and that this could be profitable for the feedlot.

B. John Nurkowski

41. Mr. Nurkowski gave oral evidence at the hearing and also relied on the testimony of the following persons:

- Greg Kilmartin resides approximately 250 metres northeast of the feedlot with three other people. He has lived there since 2009;
- Susan Ives resides approximately 500 metres northeast of the feedlot with her husband and a student. She has lived there since 1997;
- Darlene Torada resides approximately 750 metres south-southeast of the feedlot with her father, brother, spouse and daughter. She grew up on the property but returned to live there in 2008;
- Parmjit Gill resides approximately 500 metres northeast of the feedlot with his spouse, children, mother and aunt. He has lived there since 2004;
- Bob Naka resides approximately 400 metres north-northwest of the feedlot with his spouse, daughter and son-in-law. He has lived there since 1984;
- Larry Simla resides approximately 750 metres southwest of the feedlot with his spouse. He has lived there since 1987;
- Bob Fisher-Fleming is the Acting Safety Manager for Okanagan Tree Fruit Cooperative and is responsible for the on-site and fruit safety program;
- Greg Baytalan is an Environmental Health Officer and an Air Quality Specialist with the Interior Health Authority.

42. Dr. Gabriella Zilahi-Balogh was qualified as an expert in entomology and in particular in the identification of insect species. She prepared a report on behalf of Mr. Nurkowski which was entered into evidence at the hearing.

43. Mr. Nurkowski testified that he is familiar with farming because he grew up on a mixed farm in Saskatchewan and worked on a small cattle ranch when he was in grade 10. He has a degree in Geology and until recently worked in the oil and gas industry in Calgary, but that it was his goal to return to farming. He testified that his spouse has a degree in Agriculture and Horticulture. He said that in January of 2014, he began working in British Columbia and that the Kelowna property is now his principal residence but that his spouse and daughter continue to reside in Calgary for now.

44. Mr. Nurkowski testified that he and his spouse purchased their property in January 2008 after viewing an MLS Listing and viewing the property once or twice. He said that when he purchased the property, he was not aware that there was a feedlot next door because he did not recall seeing any confined feeding areas until later in 2008. Mr. Kilmartin (who was the listing realtor of that property) testified that he was aware that the neighbouring property was a feedlot and that while the listing did not refer to a feedlot next door, he

believed it would have been obvious to persons viewing the property. He also testified that when he purchased his property next to the respondent's property in 2009, he was aware that it was being used as a feedlot.

45. Mr. Nurkowski testified that after he purchased the property, he rented the residence to a tenant and leased the property back to the former owner (except for a small plot) who continued to grow produce on it in 2008 and 2009. He said in 2010, he leased the property to another grower and that it was not until 2012 that he began to grow his own produce on the property. Mr. Nurkowski testified that prior to 2014, it was his practice to spend eight weeks of his vacation time as well as weekends during the summer months every year on the Kelowna property and that his spouse spent an additional month on the property.

46. Mr. Nurkowski testified that in 2013 he leased a portion of his property to someone else that grew herbs, melons, carrots and potatoes and designated another garden bed area for use as a "joint research project with UBC Okanagan." Mr. Nurkowski said he also grew tomatoes on his property that year for sale in Alberta and clarified that some of those garden beds appear empty in certain photographs because it is not his practice to plant after mid-summer. He also testified that he planted fruit trees five to six years ago and last year planted peach trees and grape vines (the latter of which are not yet producing).

Odours:

47. Mr. Nurkowski testified that he observed the volume of manure steadily accumulating on the feedlot year after year and that it got really bad in 2011 and 2012. He said that he filed his complaint when he observed that the farm had done nothing to remedy this situation after the hydrogen sulphide incident in August 2012.

48. Mr. Nurkowski said that given the volume of manure on the feedlot, he believes the feedlot had not removed most of the manure from the site or spread any on its fields until the spring of 2013, although he was aware that the farm had screened some compost in 2011. It is his position that the "massive amounts" of manure on the feedlot are causing odours because the gasses emitted from the anaerobic breakdown of the manure (such as hydrogen sulphide and ammonia) are highly odorous.

49. Mr. Nurkowski testified that his residence is located approximately 302 meters northeast from the feedlot and that the winds blow from the southwest to the northeast (or from the direction of the feedlot toward his property) approximately 25% of the time and that he notices strong odours approximately three times per week.

50. Mr. Nurkowski testified that strong odours from the feedlot affect his and his family's ability to work on their property or to eat outside and that they are significantly worse when manure is moved. Mr. Nurkowski said that on April 29, 2013 when he went to the shared property line with the feedlot to pick up some equipment, the intensity of the odour made him physically ill. As a result of that incident, he said he no longer goes near that property line when odours are bad. He also testified that his spouse has asthma and claimed that she had an asthma attack while working outside when odours were released by a

bucket loader moving manure. As a result, he said his spouse no longer works in the garden without her inhaler. He further testified that in May of 2013 his daughter became physically ill when she inspected an area approximately 80 meters from the edge of the property line.

51. Mr. Nurkowski suggested that any of the respondent's photographs showing him working near the feedlot's property line when the manure was being scraped from pens must have been taken when the wind was blowing in the opposite direction. He also said he believes the odours pose a health risk despite the respondent's articles alleging the contrary.

52. Mr. Nurkowski relied on the evidence of his neighbours. Mr. Kilmartin testified that approximately once or twice per month he can smell odours from the feedlot that are so strong that he has to go indoors. He also smells strong odours when manure is spread on the fields next to his residence. Mrs. Ives testified that she smells odours from the feedlot on a daily basis although on some days it is hardly noticeable while on other days it is strong and putrid and drives her indoors. She believes the source of the odours is from feed and not from manure. Ms. Torada testified that some days the odour from the feedlot has been so strong that she has had headaches and nausea and had to stop working in her orchard.

53. Mr. Gill testified that he and his orchard workers are bothered by strong odours coming from the feedlot when the winds are strong. Mr. Naka testified that although his property is not in the path of the prevailing winds, there are some days when the odours from the feedlot are so strong that he cannot go outside. He said he believes that the odours may be from the feed as he can often hear equipment operating at the same time and observed that it is not an "excrement smell." Mr. Simla testified that he has been bothered by strong odours over the past two years that appear to be coming from the feedlot however he was unsure if it was from the manure or the feed. He said the intensity of the odour varies but that there are days when the odour was so strong that he had to close the windows on his residence and could not use his outside patio.

54. Mr. Nurkowski submits that the respondent's farm site is not suitable for the number of cattle it maintains and the volume of manure those cattle produce. In pre-hearing conferences, he sought an order that the feedlot be required to move its pens and composting operations further back on its property in order to maintain a 400 foot separation distance from his property line and that it limit the number of cattle on the feedlot to no more than 250 cattle at any given time. He also sought an order that the respondent build earth berms 2 metres in height around the feedlot, manure storage areas and composting areas or alternatively, that it build a covered storage facility for manure composting operations.

55. In his written submissions following the hearing, Mr. Nurkowski sought an order that the respondent reduce its current cattle numbers by 2/3 and limit it to no more than 500 at any one time, and to maintain annual records detailing animal numbers and weights. Mr. Nurkowski also sought an order that the cattle pens be cleaned out 2 – 4 times per year and that all manure and composting activities be moved off of the feedlot's site.

Alternatively, he sought an order that the present location of the composting operations in the field to the west of his property be moved along the driveway of the feedlot site. He further sought an order that the respondent follow the composting practices set out in the Ministry of Agriculture, Composting Handbook.

Flies:

56. Mr. Nurkowski testified that between 2008 and 2012 he was disturbed by an increasing number of flies that left excrement and regurgitated material on buildings. Mr. Nurkowski testified that he has to pressure wash his residence once or twice per year to remove a buildup of fly feces and regurgitated material. He said the flies are a problem between mid-May and early November and he believes they are primarily stable flies and that their source was the manure and compost on the feedlot. He also testified that he is very concerned that if flies are in fact, coming from the manure on the feedlot that they would carry E. coli on their bodies and transfer it to his produce. Mr. Nurkowski said he has not tried pesticides to control the flies and would not use them because it is his intent to grow organic crops.

57. Mr. Nurkowski's neighbour, Mr. Kilmartin testified that he is bothered by a large number of flies which he believes are coming from the feedlot, they are "unbearable" and prevent him from eating outside. The flies leave a significant amount of feces on his residence so that he must power wash the exterior from time to time. He also said he believes there may be more flies when manure is spread in the fields. Ms. Torada testified that she has noticed a dramatic increase in the number of flies and that in the past three years she has been bothered by biting flies which she believes are from the feedlot. She also testified that it is her practice (an accepted farm practice) to leave spoiled fruit on the ground and she agreed that the fruit attracts flies. Mr. Gill and Mr. Naka testified that they have noticed an increased number of flies since the feedlot moved to its present site. Mr. Naka said the flies do not prevent him from eating outside but due to the spots they leave, he must wash down surfaces and fruit.

58. Mrs. Ives testified that she used to keep horses in a stable on her property but that they were subsequently boarded in Peachland and then sold approximately two years ago. She admitted that there were flies in the barn on her property when she had the horses.

59. Mr. Nurkowski's expert witness, Dr. Zilahi-Balogh, testified that she attended the Nurkowski property on October 4 and 11, 2013 and observed numerous flies and fly feces on the side of Mr. Nurkowski's residence. She testified that flies will move from feedlots onto adjacent properties depending on the temperature and that it was not unusual to find more flies on the Nurkowski residence than the feedlot buildings given that flies are attracted to light coloured surfaces such as the siding of Mr. Nurkowski's residence.

60. Dr. Zilahi-Balogh said she took a sample of the flies found on the Nurkowski property and later identified them as stable flies which are blood feeders that breed in moist areas with organic material. In her opinion, the likely origin of these flies was the feedlot given its proximity, moist conditions and the abundance of flies. Dr. Zilahi-Balogh said that feedlots

typically have lots of stable flies and she was not aware of any other livestock operations in the area. She noted in particular, that if a neighbouring property had a horse barn but no horses to produce manure or urine, it would be an unlikely source of flies.

61. Dr. Zilahi-Balogh testified that fly management on feedlots involved an integrated approach that included chemical agents (such as applying pesticides on barn or other surfaces where the flies land), cultural approaches (such as removing manure, composting manure to kill larvae and eggs and to dry out the material and keeping areas free of moisture) and biological controls (such as parasitic wasps). She noted that "a lot of problems could be alleviated by taking a cultural approach to fly control." She said she was unable to find a report that would substantiate the effectiveness of using cedar bedding as a "natural inhibitor."

62. In pre-hearing conferences, Mr. Nurkowski sought an order that the feedlot implement a fly control program and manure management practices to mitigate flies. In his written submissions following the hearing, he submits that the fly problem can best be mitigated by cleaning out the cattle pens more often and by moving the manure off site.

Birds:

63. In his filed complaint, Mr. Nurkowski states that between 2008 and 2012 he incurred "extra expenses in an attempt to minimize losses to vegetables, berries and fruits as a result of exploding starling and other pest bird populations due to the proximity to the feedlot." In particular, he states that "in addition to damaging fruit through feeding, [the birds] also contaminate fruits and berries with their droppings." Mr. Nurkowski testified that he has observed many birds leaving the feedlot and flying onto his property. He said bird numbers are higher in the winter months and they appear to be attracted to the feed on the feedlot. However, he agreed that birds are also attracted to fruit in the area.

64. Mr. Nurkowski testified that he used to grow soft fruit (blackberries and raspberries) but that they would get covered with bird excrement and he did not feel comfortable selling them so he removed the canes. He admitted that the raspberries had a borer problem (or were diseased) but denied that was the reason for removing them. He testified that crows perch on his property and leave excrement on the grapevine posts and grape leaves. He said the birds also leave excrement on the apples of an apple tree 80 meters from the property line closest to the feedlot so he does not harvest them.

65. Mrs. Ives testified that she believes the feedlot has attracted ravens to the neighbourhood. Mrs. Torada testified that she has noticed more starlings and crows. Mr. Gill testified that he has noticed an increased number of birds since the feedlot moved to its present site and observed that the starlings eat his cherries. He said he is concerned about bird feces on fruit but admitted that this is not presently of concern to the Tree Fruit Cooperative of which he is a member. Mr. Gill also testified that he uses nets on his trees to control bird predation but does not use propane cannons because he does not find them to be effective. Mr. Naka testified that he is uncertain if starlings are attracted to the area solely because of the feedlot because he has not seen many of late however he believed that the feedlot has

attracted crows to the area. Mr. Simla testified that he has always had starlings because they are attracted to cherries but that he has observed that the number of crows has grown since the feedlot located to its present site and that the crows also eat his cherries.

66. Mr. Nurkowski testified that he does not believe that the feedlot's practice of trapping starlings is effective at reducing bird numbers and submitted that they would be reduced if the manure piles on the feedlot were moved offsite. He also submitted that nets above the feeding areas would deter the birds. Mr. Nurkowski testified that he currently takes no measures to control birds on his property but has plans to use a (radar controlled propane cannon) bird control device next year. He seeks an order that the respondent continue to trap birds as well as use netting and propane cannons "to control the bird population to the level [it was] prior to the operation of the feedlot".

Manure Dust:

67. Mr. Nurkowski testified that manure dust from the feedlot blows onto his property and that it is "significant". He said the dust exacerbates his spouse's asthma and raises food safety issues for him. Mr. Nurkowski testified that he did not research the air quality in Kelowna prior to purchasing his property and therefore was unaware of other factors affecting the air quality (such as smoke from forest fires) that could trigger his spouse's asthma. He admitted that pesticides used on neighbouring orchards could also be a trigger for his spouse's asthma but claimed they have not been a problem given that the farmers in question give them notice and spray in the early mornings (to minimize drifting spray).

68. Mr. Nurkowski stated that the former owner of his property grew vegetables on the whole of the property and it was his intention to do the same. However, Mr. Nurkowski claimed that he has not used the bottom half of the property (nearest the feedlot) for some time due to a concern about "contaminants." He said he wants to grow his produce in accordance with CFIA "Import Requirements for Leafy Green Vegetables from U.S. and California"[4] which he claims requires that produce not be grown within 400 feet of composting operations or concentrated feeding operations.

69. Mr. Nurkowski testified that the CFIA does not have similar standards for producers within Canada and that the only standards of which he was aware were the CFIA endorsed CanadaGAP Program, which must be adhered to by all fruit growers who market their produce through the B.C. Tree Fruits Cooperative (the Cooperative).

70. Mr. Fisher-Fleming of the Cooperative testified that manure can be used as a fertilizer in orchards but only at certain times of the year and that outside of those times, manure dust drifting onto an orchard would have to be disclosed to the Cooperative by the affected grower as a "potential contaminant" under the GAPCanada Program. He said as a result of such disclosure, the Cooperative could require growers to take mitigating steps, take further measures at the packing house and/or potentially reject the product. Mr. Fisher-

[4] The source of this publication is http://www.inspection.gc.ca/food/fresh-fruits-and-vegetables/imports-and-interprovincial-trade/californian-leafy-greens/eng/1362372169428/1362372248701

Fleming clarified that it was not the nature of activities undertaken on operations beside orchards that was an issue for the Cooperative but rather, ensuring that any "potential contaminants" do not pose a risk. He noted, for example, that at least one grower for the Cooperative has an orchard located beside a dump. Mr. Fisher-Fleming also testified that the packing house has mitigating procedures (i.e. washing fruit) that it undertakes as a matter of course for all fruit. He also clarified that Mr. Nurkowski is not a member of the Cooperative and that no fruit has been rejected from members in the vicinity of the respondent farm.

71. Mr. Baytalan testified that he attended the feedlot in August 2012 in his capacity of Environmental Health Officer with the Interior Health Authority, approximately a week or more after the (hydrogen sulphide) incident where Tim Marshall was overcome by gasses. The purpose of his visit was to determine if there was a health hazard; i.e. if there was a possibility of hydrogen sulphide moving downwind from the feedlot. Mr. Baytalan testified that he took some readings but the instrumentation did not register any gasses. He then made some inquiries with other health professionals and was satisfied that air dilution would render the gasses safe. He also testified that no violations were issued to the feedlot as a result of this incident. Mr. Baytalan agreed that he had little experience dealing with feedlots but observed during his site visit that there was an odour and there appeared to be a great deal of manure in the pens. He agreed that at times the air quality in Kelowna is rated as poor.

72. Neighbour, Mr. Kilmartin testified that he has observed dust blowing from the feedlot in the spring, summer and fall months but that is was "not that bad" and depended on the direction of the wind. However, he said because his grandson has asthma, he stays in a motel when he visits in the summer months due to the dust.

73. Mr. Nurkowski said he would not consider building a dust screen (or cedar hedgerow) as recommended by the KPs because the dust plumes would not be mitigated by four foot trees. In his oral testimony, he said the only solution would be for the feedlot to remove manure from the site or to contain it in a storage facility because he believes spreading it on the feedlot's fields will only increase the surface area for dust, flies and birds. Mr. Nurkowski seeks an order that the respondent either move its pens and compost piles to another location on the feedlot site or alternatively, that it build a covered storage facility for composting and build a vegetative berm to function as a dust screen.

RESPONDENT'S EVIDENCE AND SUBMISSIONS:

74. Tim Marshall presented the case for the respondent feedlot and gave oral evidence at the hearing. The respondent feedlot also relied on the testimony of the following persons:

- His brother, Donald Marshall who has resided on the orchard property next to the current feedlot location since the 1980s and he currently resides there with his family. He is also employed by the feedlot and has a contract to trap starlings with the BCGA;
- His brother, David Marshall who resides north of the feedlot, is employed by the feedlot and operates an abattoir on the feedlot property;

- Tami Sali rents a residence from the Marshalls which is located approximately 250 metres west of the feedlot. She has resided at this location with her family for the past four years;
- Evan Duncan resides on a 10 acre property approximately 800 meters northwest of the feedlot. He has lived there since 2004;
- Peter Raffen owns and operates a livestock auction in Armstrong, B.C. and has known the Marshalls for 48 years;
- Marv Hodge has been a livestock inspector for the past 8 years and is currently a supervisor for the Okanagan Feeders' Association;
- August Bremer has owned and operated a feedlot in Armstrong, B.C. for approximately 25 years;
- Bill Freding has owned and operated a feedlot in Oliver, B.C. for approximately 25 years; and
- Carl Withler is a Regional Agrologist with the B.C. Ministry of Agriculture in Kelowna, B.C.

75. Tim Marshall testified that the feedlot business was purchased by his grandfather in the 1930s and that his father, Bill Marshall, took it over in the 1970s. The former feedlot site was located on 117 acres within the City of Kelowna and operated with approximately the same number of cattle as the feedlot has now. Initially there was little development in Kelowna but by 2006, industrial and residential uses developed in the area. Tim Marshall testified that he was aware of some complaints made about the feedlot and he believes the City of Kelowna and the feedlot's neighbours exerted some pressure on the Marshalls to move from this site. In 2006, the land on which the feedlot was located was removed from the ALR and the feedlot moved to its present location on the Marshall family home site (i.e. where Bill and Liz Marshall have resided since 1971). The Marshall family purchased lots adjacent to the feedlot that were used as orchards but some were later cleared to use as hay fields. Tim Marshall also resided in a house next to his brother, Don Marshall, on the feedlot property until 2002.

76. Tim Marshall testified that the barns and corrals were built on the feedlot site in 2006 and an abattoir was constructed sometime later. The abattoir is used to slaughter and custom process other persons' animals and is operated by his brother, David Marshall.

77. Tim Marshall testified that the Marshall home site was the only viable option for relocating the feedlot, in part because it was zoned for intensive agricultural use. He said it was important to maintain the feedlot's location in Kelowna because that is where its major feed sources are located (spoiled fruit from Sunripe, by-products from a winery and barley mash from a brewery). Feedlot owner Mr. Bremer testified that feedlots do not make a lot of money and therefore rely on low cost feed. Mr. Marshall also testified that while the Marshall family owns 1,000 acres of rangeland on the top of Black Mountain, it is (economically) unsuitable for a feedlot because it lacks power, water and would be difficult to access when transporting livestock, feed and other supplies. It would also be harmful to expose older livestock to the extreme weather conditions existing there.

78. Tim Marshall testified that the feedlot differs from many other feedlots in that 95% of the cattle are "canner" or non-productive, older livestock that are sold and slaughtered for ground beef. This means that the cattle do not remain on the feedlot in order to gain weight. Cattle come and go from the feedlot every day. They are purchased from as far as Vanderhoof and Calgary, Alberta. In the summer months, the feedlot holds between 200 and 500 head of cattle while in the winter months it usually holds between 500 and 1000 head of cattle but that due to the frequency of buying and selling, the maximum number could be 1500 (at the very most). In the spring the respondent also purchases 500 to 1,000 calves which are put out to range. In the fall, these cattle are gathered at the feedlot and most are shipped to Alberta for finishing and slaughter.

79. Peter Raffen testified that the Marshall feedlot purchases approximately $1 million worth of livestock from his auction each year. He said there are not a lot of purchasers of older cattle in the province at this time and as a result, the loss of the feedlot as a customer would significantly affect his business. Feedlot owner, Mr. Bremer testified that the respondent feedlot purchases most of its cattle in the fall when many other producers are reducing their herds, so prices would be much lower without the Marshall feedlot.

80. Mr. Raffen testified that while some feedlots in the Okanagan (i.e. Enderby, Oliver and Armstrong) were located in lower density residential areas (compared to the respondent feedlot) he was aware of a second feedlot in Armstrong that was in a densely populated area. He also testified that while the Enderby feedlot had between 300 and 500 head of cattle, the others were much larger (5,000 or more head of cattle). Mr. Bremer testified that he has seen many feedlots both in BC and Alberta; he knows of two Alberta feedlots that had 75,000 and 100,000 head of cattle, and that the management practices on these sites are much the same as on the smaller BC feedlots. Feedlot owner, Mr. Freding testified that a high density of residential lots was not an issue for him given that Oliver had a minimum 10 acre lot size.

Odours and Manure Management:

81. Tim Marshall testified that although he owns and operates his own (unrelated) business, he is still active in the operation of the feedlot and he earns some income from manure and compost that both he and his brother, Donald Marshall, sell. He said they also give some (at no cost) to neighbours. Donald Marshall also testified that there has been a high demand for manure from the feedlot by orchardists and landscapers (as an example there is a standing order for 200 loads).

82. Tim Marshall testified that prior to 2012 it was the feedlot's practice to pile manure in windrows and turn it in the cattle pens rather than to remove it and "tie up a hay field". He said once the manure was composted, it would be dumped by the fence (on the property line) at which time it would be screened and processed in the same area. Tim Marshall testified that while the manure may have been left in the pens in 2007 and 2008 to build up berms, he recalled that on at least two occasions after that time material was removed and some of it was applied to the fields.

83. Tim Marshall testified regarding the August 2012 incident where, while piling manure, he was rendered unconscious and his dog died as a result of inhaling hydrogen sulphide gas. He described this incident as unusual given that he had been exposed to manure on the feedlot since he was a child and given that as far as he was aware it has never happened to anyone else in the industry before. He also said that after reviewing the feedlot's operations, the agencies involved concluded that the incident was the result of improper composting. Tim Marshall denied that the anaerobic conditions occurred because more manure was accumulating than was being removed and stated instead that it was the result of the material being compressed and not getting any air.

84. Tim Marshall testified that as a result of this incident, the feedlot implemented safety procedures as required by WorkSafe BC which included the use of a monitor to measure hydrogen sulphide, oxygen, carbon dioxide and combustible gasses. The monitor must be worn by anyone undertaking extensive manure removal or compost turning.

85. Tim Marshall testified that since the incident in August 2012, he has learned more about composting and manure management and believes the feedlot has been proactive in a number of ways. He said he developed a manure management plan in consultation with the KPs, forwarded a copy of it to Mr. Nurkowski and sent progress reports to a number of public authorities. He said in late-March of 2013, the feedlot started cleaning out the pens and that this was completed by the end of April 2013. He said some of the manure was put in windrows in the west field to compost and some was spread and harrowed into hayfields to the west and south of Mr. Nurkowski's property. He said although Mr. Nurkowski objected to composting in the west field, Mr. Marshall believes that was the most suitable location on the property because of its sloping nature. He also testified that he turned the windrows a number of times to aerate them and monitored the internal temperature to determine if it was high enough to kill any fly eggs and larvae.

86. Tim Marshall stated further that although the farm does not have a written manure management plan, it is the feedlot's intention to clean out the pens once per year (while maintaining the 5 foot berm (for cattle to stay dry and lie), to apply some of the un-composted manure to the farm's fields and sell more to others like orchardists, and to compost the rest then remove it from the property. Tim Marshall testified that it was not possible to spread the manure on the Black Mountain range property given that it is forested, but stated that he would consider spreading some of it on the fields at his own residence.

87. Tim Marshall also testified that he had an Environmental Farm Plan (EFP) prepared by an EFP Planning Advisor in July 2013 to ensure that if there were operations on the feedlot that were not in compliance with provincial regulations that they would be fixed. He said that the only items noted by the Planning Advisor on the Action Plan worksheet as high risk factors were fuel tanks on the farm and a can of pesticide used to spray the cattle for lice. He said dust and odours were ranked as low risk which suggested to him that the feedlot was not being mismanaged.

88. Tim Marshall testified that Mr. Nurkowski made a complaint to the Regional District that a corral was too close to the Nurkowski property. He said he agreed that the corral did not comply with the by-law so he moved it. Regional Agrologist, Mr. Withler testified that the Ministry recommends composting activities be set back 30 metres from a lot line but that this has not been adopted by the Regional District and therefore at present, the feedlot could store compost up to its lot line (although it no longer does so).

89. Tim Marshall says he believes the feedlot was not the source of the strong odours that Mr. Yunker claimed made him ill in October of 2012 and instead he said he believes that odour was the result of a packinghouse dumping waste near Mr. Yunker's property, which he believed also resulted in complaints to the Ministry. Mr. Withler testified that until recently, landfill sites would not take culled fruit and as a result, farmers would dump it in gravel pits or on site. He said that over a two week period in the summer of 2012, a farmer dumped and partially buried 100,000 pounds of spoiled cherries on a site approximately a kilometer northwest of the feedlot (near Mr. Yunker's residence). He said the rotting fruit gave off a rancid odour that could still be smelled into the spring of 2013 and that the surface flow entered a watercourse and putrefied a pond on the nearby golf course.

90. Tim Marshall disputes Mr. Nurkowski's testimony that he was unaware in 2008 that he was moving next door to a feedlot given that the feedlot appeared the same in 2012 as it was in 2006. He also said he has many reservations about Mr. Nurkowski's complaints about odours from the feedlot. He recalled that while he was cleaning out the pens in March 2013, a worker on Mr. Nurkowski's property went to the property line to paint a shed located there but did not seem to be disturbed by the movement of manure a short distance away. He also claimed that on April 17, 2013 (the date Mr. Nurkowski alleged to Interior Health that he became ill from odours on the feedlot), the winds were blowing from the north (or away from Mr. Nurkowski's property). He further claimed that other photographs taken of Mr. Nurkowski and his spouse near the property line while manure was being moved show that Mr. Nurkowski's allegations are not believable.

91. Tim Marshall submitted that all feedlots have odours, even those in Alberta that Mr. Nurkowski alleges have "progressive standards." He noted that even though Alberta may have licensing requirements regarding proximity to neighbours, it still had issues with odours and pollution and he referred the panel to some articles in that regard. Tim Marshall testified that he believes the strong odours from the respondent farm are not only from manure but also from the silage or other feed and he referred the panel to a number of articles in that regard. He said he also believes this to be the case given that compost does not emit an odour and the material in the pens will not emit an odor in the winter when it is frozen.

92. Tim Marshall testified that a lot of bedding is required in the pens for older cattle in order to avoid illness. He noted that there are two other much smaller cattle operations in Kelowna that allow manure to accumulate and that these also have odours but that one is not detectible because it is located next to a landfill site.

93. Tim Marshall admitted that the feedlot received letters from the Ministry of Environment (MOE) from August 2012 to April 2013 alleging that the feedlot was in contravention of the Code of Agricultural Practice for Waste Management (the Code) but he denied that this was the case. He testified that MOE alleged the feedlot was improperly storing waste because it was of the view that under the Code, field storage includes the composting process and therefore MOE maintained that manure on the feedlot could only be there for a total of nine months. Tim Marshall also testified that he believes one of the letters was in complete error in that it referred to waste from the abattoir which is treated differently under the Code than manure. In addition, he suggested that the MOE was likely in error about all of the matters raised given that there was no follow-up to the letters alleging non-compliance.

94. Mr. Withler testified that in his opinion, field storage of agricultural waste referred to under the Code refers only to manure in an uncomposted state and not to composted material. He also testified that the Ministry is not concerned about the potential for E. coli transfer from the feedlot to other farming operations in the area but rather feels the current uses are compatible. Mr. Withler testified that he believes that the feedlot was doing a good job removing manure from the pens and offsite prior to 2012 but agreed that the accumulation in the pens was a contributing factor to the complaints about odours. He said the feedlot has since improved its manure management practices by moving manure more frequently from the pens and taking the necessary steps to ensure proper aerobic composting of the manure.

95. Tim Marshall submitted that the farm has taken steps to mitigate odours from the manure but that it is not possible to eliminate odours completely especially if one of the odour sources is the feed. Mr. Raffen testified that he has been on many feedlots in the south Okanagan and that odours are a factor on all of them. He said he believes the feed contributes to the odour. Mr. Withler agreed that culled fruit fed to the cattle may be a source of odour on the feedlot.

96. Ms. Sali, who resides 250 m west of the feedlot, testified that while the feedlot has odours, they are not so offensive that they make her ill and she has no reservations about inviting guests to her home. In fact, according to her testimony, she approached the Marshalls about the possibility of renting the house on their property. Since moving onto the site, she said her children love to visit the feedlot. Ms. Sali testified that while she is not aware of the feedlot's manure management practices, she has observed over the past four years people frequently buying and removing manure in vehicles of varying sizes and has also observed the feedlot spreading manure on its fields.

97. Mr. Duncan's property is located downhill from the feedlot and he testified that winds in the evenings can bring odours down from the feedlot especially when manure is being spread. He also testified that he gets used to the smell and it does not make him nauseous. He said he believes the strong odours on the feedlot are from the feed. He also testified that he received between 1,000 and 1,400 cubic yards of manure from the feedlot in 2009 and 2010, that his father (who has 36 acres) received 100 – 200 dump truck loads of manure from the feedlot prior to 2012 and that his brother also received a lot of manure from the

feedlot. He said he has observed the feedlot spreading manure on its fields on two occasions prior to 2012, selling it to others from a corner lot and selling it to orchardists in the area. He further testified that last year he had piled raw manure from the feedlot beside a large garden on his property and had no concerns about E. coli contamination.

98. Livestock auction owner, Mr. Raffen, testified that the pens on the Enderby feedlot are cleaned out on a yearly basis and does not believe the manure is left on the property but rather was spread on other properties. He also testified that the Oliver feedlot appears clean and tidy but was unsure what they did with their manure. He was aware of one feedlot that had composted manure on its property but had recently moved those operations to another location. Mr. Raffen testified it is his practice to clean out his pens every fall and that a company from Vernon removes it approximately once per year. He testified that prior to clean out, the pens on feedlots can accumulate a large amount of manure. He also testified that although the respondent feedlot does not have a lot of field areas on which to spread manure, he believes the Marshalls have been able to move the manure by selling it. He was uncertain if more manure had accumulated on the respondent feedlot than had been removed.

99. Mr. Hodge testified that in his experience all feedlots have odours and he noted that in the fall months orchards also produced an odour from rotting fruit. He also testified that in his role as a livestock inspector, he visits many farms and he did not believe the respondent farm's odours were any more unusual than on other feedlots. Mr. Hodge also testified that he did not believe the respondent farm left a greater concentration of manure in the pens than other feedlots he has been on.

100. Mr. Bremer testified that it is common practice for feedlots to have piles of manure in the pens in the winter months, to clean out the pens once per year in the spring and to store the manure. He said it is his practice to clean out his feedlot pens two to three times per year and to truck it to a nearby First Nation's reserve to spread. Despite this practice, he said there will still be an odour because he has to leave a mound (or berm) in the pens. Mr. Bremer also said that liquid manure systems result in much stronger odours than the solid manure from feedlots, and that cattle fed a high concentration of grain will produce manure with a stronger odour.

101. Mr. Bremer and Mr. Freding both testified that they do not believe that the volume of manure contributes to the odour but rather it is the surface area of the manure that effects how much odour there will be. Consequently, Mr. Bremer said the odour from a feedlot with 10 feet of manure under the cattle will be the same as one with 2 feet, and that he does not believe the frequency of removal of manure from the respondent farm is the problem with respect to the odour. Mr. Bremer testified that he has been to the respondent feedlot and believes it has been well managed since the KPs recommendations were implemented.

102. Mr. Freding testified that he has been on at least 20 to 30 feedlots and that they all smell, but some more "pleasant" than others. He noted for example, that he could smell the feedlots near Brooks, Alberta from ten miles away and that in comparison one can hardly smell the British Columbia feedlots. He said it is common in the early spring to get odours

on feedlots as things begin to thaw but as things dry out, the odours are reduced. Mr. Freding testified that it is common to have manure piles in pens over the winter, to clean them out in the spring and then to either spread the raw manure or to compost it and leave it in piles for about a year.

103. Mr. Freding said it is his practice to clean out the pens at least once per year and to spread approximately 25% (on 160 acres used for corn) and 75% is piled in windrows to compost. Some of the compost is applied to grape crops and the rest is sold commercially. He said that it will take a year and a half from the time the manure is removed from the pens to get a good quality compost product. He testified that while his pens did not accumulate as much manure as the respondent feedlot (based on a photograph taken in December 2012), he was aware of many feedlots in Washington State that did have similar amounts of manure accumulation given that the manure cannot be spread in the winter months and has to be piled up to keep the cattle dry.

104. Mr. Withler testified that he has been on a number of livestock operations in the United States, New Zealand and Canada including three feedlots in the Okanagan area and they all have some odour.

105. The respondent submits that feedlots produce odours and that the odours and other disturbances are a consequence of living in a farming community. The respondent also submits that Mr. Nurkowski's complaints are without merit and that the remedies he seeks would effectively put the feedlot out of business. The respondent states that Mr. Nurkowski wants to shut down the feedlot because he failed to realize when he purchased his property that it was next to the feedlot.

106. The respondent also submits that its manure management practices prior to the complaints accorded with normal farm practices but that since the accident in August 2012, it has made "improvements" to its composting practices. The respondent submits that its manure management practices now include cleaning out its pens once per year, selling and spreading some of the raw manure and composting the rest of it on site in the recommended location and using the methods recommended by the KPs. The respondent also states that it will no longer use gypsum (or drywall materials) in the bedding material in the pens given that it may have contributed to increased levels of sulphur.

Flies:

107. Tim Marshall denied that the feedlot was the source of stable flies and relied on various photographs he said were taken of cattle on the feedlot in June of 2013 which he suggested showed very few flies. He also testified that although the farm buildings have not been power washed since 2006, they show little accumulation of fly spots.

108. Tim Marshall referred the panel to an article that stated poultry operations provided a significant habitat for stable flies. He testified that the former owner of Mr. Nurkowski's property had 70 hens in a confined area near his present residence until 2010 when she moved. Consequently, he suggested that this could have been a potential source of stable

flies. Tim Marshall testified that when he lived on the farm property, prior to the feedlot lot locating there, he too had a fly problem and suggested that the flies could have come from the chicken operation on the (now) Nurkowski property.

109. Tim Marshall also testified that it was Mr. Nurkowski's practice to leave garbage bins outside his residence under a light while he was not living there and that this practice could attract flies. He noted that Mr. Nurkowski has taken no steps to deal with fly issues on his property.

110. Donald Marshall testified that he has resided to the north of (what is now) the feedlot since 1992 and observed no difference in the number of flies at his residence after the feedlot located onto that site. He also testified that he does not notice flies other than in the late fall when the sun shines on the southwest corner of his residence. He further testified that he is not bothered by flies on the feedlot and has observed some on the side of a barn and some on the side of a pickup truck. Ms. Sali testified that, while she gets some flies at her residence, there are not many and they do not bite. She believes the flies come from the rotting fruit on the ground in the surrounding orchards. Mr. Duncan testified that he believes the fly situation is "normal" and noted that he has a white-sided house.

111. David Marshall testified that he is responsible for a licensed abattoir located on the feedlot property. He stated that as a condition of his license, he must comply with CFIA regulations, animal health and food safety regulations and must deal with the B.C. Centre for Disease Control, Interior Health, the Ministry of Environment and B.C. Meat Inspection agencies. David Marshall testified that while there are some flies on the farm, there are no fly issues with respect to the abattoir and he submitted that if there were any health-related issues due to flies (such as E. coli) that the previously mentioned agencies would shut him down. Instead, he suggested that flies could be coming from cattle that graze on rangeland behind a neighbouring Ms. Ives' residence or from another neighbour who leaves large piles of grass clippings.

112. Mr. Raffen testified that flies are part of a feedlot in his experience. Mr. Bremer testified that he has observed few flies on his feedlot operation compared to a dairy operation he formerly operated and that he does not use a fly control program. Mr. Hodge testified that he has only observed a few flies when he has visited the respondent feedlot. Mr. Freding testified that he does not notice a lot of flies on his feedlot however he uses parasitic wasps in the summertime to control hatching pupae. He did not know just how effective the program was and said it costs less than $1,000.00 per year.

113. Mr. Withler testified that he was surprised that he did not find significant numbers of flies on feedlots given the sources of manure.

114. The respondent submits that while it has few flies on the feedlot site, it is willing to implement a parasitic wasp program and will continue to use cedar shavings in its bedding mix to help control flies.

Birds:

115. Tim Marshall testified that the feedlot traps starlings and also traps some pigeons which are then sold. Donald Marshall testified that he has been trapping starlings on the feedlot property since 2007 under a contract with the BCGA Program and during that time has caught 115,000 starlings. He also testified that he has been catching fewer and fewer birds each year, which suggests to him that the BCGA Program is effective in reducing bird numbers. He testified that he has observed that the birds come to the feedlot from other areas such as the dump and leave at night. He also says that starlings were in the area prior to the feedlot locating there and that when cherries are ripe, the birds hide in the orchards.

116. Tim Marshall referred the panel to a photograph taken at the end of June 2013 that showed little being grown on the Nurkowski property. He claimed that Mr. Nurkowski had provided no evidence that he grew any vegetable crops in 2013 but rather just provided photographs of soil having been worked. Tim Marshall further testified that based on his observations, he was also doubtful that Mr. Nurkowski had produced any fruit crops and noted that there was no evidence of fruit or vegetables spoiled by bird predation or droppings. Consequently, he submitted that in the absence of any evidence of bird damage to vegetable or fruit crops grown by Mr. Nurkowski, there were no grounds for his complaint regarding birds. He also noted that despite the complaints, Mr. Nurkowski has taken no steps to date to control the birds.

117. Mr. Duncan testified that he is not bothered by crows or starlings but rather by quail. Mr. Raffen testified that in his experience feedlots have lots of birds and also tend to have traps. Mr. Hodge testified that in his experience, every feedlot has birds because they are attracted to the feed but that there can be other feed attractants in an area such as orchards. He also testified that in his opinion most feedlots use scare devices or traps for bird control. Mr. Withler testified that in his experience, feedlots tend to attract birds due to the open feed. Mr. Bremer testified that his feedlot gets pigeons and starlings; his practice is to shoot and not trap them. Mr. Freding testified that he gets a large number of starlings in the summer months that are more of a nuisance to his 50 acres of crops than on the feedlot. He said he shoots and traps for bird control.

118. Tim Marshall submitted that the farm has taken steps to mitigate birds through trapping of pigeons and starlings but that it is not possible to eliminate them completely.

Manure Dust:

119. Mr. Marshall denied that the feedlot is the cause of Mr. Nurkowski's spouse's asthma and suggested that local online discussion forums (to which he referred the panel) show that Kelowna is not considered a good environment for someone with asthma or allergies due to the poor air quality. He also noted that according to the doctor's report tendered by Mr. Nurkowski, there are a number of triggers for asthma including chemical vapours. He referred the panel to photographs showing neighbours to the north and east of the Nurkowski property spraying pesticides in their orchards. He also referred the panel to a

document that alleges the symptoms associated with pesticide exposure are similar to those associated with hydrogen sulphide exposure.[5]

120. David Marshall testified that he rounds up cattle inside the pens approximately two to three times per week and that in the dry summer months, this creates dust. He said the feedlot tries to minimize the amount of dust by moving cattle in the mornings when it is cooler and the dew is on the ground. However, he testified that given that the pens were cleaned out this year, the ability of the ground to hold moisture has been reduced and he anticipates that this may create dustier conditions.

121. Ms. Sali testified that she has allergies but does not experience breathing difficulties due to dust from the feedlot. She also said one of her daughters has congestive heart disease and is not adversely affected by dust. She admitted that someone with severe allergies might have difficulties with dust and that her residence was not subject to the prevailing winds. Mr. Duncan testified that he has not observed dust coming from the feedlot.

122. Mr. Raffen testified that dust from moving cattle in the dry months is typical on a feedlot. Mr. Bremer testified that moving cattle can create a cloud of dust but that it does not move anywhere. Mr. Withler testified that it is not unusual for the movement of livestock and equipment to generate dust.

123. Mr. Freding testified that he is not concerned about E. coli being spread from his feedlot operation to his grape crops given that the heat from the composting process will kill any bacteria on the manure dust. In any event, he noted that of the many strains of E. coli, there are only two dangerous strains and that it was his experience that the risk of E. coli contamination was more likely transmitted through irrigation. He said he is not aware of crops next to a feedlot being contaminated with E. coli.

124. The respondent submits that there is no evidence that manure dust from the feedlot has "contaminated" Mr. Nurkowski's crops. The respondent also submits that more frequent removal of manure from the pens would reduce moisture levels and therefore could create more dust in the dry summer months. The respondent states that it will continue its current practice of sorting cattle in the early mornings when the air is cooler and there is some dew on the ground.

EVIDENCE AND SUBMISSIONS OF THE INTERVENER, BCGA

125. Connie Bielert is the general administrator for the BCGA and the manager of the Starling Control Program which began in 2003 in response to growers' concerns about crop losses and the costs of bird control. She said the program is funded in part by the Regional Districts in the Okanagan Valley as well as by fruit organizations and members.

[5] "Californians for Pesticide reform" is found at http://www.pesticidereform.org/article.php?id=55

126. Ms. Bielert testified that feedlots are ideal sites for trapping starlings because they are attracted to the feed. However she also testified that some hobby farms have been found to have bird numbers in excess of those found on feedlots and that landfill sites and roosting sites are also attractive to the birds. She noted that September, October and the early part of November tend to be high catch times. She also noted that the birds tend to leave the feedlot when more attractive sources of food are available such as ripened fruit. Consequently, in her opinion, the orchards would be attractive to the birds when fruit is ripe even if the feedlot was not located near them.

127. Ms. Bielert testified that birds travel long distances from roosting areas to food sources and therefore it was unlikely starlings would travel from a feedlot to an orchard. She also noted that a lot of nesting takes place in urban centres. Consequently, she testified that part of the Program includes educating the public about the need to disrupt nesting sites and encouraging agricultural producers to dispose of non-harvested fruit. She also submitted that because birds are drawn to a variety of feed sources and perching sites, they are a regional (rather than a site specific) problem and therefore each farmer needs to be responsible for taking measures to protect their crops.

128. Ms. Bielert testified that she believes there has been a decline in starling numbers in the Okanagan Valley due to the BCGA Program and stated that members have advised her that they no longer need to rely on netting due to the decreased numbers. She acknowledged however that it was possible for starling numbers to increase regionally due to their tendency to migrate from one area to another. She also testified that she believed that if the BCGA Program was to stop, starling numbers would quickly increase to their previous levels.

129. Ms. Bielert testified that based on others' reports, there appeared to a "crow problem" all over which she attributed to a natural increase in the crow population.

ANALYSIS

A. The Law

130. The complaints were filed pursuant to section 3(1) of the *Act* which provides as follows:

> 3(1) If a person is aggrieved by any odour, noise, dust or other disturbance resulting from a farm operation conducted as part of a farm business, the person may apply in writing to the board for a determination as to whether the odour, noise, dust or other disturbance results from a normal farm practice.

B. Preliminary Matters

131. In his written submissions following the hearing, Mr. Nurkowski stated that his complaints dealt with disturbances arising from the operations on the respondent feedlot and abattoir. Neither the Notices of Complaint filed by Mr. Nurkowski nor the Pre-hearing Conference Reports completed with respect to this matter refer to disturbances arising from the

operation of the abattoir on the feedlot site but rather only allege disturbances arising from the feedlot operations and in particular, the odours, flies, birds and dust arising from the livestock pens and composting areas adjacent to his property. As such, the panel has not considered any alleged disturbances arising out of the abattoir operation in this complaint decision.

132. During the hearing, both complainants made submissions that exposed manure and manure dust on the feedlot were sources of E. coli bacteria that could potentially contaminate nearby orchards and crops and that exposure to odours from manure could also be a potential health concern. However, as the parties were cautioned by the presiding member during pre-hearing conferences and during the course of the hearing that BCFIRB does not have jurisdiction under the *Act* to deal with complaints regarding pollution, food safety or public health. Such matters fall under the jurisdiction of other agencies that are charged with making those determinations and issuing compliance orders. Consequently, the panel finds that any evidence and argument that relates to pollution, food safety and public health are not relevant to the determination of "normal farm practice" in a complaint filed pursuant to section 3 of the *Act*.

133. This ruling accords with previous decisions of this board. See for example *Eason v. Outlander Poultry Farms Ltd.* (March 10, 2000), where the panel stated at paragraph 91:

> Finally, there were times during our hearing when it appeared as if the Panel was being asked to exercise jurisdiction over what might generally be called "pollution". The *Waste Management Act*, administered in this area by the GVRD, is the statute that governs the discharge of "waste" in this Province. Issues of compliance with that Act are for other agencies to determine. Neither Complainants, farmers nor *Waste Management Act* decision makers themselves should assume that our decisions are in any way based on the *Waste Management Act* or that the nature or timing of decisions under that statute should depend on the outcome of our decisions.

134. Similarly, in *Lacey v. Instant Lawns Turf Farm (1994) Limited*, (October 31, 2005), the panel held:

> A panel's job is to determine whether an odour results from a normal farm practice. It is not to determine whether odour is excessive *per se*. Other laws and government agencies exist that may potentially have some role to play in respect of farm operations that allegedly cause odour problems. Specifically, the Ministry of Environment or the Greater Vancouver Regional District (the "GVRD") may, if relevant legal tests are met, take action under the *Environmental Management Act*, or GVRD air discharge bylaws passed in accordance with that *Act*, if the conduct in question causes "pollution". (paragraph 17)
>
> For these reasons, it is important to note that even if the Provincial board considers a matter to be a normal farm practice, it does not mean that the conduct is acceptable for all purposes and beyond the scrutiny of regulators who hold their own mandates and are subject to their own legislation. This conclusion is consistent with the provisions of s. 2 of the Act which protects a farmer from private law nuisance claims only if the conduct is a normal farm practice and he or she is not in contravention of the *Environmental Management Act*, the *Health Act*, the *Integrated Pest Management Act* or any land use regulation. (paragraph 21)

135. The panel also wishes to note that Mr. Nurkowski's written submissions filed after the conclusion of the hearing misstated testimony of a number of witnesses and included new

evidence. In coming to our decision, the panel has relied on our own independent recollection of the evidence. At the conclusion of the hearing, the parties were advised that the panel would not accept any new evidence. Accordingly, it is the panel's view that any new evidence included in the written submissions (without first obtaining leave of the panel) is not now admissible.

C. Step one: Standing

Odours:

136. Mr. Yunker and his son gave evidence that once the feedlot moved to its current location, they could smell odours frequently. Mr. Yunker claimed that on a number of occasions, he was driven inside by the odours and on one occasion, the odour was so strong that it made him ill. Mr. Yunker acknowledges that since the farm made changes to its manure management practices in the spring of 2013, the odours have been significantly reduced and that he does not smell them very much anymore.

137. Mr. Nurkowski's evidence is that he and his family are disturbed by odours coming from the feedlot and that when the manure is turned and/or the winds are blowing from the southwest to the northeast, the odours were strong enough to make them feel ill. He relied on the evidence of a number of neighbours within a one kilometer radius of the feedlot who also testified that they could smell strong odours from the feedlot however some of them were uncertain whether it was the manure or the cattle feed causing the odour.

138. The respondent admits that feedlots give off odours due to the manure as well as the feed but submits that Mr. Yunker's property is located approximately 800 meters away from the farm and is not in the path of winds from the feedlot and therefore it is more likely that the odours he complains of come from another source such as rotting fruit in nearby orchards or culled fruit dumped in large quantities on a nearby site.

139. The respondent also submits that at the time of his complaints, Mr. Nurkowski and his family only resided on their property for very short periods of time each year and that Mr. Nurkowski and a worker have been observed working very close to the property line with the feedlot when manure was being removed from the pens or handled and showed no signs of discomfort.

140. The panel finds that, while the feedlot is likely not the only source of odours in the Ellison area, it does contribute to the odours complained of by the complainants and their neighbours. The panel finds that culled fruit left on the ground in orchards and dumped in significant quantities in the fall of 2012 would also have contributed to strong, rancid odours in that area. However, the panel finds odours from the feedlot to be significant. The panel accepts the KPs' evidence that due to the type of composting practices used by the feedlot prior to the spring of 2013, it would have given off strong, odoriferous gasses. The panel also finds that the cattle feed (made up of spoiled fruit, barley mash and bi-products from a winery) likely contributed to the odours emanating from the farm. As a result, the

panel finds that both Mr. Yunker and Mr. Nurkowski have established that they are aggrieved by odours, some of which result from the operation of the feedlot.

Flies:

141. Mr. Nurkowski claimed that he is disturbed by many flies from May until November of each year which he believes come from the feedlot because they are biting or stable flies. The flies leave large amounts of feces and regurgitated material on the side of his residence and he is concerned that they may be vectors for disease. Some of Mr. Nurkowski's neighbours also testified that they have observed an increased number of flies and in particular biting flies since the feedlot moved to its present site.

142. The respondent gave evidence that feedlots in general, and its feedlot in particular, do not have a lot of flies. Members of the Marshall family that reside on or near the feedlot and one of their tenants testified that they are not bothered by large numbers of flies or biting flies. The respondent submits that there could be other sources for flies such as a former small chicken operation on Mr. Nurkowski's property, garbage bins, grass clippings and fruit waste in orchards.

143. The panel accepts the expert evidence of entomologist, Dr. Zilahi-Balogh, that the likely origin of the flies is the feedlot. The panel finds it significant that she identified the flies as stable flies that breed in moist organic material such as that found on the feedlot. The panel also finds it significant that there are currently no other livestock operations in the immediate area and that it is normal for the flies to move offsite to surrounding areas. The panel notes that there may be other sources for flies in the area surrounding the feedlot such as the orchards where fruit is left to rot in the fall months, however, the panel also notes that this is not a factor at other times of the year (i.e. spring and early summer) when flies are still present. Consequently, the panel finds that Mr. Nurkowski has established that he is aggrieved by flies resulting from the feedlot operation.

144. The panel notes Mr. Nurkowski's belief that flies are a potential vector for disease and that he is concerned about the potential for the produce he grows on his property to be affected. However as the panel has noted above, the *Act* does not deal with potential disturbances nor does it deal with food safety or public health issues.

Birds:

145. Mr. Nurkowski's complaint also alleges that he is disturbed by birds (starlings and crows) that are attracted to the feedlot and that damage his fruit and vegetables by leaving excrement on them which he believes is a potential health hazard. We observe here that this aspect of the complaint was not vigorously pursued in the hearing. Mr. Nurkowski did acknowledge that birds are also attracted to ripe fruit growing in the surrounding orchards but submitted that the feedlot attracts the birds for the balance of the year by making feed available. Some of Mr. Nurkowski's neighbors testified that since the feedlot moved to its present location they have observed an increase in starlings and crows although others testified that they have observed only an increase in crows.

146. The respondent acknowledged that starlings and pigeons are attracted to the feed on the feedlot but disputes that Mr. Nurkowski is aggrieved by those birds given that there was little evidence that he had grown any produce on his property or if he had, that any of it had been damaged by birds as alleged.

147. The panel agrees that aside from two photographs showing bird feces on some leaves of an apple tree near the property line with the feedlot, there was no other evidence to corroborate Mr. Nurkowski's testimony that birds attracted to the feedlot have damaged the fruit or vegetables he has grown on his property between 2008 and 2013. Instead, the panel finds that Mr. Nurkowski's complaint is really about the potential for bird feces to contaminate future fruit or vegetables that he may grow. However as we already stated the *Act* does not deal with potential disturbances nor does it deal with food safety and as a result, the panel finds that Mr. Nurkowski has not established that he is aggrieved by birds from the feedlot.

148. Furthermore, the panel accepts the evidence of many of the witnesses that starlings and crows existed in the area prior to the feedlot moving to its present site and that these birds would likely still be present on Mr. Nurkowski's property even if the feedlot was not there given that the orchards surrounding his property provide perching areas and an attractive source of food when the fruit is ripe. The panel also finds it significant that Mr. Nurkowski testified that large numbers of birds are attracted to the feedlot in the late-fall and winter months, a time when he has not been producing any crops.

149. The panel also accepts the evidence of the Ms. Bielert for the intervener that she is aware of reports of an increased crow population in many areas and that this suggests the increase in crows in the neighbourhood may be due to a natural increase in population rather than attraction to the feedlot itself.

150. For the above reasons, the panel concludes that Mr. Nurkowski has not demonstrated that he is aggrieved by damage to fruit or vegetables from birds attracted to the respondent's farm operation and as such we dismiss this part of his complaint. However, even if we had found that he was aggrieved, in our view, the respondent farm's bird control practices are consistent (and in fact exceed) normal farm practices of other feedlots (and the reasons for this are set out below).

Manure Dust:

151. Mr. Nurkowski submits that he is aggrieved by manure dust in the dry summer months that blows from the cattle pens and composting areas on the feedlot and is carried onto his property by the prevailing winds. Mr. Nurkowski says the manure dust aggravates his spouse's asthma. He also submits that the manure dust may contain E. coli bacteria with the potential to contaminate his vegetable gardens and cause health problems. He relies on the evidence of one of his neighbours who also experiences dust from the feedlot in the summer months and takes precautions not to expose his grandson with asthma to those conditions.

152. The respondent admits that some dust is generated in the pens in the dry summer months when cattle are moved or when compost piles are turned but says the amount of dust generated is minimal. The respondent challenges Mr. Nurkowski's allegation that only the manure dust aggravates his spouse's asthma given the evidence that the air quality in Kelowna in the summer months is not suitable for persons with breathing problems (i.e. due to smoke from burning orchard prunings and forest fires) and that pesticides sprayed on the neighbouring orchards are also known to aggravate breathing problems for people with asthma.

153. Based on photographs of dust provided by Mr. Nurkowski, it was the opinion of the KPs that the amount of dust generated by the feedlot is minimal, confined to the dry summer months and occurs only when cattle are sorted or compost piles turned. The panel agrees that there are typically only a few months of the year under certain conditions when dust is an issue on the feedlot and also agrees that the dust generated appears to be minimal. The panel further agrees that there may be other irritants in the environment (including other sources of dust or orchard sprays) that may aggravate Mr. Nurkowski's spouse's asthma. However, the panel concludes that the dust that blows onto the Nurkowski property from the feedlot likely would have a negative effect on Mr. Nurkowski's spouse's ability to use their property when the wind is blowing from the southwest direction and as a result, the panel finds that he is aggrieved of manure dust. The panel wishes to clarify however this finding does not allow the panel to consider public health or food safety issues.

154. In summary, the panel finds that Mr. Yunker is aggrieved by odours resulting from the feedlot operation. The panel also finds that Mr. Nurkowski is aggrieved by odours, flies and manure dust from the feedlot operation. However, there was insufficient evidence to demonstrate either that Mr. Nurkowski's fruit and vegetables had been damaged by birds (his complaint on this issue was primarily prospective in nature) or that the feedlot was in fact the source of birds complained of. As a result, this portion of the Nurkowski complaint is dismissed.

155. As a result, the panel must now determine if the odours, flies and manure dust resulting from the respondent feedlot's operations conducted as part of a farm business result from normal farm practices.

D. Step two: Normal Farm Practice

156. Section 1 of the *Act* defines "normal farm practice" as follows:

> **"normal farm practice"** means 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).

157. Consequently, in determining whether a complained of practice falls within the definition of "normal farm practice," the panel looks to whether it is consistent with proper and accepted customs and standards as established and followed by similar farm businesses under similar circumstances. Consistent with the approach set out in *Pyke v. Tri-Gro Enterprises Ltd.*, 55 O.R. (3d) 257 (C.A.) the panel also considers the site specific circumstances of the farm itself and in relation to properties around it to determine if there are any factors that are relevant to the determination of what is normal farm practice for the particular farm.

158. Mr. Nurkowski sought to argue that *Pyke v. Tri-Gro* is also authority for the proposition that where a farm commences operations in a neighbourhood and the nuisances it produces are out of character for the area in which it operates, it will be found not to be operating in accordance with normal farm practice. He emphasizes that this is not a case of residential areas encroaching on a pre-existing farming operation but rather one where the feedlot moved its operations to an area that is inappropriate because of incompatible agricultural and residential uses. Mr. Yunker submits that the feedlot has changed the character of the neighbourhood and that matters will only get worse as the area becomes more densely populated.

159. Mr. Nurkowski also submits that the number and proximity of residences surrounding the feedlot in addition to the use of his property (and that of some of his neighbours) to produce food for consumption are factors that should also be taken into account when determining normal farm practice. In particular, Mr. Nurkowski submits that what is accepted practice for feedlots should be modified in this case because most feedlots are located in more rural settings with fewer residences near them so that the disturbances resulting from their operations will not affect as many neighbours as they would in a more populated area. Mr. Nurkowski also submits that due to the intensive use of the feedlot property, there should be a greater separation distance between the feedlot and his property such as those found in provinces like Alberta.

160. While the panel agrees with the complainants that the character of the neighbourhood may be relevant, it is but one of the relevant contextual, site-specific circumstances to be considered. The number and proximity of neighbours, the use of their lands, types of farming in the area and the size and type of operation that is the subject of the complaint are all matters which may be taken into account in determining normal farm practice. However, the panel does not agree that some vague notion of what is "out of character" for an area is determinative of normal farm practice especially in circumstances as here, where the particular farm use is consistent with provincial and local government zoning for the area, nor do we read *Pyke* as authority for this proposition.

161. Where a farm operation meets provincial or local government zoning requirements, as it does here, the appropriate approach of a panel would be to consider relevant industry customs and standards and then determine whether any site specific factors exist that would warrant modifying those practices on the particular farm. Quite simply what may be normal farm practice in one set of circumstances may not be normal in others.

162. In the circumstances of this case, the panel agrees that the proximity of Mr. Nurkowski's property to the feedlot is a relevant factor that may require a modification to what are the proper and accepted practices of feedlots. The panel wishes to clarify, however, that proximity to the feedlot and the use to which Mr. Nurkowski and his neighbours put their property are separate and distinct issues. The fact that Mr. Nurkowski raises food for human consumption is not a factor that requires the feedlot to adopt higher standards than other feedlots. Normal farm practice does not relieve neighbours and other farmers from the responsibility for taking reasonable precautions on their own behalf. The panel notes for example, that there are other farming operations in the area surrounding the feedlot (i.e. orchards) that attract birds and flies so that these known vectors for disease could come from anywhere. It is due to the potential for contaminants from a variety of sources in the environment that the CFIA recommends triple washing and disinfecting produce for consumption. According to Mr. Fisher-Fleming this is the standard practice of the Cooperative, whose members are located in diverse settings including one that is located next to a dump.

163. The panel also finds that the winds are a relevant contextual factor in this case. The panel accepts Mr. Nurkowski's evidence that the wind blows from the southwest to northeast (or from the direction of the feedlot to his property) approximately 25% of the time. The panel finds that given the close proximity of Mr. Nurkowski's property to the feedlot, the wind flow is a factor because it can carry odours and dust. We will address these contextual factors in our discussion of normal farm practice below.

Odours and Manure Management:

164. Both complainants submitted that the manure management practices of the feedlot were inadequate and resulted in the strong odour they experienced. For the reasons set out above (in the section regarding aggrievement), the panel finds that the likely source of the odour was due to the inadequate aerobic decomposition of the manure on the feedlot during the composting process that resulted in the release of high concentrations of odoriferous gasses. The panel is also mindful of the respondent's evidence and witness testimony that cattle feed may be a contributing source of the odours. However, given that odour from feed was not identified in the filed complaints or argued at the hearing and was not a part of the scope of the KPs' investigation, it will not be dealt with in this decision.

165. Based on the evidence of the KPs and feedlot operators, the panel finds that the proper and accepted practice of feedlots in British Columbia is to clean out cattle pens at least once per year by scraping them down to (but no further than) the gleyed layer and leaving a 5 foot mound for animals to bed on. Clean out of the pens is typically done in the spring after the ground has thawed. Raw manure (mixed with bedding material) is then spread in the fields for fertilizer, moved off site as fertilizer or piled in windrows on the feedlot site to compost. After the composting process is completed, the composted manure is sold, used or moved off site.

166. The respondent admits that prior to the spring of 2013 it did not remove manure from the cattle pens to compost. The evidence of the respondent was that some of the composted

manure was removed from the pens, spread on its fields and sold either as fertilizer or compost.

167. Mr. Nurkowski testified that he had not observed the respondent removing any manure from its feedlot and alleged that little had been removed between 2006 and the spring of 2013. he panel finds however that Mr. Nurkowski only resided on his property for very short periods of time from 2008 until 2013 and therefore he would not have had a reasonable opportunity to determine if the feedlot was removing, selling or spreading manure or not. As a result, the panel prefers the testimony of the respondent's witnesses that between 2006 and 2013, some manure was removed from the pens and applied to its own fields or orchards and was also sold or given away as fertilizer or compost. The panel also accepts the testimony of the KPs that it can be difficult to determine if the same amount of manure was removed as is produced each year because there is "an ebb and flow" to the clean out and composting operations but that it is likely that manure did build up on the feedlot over a number of years because it was not moved off site at the same rate it was produced.

168. Consequently, the panel finds that at the time of Mr. Yunker's and Mr. Nurkowski's first complaints in 2012, the feedlot's manure management practice was to compost manure in the pens, dump some of it over the fence of the pens next to the property line, and sell some commercially to orchardists and apply some to its own fields from time to time. However, the panel finds that the feedlot's practice of not cleaning out pens at least once a year and of composting manure in the pens did not accord with the proper and accepted practices of other feedlots who clean out their pens at least once per year. The panel also finds that the respondent's practice of piling composted manure outside of the pens next to the property line did not accord with the proper and accepted practices of other feedlots whose pens and compost piles must be located at least 30 meters from the property line (as required by by-law and recommended by Ministry of Agriculture guidelines, respectively). Accordingly, the panel finds that the feedlot's manure management practices at the time of the complaints were not consistent with normal farm practice.

169. However, the panel finds that as of late-March or April 2013, the respondent feedlot, in consultation with the KPs, began modifying its manure management practices by removing manure from the cattle pens (while preserving the 5 foot mound) and placing the manure in 4 foot high windrows to compost, monitoring internal temperatures and turning piles to facilitate aerobic decomposition. The panel further finds that the feedlot moved its cattle pens and compost piles 30 meters from the property line.

170. Mr. Nurkowski argued that the respondent's feedlot, given the contextual factors such as the number and proximity of neighbouring residences, requires a much larger setback such as required in Alberta. Farming practices and standards used in other jurisdictions may assist with determining normal farm practice to the extent they can be considered "similar farm businesses under similar circumstances." However the panel notes that there is an important difference between BC and Alberta in the typical size of the feedlot operations that exist (feedlots in Alberta can keep between 75,000 and 100,000 head of cattle more akin to US feedlot operations whereas those in the Okanagan Valley of BC typically keep

between 200 to 5,000 head of cattle). Even by BC standards, the respondent feedlot is a relatively small operation. Further, in the absence of evidence that the Alberta guidelines are in fact the practices followed by feedlots in Alberta generally or in circumstances similar to those of the respondent, the panel finds the Guidelines unhelpful and instead prefers the testimony of the BC feedlot operators who appeared before us.

171. Accordingly, the panel finds that the respondent feedlot's practices since April 2013 with respect to the removal of all old accumulations of manure from pens (but for the mounds) and composting of that manure currently accord with proper and accepted practices of other feedlots in BC.

172. The panel finds that the respondent's practice of applying manure to its forage fields as fertilizer and selling raw manure and compost as fertilizer to others also accords with the proper and accepted practices of other feedlots in BC.

173. Turning now to consider site specific factors, Mr. Nurkowski submits that it has been the feedlot's practice to have more cattle and store a much larger volume of manure on its premises than the size of the feedlot could reasonably accommodate and that this was causing or contributing to the disturbances he has complained of. He seeks an order that the respondent significantly reduce the number of cattle on the feedlot, clean out its pens three to four times per year and remove all manure and composting operations off site.

174. Given that the volume of the manure (or composted material) on the feedlot is not identified as a disturbance on Mr. Nurkowski's or Mr. Yunker's filed complaints, the panel takes this argument to be that to the extent that manure causes odour, reducing the volume of manure will have the corresponding effect of reducing odour. However, the preponderance of evidence before the panel is that this is in fact not the case. The KPs, Mr. Withler, and some of the other feedlot operators testified that odour is related to the surface area of the raw manure (in pens or when spread on fields) or composting manure when it is turned. Odour is not directly related to the volume of manure. The evidence of the KPs was that properly composted manure should not produce odours.

175. Mr. Nurkowski's complaint also alleges that wet manure on the feedlot site provides breeding grounds for flies. The panel does not understand Mr. Nurkowski to allege that the existence of flies is related to the volume of manure but rather to the farm's manure management and fly control practices. Furthermore, the panel notes that as part of the relief sought, Mr. Nurkowski relies on those measures necessary to reduce flies as recommended by his expert witness (which is discussed in greater detail below). Accordingly, the panel does not intend to address the volume of manure or composted material on the respondent feedlot as a separate complaint over and above that addressed under the odour and fly complaints. As such, we make no determination as to whether the feedlot's practices with respect to the volume of manure or compost on site accords with other feedlots' practices.

176. However, the panel understands that the respondent has other properties available to it upon which it could store, utilize or compost manure from the feedlot and the panel would

encourage the respondent to consider moving some of its manure offsite (in addition to the manure being sold or given away) as some other feedlots in BC reportedly do.

177. The panel accepts the uncontested testimony of the KPs that the density for feedlots as a general guide to storing and managing its manure responsibly should be about 357 cows per hectare. The respondent's feedlot operation is located on 3 hectares and as such could hold over 1,000 head of cattle (which it does periodically in winter months) but the panel would note that it operates with fewer than 250 cattle for most of the year. The panel also accepts the evidence of the KPs that more frequent cleaning of the pens could result in increased odours during clean out and spreading.

178. Consequently, the panel finds that there is insufficient evidence to warrant modifying normal farm practice or the recommendations of the KP's regarding the frequency of pen clean out and undertaking composting operations on site provided that the respondent does not exceed an average annual density of approximately 357 cattle per hectare, which would be no more than a total of 1,100 head of cattle under the current feedlot configuration. In other words, the manure management recommendations of the KPs are based on what are the usual and accepted practices for feedlots in B.C. at a standard density of about 357 cattle per hectare. It is clear from the evidence heard at the hearing that the average number of animals in the feedlot on a yearly basis is considerably less than the maximum capacity estimated to be 1100 mature animals. The panel would, however, stress that the respondent needs to be mindful of these densities and how the number of cattle housed in the feedlot over the course of a year equates to the total volume of manure produced when managing its operations.

179. The panel would further note that the respondent's operations (including but not limited to pen size, area for onsite composting and manure spreading, and manure management practices generally) could change significantly in the future in order to accommodate an increase in the number of cattle on the feedlot site. Should such a change to the respondent's operations be contemplated by it, the panel recommends that the respondent first retain an expert in manure management practices to provide it with an assessment and recommendations as to whether and to what extent the respondent's manure management and other feedlot operations need to be modified to address potential disturbances to neighbours that could result from increased cattle numbers.

180. Mr. Nurkowski also submits that due to the direction of the winds and the proximity of his property to the feedlot property, the respondent should be required to make the following additional modifications to its operations to mitigate odours:

    (a) increase its separation distance by moving the feedlot site and composting areas to another area on its property in order to maintain a minimum 400 foot separation distance from the property line;
    (b) surround the feedlot with 2 metre high earth berms; and
    (c) build a covered storage facility for manure composting.

181. The panel notes that in 2012, the Ministry of Environment directed the respondent to build an earth berm for the storage of manure but later withdrew that directive because it determined that it would not be suitable due to the existence of hydrogen sulphide in the manure. Mr. Nurkowski has not offered any evidentiary basis to suggest that an earth berm is proper and accepted practice for a feedlot or consistent with normal farm practices in the circumstances of this case.

182. The panel accepts the testimony of the KPs as well as Mr. Nurkowski's documentary evidence that proper (or turned) aerobic composting will reduce odours and moisture from the manure and the high temperatures will destroy potentially harmful bacteria.[6] The KPs testified that the farm's past use of gypsum products for bedding in the pens may have contributed to increased hydrogen sulphide and odour levels. The respondent confirmed that most of the gypsum has been cleaned out from the pens and it will not be used again. Based on the evidence of some of the witnesses including the complainant, Mr. Yunker, the panel concludes that the 2013 modifications to the feedlot's clean out and composting operations have been successful at reducing odours.

183. The panel well appreciates that feedlots and other farm livestock operations can produce significant odours, and the operators of those farms are not expected to and cannot eliminate odours completely.[7] In this case, the panel is satisfied that the respondent's current clean out and composting practices not only accord with proper and accepted practices of other feedlots but that they have also been successful at mitigating the odours that were the subject of the complaint in 2012. As a result, the panel concludes that the installation of a contained manure storage facility is something that is not typical on feedlots for the purpose of eliminating odours and is not warranted by the particular contextual circumstances of this case.

184. In their second Report, the KPs recommended that composting operations take place in the natural bowl area on the hay field west of the feedlot as it is a natural containment area in the unlikely event of runoff and the respondent has done so. The KPs also state that the Ministry recommends a 30 metre setback between the compost windrows and the property boundary although they acknowledge that there are no provisions in the Central Okanagan Bylaws for a setback of compost piles from the property boundary.

185. In the absence of any reliable evidence supporting the Mr. Nurkowski's assertion that a 400 foot setback is required and in light of our discussion in paragraph 171 above, the panel prefers the evidence of the KPs that the current location of the feedlot pens and composting activities (the relocation of which was recommended by the KPs) are

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[6] Ministry of Agriculture Composting Methods Factsheet (September 1996); and Appendices to On-Farm Food Safety Manuals, pp. 13-16 (see http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=OCEUQFjAA&url=http%3A%2F%2Fwww.canadagap.ca%2Fuploads%2Ffile%2FEnglish%2FManuals%2FVersion%25206.1%2520Updates%2FAppendices%2FAppendices%25206.1%25202013%2520(track%2520changes).doc&ei=H-SAUsLjOM2vigKOxYGQCg&usg=AFQjCNHYvQ0mwvlzwSSfS2wat6X3RBeseA

[7] See for example s. 19 of the Code which states that odours are not prohibited provided that agricultural waste is managed in accordance with the Code.

appropriate to mitigate the impact of odours on neighbours taking into account the relevant contextual factors including wind flow and proximity of those neighbours to the feedlot. The panel accepts the KPs' evidence that the feedlot and the composting operations are located in the optimal areas of the respondent's farm property and given that current composting measures are effective in mitigating the odours. We also note the KPs evidence that prevailing wind in this area is from the north, with stronger winds having a tendency to come from the southeast and only those coming from the southwest would impact the Nurkowksi property. Accordingly, and taking into account the relevant contextual factors including the number and proximity of neighbours including Mr. Nurkowski, the local topography and the prevailing winds in this area, the panel finds the respondent's current manure management practices are consistent with normal farm practice.

186. However, consistent with previous decisions of BCFIRB, the panel recommends that the respondent feedlot have consideration for its neighbours by handling manure (including spreading activities) and turning compost piles when the winds are not blowing.

Flies:

187. Based on the evidence of the KPs and some of the feedlot operators, the panel finds that it is proper and accepted practice for feedlots in the south Okanagan area to have an integrated fly control program that involves reducing breeding grounds by maintaining dry areas, composting manure (so that it reaches high temperatures to kill fly eggs and larvae) and may include a parasitic wasp program.

188. The panel finds that at the time of the complaint in 2012, the feedlot did not have an integrated fly control program but rather had a practice of including cedar shavings in its bedding material to repel insects. As indicated above, the panel accepts the evidence of the entomologist, Dr. Zilahi-Balogh, that the feedlot is the likely source of stable flies in the area and that the effectiveness of cedar shavings is not widely accepted as a fly control measure. Accordingly, the panel finds the respondent's fly control program is not consistent with normal farm practice.

189. Although Mr. Nurkowski submits that more frequent removal of manure (where flies can breed if moist enough) will address the fly populations, the panel prefers the evidence of the KPs and the entomologist that proper composting methods and maintaining dry areas (including around feed storage areas) should be sufficient to reduce fly numbers. The panel notes that the respondent farm began composting as recommended by the KPs in the spring of 2013 but that Mr. Nurkowski and others claimed that fly numbers were still a problem.

190. The panel is mindful that one south Okanagan feedlot operator makes use of predatory wasps as part of his fly control program. While this control measure may also prove to be beneficial to the respondent, the panel is persuaded by the recommendations of the KPs and finds that it will likely be more useful and effective for the respondent to hire a qualified pest management professional experienced in fly identification and control to determine the appropriate fly control measures for the feedlot and for the respondent to implement the recommended control measures.

Birds:

191. The panel's conclusion above is that Mr. Nurkowski failed to establish that he is in fact aggrieved by bird damage to the fruit or vegetables he grows (as opposed to the potential risk of bird predation to future crops) resulting from the respondent's farm operation and that portion of the complaint was dismissed. However, even if the panel had found Mr. Nurkowski was aggrieved of nuisance birds as he alleged, it is our view that the respondent farm's bird control practices are consistent with normal farm practice (and the reasons for this are set out below).

192. The panel accepts the evidence of the KPs that feedlots can attract various kinds of birds as cattle feed and fly larvae are potential food sources year round. Mr. Raffen and Mr. Hodge testified that in their experience feedlots in BC may use scare devices or traps. Mr. Bremer testified that his practice is to shoot birds. Mr. Freding says he both shoots and traps birds.

193. In the case of the feedlot, the panel finds that there is an aggressive bird trapping program in place. According to the KPs, the feedlot has trapped approximately 45,000 starlings in the past three years. Mr. Marshall testified that approximately 115,000 birds have been trapped since 2007 and the numbers of birds caught is declining year over year. In the KPs' view, the respondent's participation in the BCGA Program goes beyond the bird control practices of other feedlots by actually reducing crop damage in the vicinity through the removal of "juvenile birds which cause the majority of the damage."

194. The panel agrees with the KPs that the respondent's farm practices in relation to nuisance birds greatly exceed the practices of other feedlots which manage the nuisance as it exists for their operation. The respondent's participation in the BCGA Program has contributed to a decline in starling numbers regionally. Having made this finding, there is no basis to make the order Mr. Nurkowski seeks requiring the respondent to add netting and propane cannons to manage nuisance birds. If Mr. Nurkowski has bird issues now or in the future, as Ms. Bielart testified "each farmer needs to be responsible for taking measures to protect their crops".

Manure Dust:

195. Mr. Nurkowski alleges that manure dust blows off of the composting piles and confined feeding areas (or pens) and blows onto his property and vegetable gardens and aggravates his spouse's asthma. As a result, Mr. Nurkowski seeks an order requiring the feedlot to increase the separation distance from his property, clean out pens more frequently, contain the manure or alternatively ship it off site. Mr. Nurkowski also submits that given the proximity of the area where he grows crops on his property to the feedlot, the feedlot should be required to plant a vegetative screen to prevent dust from travelling onto his property.

196. The panel finds little evidence to conclude that manure dust blows off of composting or composted manure piles unless it is being handled. The only evidence of manure dust before the panel were photographs of dust plumes from the movement of cattle in the pen

area in the dry summer months. The panel finds that the manure dust generated by the feedlot is infrequent, occurring in dry months such as July and August, in small amounts, and travels in the direction of the Nurkowski property only when the wind is blowing from the southwest.

197. The panel notes that while there are a few photographs showing dust generated on the respondent feedlot, there were no photographs of manure dust blowing onto Mr. Nurkowski's vegetable gardens as he alleges.

198. The panel finds that while the common practice of some feedlot operations in the United States is to use sprinklers to mitigate dust, as noted in the third KP report and in the KPs' testimony, those operations have significantly more cattle and experience longer dry periods. The use of sprinklers does not appear to be a practice used by the much smaller BC feedlots. In order to mitigate dust from the feedlot, the KPs recommended that the respondent maintain its current practice of moving cattle during the morning when the air temperature is cooler and the winds light. The KPs also recommended that the feedlot not scrape out the pens in the summer months and limit turning of compost piles when the wind is blowing.

199. The panel finds that the accepted practice of smaller feedlots is to take few measures to mitigate dust. Consequently the panel finds that the respondent's practice of moving cattle in the morning hours to mitigate dust is consistent with or exceeds the accepted practices of other feedlots in BC. The panel also finds that the respondent's current practice of turning compost piles as recommended by the KPs during the cycle to facilitate aerobic decomposition (which can cause dust) also accords with usual and accepted practice.

200. Having regard to the relevant contextual factors including the number and proximity of Mr. Nurkowski's neighbours and Mr. Nurkowski, the local topography and the prevailing winds in this area, the panel is satisfied that the respondent`s manure dust management is consistent with normal farm practice. Further, the small amount of dust that is produced on an infrequent basis by the feedlot moving cattle over the two summer months (when animal numbers in the corrals are at their lowest) does not justify a departure from proper and accepted practices. The panel notes that since the complaint was filed, the respondent has moved a cattle pen or corral back 30 meters from the property line it shares with Mr. Nurkowski (as required by by-law) and the compost windrows are also set back 30 metres. Dust is a fact of life in many farming activities and a farmer is only required to take reasonable steps to mitigate it, not to eliminate it completely.

201. Further, the panel cannot conclude on the evidence before it that the manure dust would be mitigated by more frequent cleaning of the pens or by removing the manure offsite. The panel accepts the testimony of the KPs that more frequent cleaning out of the pens (or removal of moist bedding material) would likely create more dust not less. Dust is produced when the dry surface material is disrupted and is not directly related to the total volume of composting manure or composted material inside or outside of the pens on the feedlot. While a vegetative screen may prevent some dust from moving off of the feedlot

site, having found that the respondent `s dust management practices are consistent with normal farm practice we make no modification order.

202. In summary, the panel finds that at the time of the filed complaints in 2012, the respondent's manure management practices (frequency of clean out and composting methods) and its fly control practices did not accord with normal farm practices. However, the respondent's manure dust control practices at the time of complaint and hearing were consistent with normal farm practices.

Aggravating Factors:

203. During the hearing, both complainants alleged that the respondent had a history of non-compliance with regulatory authorities at its former location. Mr. Nurkowski also alleged that the feedlot was non-compliant with the Code at its current location by storing manure on site for longer than 9 months. The respondent disputes this allegation. In his written submissions, Mr. Nurkowski stated that "given the past record of non-compliance of the Feedlot operation, detailed records of compliance should be established by FIRB with respect to any Order determined" and he referred the panel to a number of MOE letters from August 2012 to April 2013 that he alleged showed the respondent's non-compliance.

204. During the hearing, the panel advised the parties that it would not consider evidence of alleged historic non-compliance by the respondent at its former location. In the panel's view, alleged instances of non-compliance with regulatory authorities by the respondent feedlot (if any) as a result of its practices at its former site (from 1932 to 2005) are irrelevant to the issue of whether the respondent's current practices at its current location (which is the basis of the complaints) accord with normal farm practices. The panel agrees that any instances of non-compliance at the respondent's current site under the *Act* could be a relevant, aggravating factor.

205. As the parties were advised during the hearing, this panel is not prepared to adjudicate issues relating to non-compliance with other statutes, regulations or bylaws. In any event, on the basis of the evidence provided, the panel could not determine if there was compliance or not with other agencies. For example, Mr. Nurkowski submitted that the respondent was non-compliant with the Code because it stored manure on its feedlot site longer than the 9 months permitted under the Code for field storage (according to MOE) however this was disputed by the respondent's evidence that composting is not field storage as defined by the Code.

206. However, we do note that with respect to the subject matters of these complaints, the respondent followed the recommendations of the KPs and modified its farm practices well before this hearing. Accordingly, it is not our intention to require monitoring of the respondent to demonstrate its compliance with the modification order below.

CONCLUSIONS:

207. The panel acknowledges that Mr. Yunker and a number of his neighbours resided on their properties prior to the feedlot moving into the area and that the "neighbourhood" is largely made up of small orchards, forage crops and a small livestock operation. Mr. Nurkowski purchased his property approximately a year and a half after the feedlot commenced its operations in the Ellison area with the intention to grow produce organically on his property.

208. The panel heard much about the feedlot's operations (and manure management practices in particular) and that due to the potential for it to produce contaminants and pose health risks, the respondent should take measures beyond what are proper and accepted practices for other feedlots in BC (including relocating some of its operations) to allow Mr.Nurkowski to use his property in the way he wishes. Yet the panel also observes that Mr. Nurkowski has apparently taken no steps to mitigate these disturbances even though his own documents[8] recommend that growers of produce assess potential hazards such as adjacent livestock operations and other agricultural activities (including pesticide drift) before selecting a production site on which to grow fruits and vegetables.

209. In this case, it is understandable that the complainants have concerns because of the proximity of the feedlot. In some cases, factors such as proximity and prevailing winds could result in a farming operation having to cease or modify its practices by increasing its separation distance from its neighbour or by installing a vegetative buffer to mitigate the disturbance. However, the panel has concluded that the proper and accepted practices used by other feedlots for mitigating odours, dust and flies are both reasonable and sufficient to mitigate the disturbances in this case. It is an inescapable fact that farming operations produce disturbances such as dust, odour and in some cases, flies and nuisance birds. It is unreasonable to expect a farm to eliminate all disturbances especially when it is operating in an area designated for agriculture.

210. The *Act* was enacted to protect farmers from nuisance claims from their neighbours (especially in areas of encroaching urbanization) provided that they use proper and accepted farming practices. It is only when these practices are inadequate to mitigate disturbances (due to site-specific factors) that a farm will be expected to cease or modify their operations to be in accord with normal farm practice. It is not within BCFIRB's jurisdiction to order a farm to cease or modify operations that accord with normal farm practices but that may have potential food safety, public health or pollution implications. Those matters lie within the jurisdiction of the CFIA, Interior Health and MOE

[8] see the On-Farm Food Safety Manual for the Production, Packing and Storage of Fruits and Vegetables at page 3, Source: http://www.canadagap.ca/uploads/file/English/Manuals/Version%206.0%20Updates/Greenhouse/Greenhouse%20Manual%20v6.0%202012.pdf; and the Appendices to the On-Farm Food Safety Manuals at pp. 61-62, Source: http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=OCEUQFjAA&url=http%3A%2F%2Fwww.canadagap.ca%2Fuploads%2Ffile%2FEnglish%2FManuals%2FVersion%25206.1%2520Updates%2FAppendices%2FAppendices%25206.1%25202013%2520(track%2520changes).doc&ei=H-SAUsLjOM2vigKOxYGQCg&usg=AFQjCNHYvQ0mwvlzwSSfS2wat6X3RBeseA

respectively, all of which have the ability to make their own determinations and compliance orders.

ORDER:

211. Pursuant to s. 6 of the *Act*, the panel orders the respondent feedlot to modify its farm practices as follows:

(a) To implement on a year-to-year basis the following manure management processes which are summarized here and set out in detail in the first and second KP reports:

(i) To clean out the manure and bedding mix that accumulates in the cattle pens at least once per year and to remove this material from the property, or immediately apply it to land as a fertilizer or soil amendment or to compost it in windrows of less than 4 feet in height in order to promote aerobic decomposition;

(ii) That composting operations take place in the natural bowl area on the hay fields set out in Figure 1 of the second KP Report and that the windrows be setback at least 30 metres from the property boundary and any water course;

(iii) That compost windrows be monitored for any runoff and if necessary, that any rain diversion structures be built upland of the compost areas to divert surface runoff away from the windrows;

(iv) That the temperature of the compost windrows be routinely monitored during the compost process to ensure that the minimum temperatures are attained for optimum pathogen reduction and the destruction of fly eggs and larvae;

(v) That the windrows be turned as recommended in order to promote proper aeration and that records be kept.

(b) To engage a qualified pest management professional forthwith to investigate and report on the most appropriate measures to control flies on the feedlot site and to implement those measures.

212. Mr. Nurkowski's complaints about nuisance birds and manure dust are dismissed.

Dated at Victoria, British Columbia this 31st day of July, 2014.

BRITISH COLUMBIA FARM INDUSTRY REVIEW BOARD
Per:

C. Manarin

Carrie H. Manarin, Presiding Member

Ron Bertrand

Ron Bertrand, Vice Chair

Andreas Dolberg, Member