IN THE MATTER OF THE FARM PRACTICES PROTECTION (RIGHT TO FARM) ACT, RSBC 1996 C. 131 AND IN THE MATTER OF A COMPLAINT REGARDING DUST, ODOUR, NOISE AND FLIES FROM A POULTRY OPERATION IN GRINDROD, BRITISH COLUMBIA

BETWEEN:

TERRY GARDINER JASON PAUL LORI PAUL

AND:

COMPLAINANTS

SPRINGBEND CHICKEN CORP.

RESPONDENT

DECISION

APPEARANCES:

For the British Columbia Farm Industry Review Board:

For the Complainants:

For the Respondent:

Date of Hearing:

Place of Hearing:

Daphne Stancil, Presiding Member Tamara Leigh, Member

David Lindsey, representative Terri Gardiner Jason Paul Lori Paul

Kevin Stefanyk, self-represented

June 3-4, 2019 December 15, 2020

Vernon, British Columbia, and by Teleconference and Zoom

A. INTRODUCTION

- 1. This decision relates to a complaint filed under section 3 of the *Farm Practices Protection (Right to Farm) Act*, R.S.B.C. 1996, c. 131 (*FPPA*).
- 2. Under section 3 of the *FPPA*, 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 British Columbia Farm Industry Review Board (BCFIRB) for a determination as to whether the disturbance results from a normal farm practice. Section 6 of the *FPPA* provides that, following a hearing, if a Panel of BCFIRB is of the opinion that the odour, noise, dust, or other disturbance results from a normal farm practice, the Panel must dismiss the complaint. If the Panel determines that the practice is not a normal farm practice, because it is inconsistent with the practices of similar farms in similar circumstances, the Panel must order the farmer to cease or modify the practice causing the disturbance.
- 3. The Complainants, Terri Gardner, Jason Paul and Lori Paul, are siblings that own a 13.27-acre property on Foxwood Road in Grindrod, British Columbia. They purchased the property in 2009 with the intent of starting an organic farm operation and building two homes to live in during retirement. The property is in the Agriculture Land Reserve (ALR) and includes several outbuildings and hook-up facilities for two recreational vehicles (RVs). It does not currently have a permanent residence. The west end of the property runs along the Shuswap River. Two of the Complainants (Ms. Gardiner and Ms. Paul) reside in Alberta, where they work in the oil patch. Prior to the complaint, Mr. Paul lived on the property in the spring and summer and took jobs elsewhere during the winter.
- 4. In brief, the Complainants argue that odour, dust, noise and flies generated from the poultry operation built across the road from them has made their property practically unusable when the tunnel fans are in use. They argue that the activities taking place on the Respondent farm exceed tolerable limits of reasonable neighbours and are not normal farm practices due to the size and intensity of the operation as well as the siting of the barn in proximity to the property line. They ask that the Respondent farm be ordered to cease operations until remedial action is taken.
- 5. Kevin and Kathryn Stefanyk, own and operate the Respondent farm, Springbend Chicken Corp. (Springbend). It is located on Foxwood Road, directly across the street from the Complainants. The 7.8-acre property is within the ALR. The west side of the property is adjacent to the Shuswap River. Springbend has been in operation as a broiler chicken farm since construction of the barn in 2016.
- 6. Springbend submits that its barn was built with all proper permits, setbacks and zoning requirements in place, and that the use of tunnel fans in commercial poultry operations of this kind is considered normal farm practice. Since 2018, it

has made significant efforts to address the Complainants' concerns and reduce the impacts of its poultry operation on them. By way of remedy, Springbend asks for a determination that it is following normal farm practice and for an order allowing it to:

- maintain the existing vegetative buffer at the east, south and west sides of the barn;
- modify the dust screen by installing "wings" at a 45° angle to the eves of the barn to the ground, and to extend around the east and west sides of the south end of the barn to cover the existing fans;
- maintain the existing dust screen structure, and
- remove the existing poly wall.
- BCFIRB retained Ministry of Agriculture (Ministry) Environmental Engineer, Jacquay Foyle¹, and Regional Agrologist, Chris Zabek, P.Ag, as Knowledgeable Persons (KPs) under section 4 of the *FPPA*. They conducted a site visit of the subject properties on July 31, 2018 and prepared a KP report dated October 9, 2018 (KP Report 1). They both testified at the June 2019 portion of the hearing.
- 8. Ms. Foyle conducted a further site visit on August 1 and 2, 2020, to assess the effectiveness of the mitigation measures installed by Mr. Stefanyk after the initial site visit but before the 2019 hearing. She prepared a second report, followed by minor amendments on September 4, 2020 (KP Report 2), in follow up to the 2018 KP recommendations and mitigation measures in place at Springbend. Ms. Foyle testified at the December 15, 2020 portion of the hearing.
- 9. The Panel conducted a site visit of the Complainants' and Respondent's properties on June 2, 2019 to gain a perspective of the physical layout of the properties. The hearing proceeded in person on June 3 and 4, 2019 and resumed virtually on December 15, 2020 and ended December 29, 2020, the final date for submission of written closing arguments.
- 10. Significantly, the Complainants did not attend the resumption of the hearing in December 2020 and did not file closing arguments. Despite the failure of the Complainants to attend, given the nature of the allegations, the substantive submissions the Complainants made when they filed their complaint and the resources expended by all participants on this matter, the Panel determined it was appropriate to provide its written reasons for its determination of "normal farm practices" for this farm.

¹ At the time of her initial visit, Ms. Foyle was an engineer-in-training. At the time of her second visit, she had received her professional designation (P.Eng).

B. ISSUE

11. Are the Complainants aggrieved by the dust, odour, noise and flies from the poultry operation at Springbend, and if so, are Springbend's farm operations in regard to the complaint in accordance with normal farm practice?

C. Preliminary issues

12. The Panel was required to make a number of procedural rulings in this complaint which are set out below.

Panel's Ruling Regarding Allegation of Biased Panel Chair (Presiding Member)

- 13. At the outset of the hearing, the Complainants' representative, David Lindsey, requested that Presiding Member, Ms. Stancil, recuse herself on the grounds that she may be biased in favour of the chicken industry such that the Complainants would not receive a fair hearing. The basis for the recusal request was that Mr. Lindsey had discovered that Ms. Stancil was the former chair of the Chicken Board from 2010 to 2013 while preparing for the hearing. He pointed to an email dated November 29, 2020 from the Manager of Field Services for the Chicken Board to Ms. Stefanyk in the Respondent's book of documents which he argued would influence Ms. Stancil in a manner favourable to the chicken producer. In the email, the manager commented "It sounds like you have a lot of positive representation in regards to the air quality at the site I don't think you will have any issues with FIRB. I can write a letter stating that you are in compliance with our programs if you like." [emphasis in original]
- 14. The Respondent took no position on the application and asked to proceed with the hearing.
- 15. The Presiding Member declined to recuse herself concluding the application was without foundation. She indicated she would provide written reasons for her decision declining to recuse herself which are as follows.
- 16. To support an allegation of reasonable apprehension of bias, a party must point to a prior statement, relationship, or interest that may lead an informed person to conclude, on a demonstrable foundation, that a perception of bias exists. Here, five years have passed since the Presiding Member chaired the Chicken Board and she has no direct knowledge of the daily issues or operations of the Chicken Board nor had she met or had prior dealings with the Respondent. In the first two years of her tenure on BCFIRB, the Presiding Member observed a cooling off period and did not sit on appeal Panels involving the Chicken Board or the chicken industry consistent with the practice of presiding judges in the province of British Columbia. Since that time, the Presiding Member has served on appeals involving the Chicken Board.

- 17. The nature of the work of the Chicken Board and BCFIRB are very different. The Chicken Board is a regulator, with primary focus on managing the allocation of quota, a tool to determine production volumes amongst chicken growers. It also regulates to promote the safety of chicken for human consumption and to support humane animal practices. While the Chicken Board regulates barn cleaning to control pathogens in chickens' living environment and regulates bird density in barns from an animal health and welfare perspective, the Chicken Board, does not directly regulate the siting of chicken barns. Further, while Chicken Board staff visit and inspect chicken barns, doing so does not include evaluation of or directions regarding normal farm practices as they pertain to smell, noise or dust. It is for BCFIRB to make determinations regarding normal farm practices.
- 18. Accordingly, the Complainants, simply by pointing to the Presiding Member's former role as chair of the Chicken Board, have failed to satisfy the threshold test to demonstrate that an informed person would doubt the Presiding Member's ability to conduct a hearing in a fair and unbiased manner, and to bring an impartial mind to bear on their case in particular. As a result, the Presiding Member declined to recuse herself and the hearing proceeded in the usual course.

Panel's Direction Regarding the Need for Further Advice from a Knowledgeable Person and Hearing Adjournment

- 19. As part of its case, the Respondent introduced evidence of mitigation measures installed after the 2018 KP visit. The KPs had not seen the mitigation measures as installed or assessed their effectiveness. The Panel determined that it would be unable to fully evaluate the effectiveness of these mitigation measures to manage dust and smell because they were not the same measures recommended in KP Report 1. After hearing from the parties, the Panel adjourned the hearing to allow the KP an opportunity to assess and report on the effectiveness of the Respondent's mitigation measures under similar seasonal and chicken production conditions as for KP Report 1.
- 20. Unfortunately, Ms. Foyle was not available to do the work during the summer of 2019 and despite an intense search for a suitable replacement KP, BCFIRB was unable to obtain a timely further assessment. In the fall of 2019, Ms. Foyle indicated she could undertake the further assessment in the summer of 2020 and the further assessment was completed on August 1 and 2, 2020. Ms. Foyle submitted KP Report 2 to BCFIRB in September 2020.
- 21. The Panel recommenced the hearing on December 15, 2020 and due to the Covid-19 pandemic, that portion of the oral hearing proceeded virtually. As noted earlier, the Complainants declined to attend this hearing.

Change in Panel Membership

22. The complaint hearing initially proceeded with a three-member Panel. Member O'Callaghan resigned from BCFIRB in August 2019 and the complaint hearing proceeded in December 2020 with the two remaining Panel members – Ms. Stancil and Ms. Leigh.

Complainants' Change of Representative and the Resumed Hearing

- 23. The Complainants were initially represented by Mr. Lindsey until some time after the adjournment of the hearing in June 2019. On August 27, 2020, the Complainants notified BCFIRB that Daniel Lozinik was their new representative. BCFIRB communicated with Mr. Lozinik regarding process matters including the rescheduling of the hearing. Mr. Lozinik and the Complainants did not attend the December 15, 2020 hearing and gave no notice of their intentions. As the majority of the evidence had been received, and the Complainants had made submissions regarding the remedy they sought, the Panel determined it was appropriate to proceed in their absence and render a decision.
- 24. On December 15, 2020, after the close of the evidentiary portion of the hearing, the Respondent asked to enter additional evidence. BCFIRB asked the Complainants' representative and the Complainants for their position and indicated December 16, 2021 was the final date to receive closing arguments. The Presiding Member declined to receive further evidence from the Respondent and the Respondent's closing submissions were received December 22, 2020. The Complainants did not respond to the Respondent's closing submission.

Jurisdiction of BCFIRB regarding Human Health Concerns and Environmental Pollution

25. During the course of the hearing, the Complainants sought an order from the Panel directing immediate testing of emissions from the Springbend farm based on their health concerns. They claim the air emissions on their property can be toxic. They rely on a ministry fact sheet², an online report from a workshop on sustainable animal production³ and a report of the Ministry of Environment.⁴ The Complainants submit that it is inconsistent with normal farm practice for emissions to result in negative health concerns. The KPs advised the Complainants they did not have the capability to undertake such testing.

² Management of Dust in Broiler Operations, Poultry Factsheet, December 1999 – describes the components of broiler dust – feather fragments, fecal material, dander, feed particles, mold spores, bacteria, fungus fragments, litter fragments; emissions include odorants such as acids, carbonyl compounds and phenols attached to dust particles.

³ Seedorf, J. and J. Hartung. Emission of Airborne Particulates from Animal Production

⁴ Ministry of Environment, August 2007, Assessment of Ambient PM10 Levels Adjacent to a Poultry Barn Operation.

26. BCFIRB does not have jurisdiction to address environmental issues or public health matters or to make orders with respect to matters relating to the environment or public health. The Panel recognizes that some confusion can arise given that section 2 of the *FPPA* states:

Normal farm practices protected

2 (1) If each of the requirements of subsection (2) is fulfilled in relation to a farm operation conducted as part of a farm business, (a) the farmer is not liable in nuisance to any person for any odour, noise, dust or other disturbance resulting from the farm operation, and (b) the farmer must not be prevented by injunction or other order of a court from conducting that farm operation.

(2) The requirements referred to in subsection (1) are that the farm operation must (a) be conducted in accordance with normal farm practices,...and (c) not be conducted in contravention of the <u>Public Health Act</u>, Integrated Pest Management Act, <u>Environmental Management Act</u>, the regulations under those Acts or any land use regulation.[emphasis added]

- 27. As noted in Learmonth et al. v. Coral Beach Farms, (June 8, 2018):
 - 15 However, the purpose of this section is to preclude a court (not BCFIRB) from making a finding of nuisance and/or issuing an injunction against a farm operation where the operation is being conducted in accordance with normal farm practices and not in contravention of the Health Act, Integrated Pest Management Act, Environmental Management Act, the regulations under those Acts or any land use regulation. Section 2 is not part of the Panel's narrow and specialised mandate of determining "normal farm practice" found in section 3 of the Act nor does it empower BCFIRB to make findings regarding alleged breaches of those Acts or regulations.
 - 16 The Panel reiterates that we can only address farm practices issues; we have no jurisdiction to adjudicate alleged breaches of other federal or provincial enactments. In Eason v Outlander Farms (December 3, 1999), the then Farm Practices Board made a similar finding stating:

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. 28. The decision of this Panel can only be based on the authority granted under the *FPPA* to make determinations regarding normal farm practices based on proper and accepted customs and standards as established and followed by similar farms in similar circumstances. The Panel considers this test in greater detail later in this decision, but we have not considered the Complainants' submissions regarding human health, environmental pollution or the request for testing of barn emissions in our deliberations.

COMPLAINANTS' EVIDENCE

Randy Stupka

- 29. Mr. Stupka has known the Complainants since 1980 and has visited their property many times prior to the construction of the poultry barn. He says that since the barn was built there have been issues with dust and odour. When the fans are blowing "it makes your eyes burn and makes you sick." He described white-yellow dust that gets onto clothing or anything that is left outside. The dust permeated the contents of a meal he tried to eat outside and he expressed concern about the human health effects associated with the dust. In addition, he noted that the Complainants' outlook on life had become negative since the operation of the barn and they appeared "down", Jason in particular.
- 30. Mr. Stupka described feeling a steady breeze from the fans while he was standing on the road between the two properties. He says the noise is constant when the fans are running. He tried to use the RV at the property one day but observed the dust "boiling over the trees" toward the Complainants' property from Springbend and left. He says nobody uses the property anymore because of the smell and dust. He stops in two to three times a month to check on the property for his friends and last checked on the property on May 17, 2019 prior to the June 2019 hearing.
- 31. In response to a question, Mr. Stupka noted that "even when the fans aren't running it smells"; he thought this was due to the prevailing winds carrying the odour from the farm to the Complainants' property.

Maureen Stupka

- 32. Maureen Stupka has known the Complainants for at least 40 years and has been going to their property since they bought it. Before the barn was built, she would frequently visit the property, often with her grandchildren, and stay the day. The Stupkas kept their RV (trailer) on the property.
- 33. Mrs. Stupka testified that when the fans were running, the trees were covered with dust and a yellow film. It made her eyes burn and affected her grandchildren's eyes and breathing. After the barn was in operation, the "smell was bad and there were a lot of flies. Even down at the river I could smell the

chicken barn and hear the fans." She indicated "there was nowhere you could go on the property to get away from it". She acknowledged that she did not check the western most area of the property where the fields are located. She commented that the trailer was "gross" with flies.

34. Mrs. Stupka said the Complainants had bought the property as "their dream property," and intended to start an organic farm. They had a huge garden and chickens. After the barn was built, her friends were overwhelmed by what was happening to their property. They felt sick and nauseous. They were "both physically and emotionally sick." The issues started in 2016, and the Complainants left the property in 2017 because "they couldn't breathe that in anymore." She expressed concern about her friends' state of mind because they were so distraught.

Terri Gardiner

- 35. Terri Gardiner bought the property with her brother and sister in 2009 with the intention of developing an organic farm to provide income when they retired. She provided a financial appraisal of the property as at the time of purchase. They had intended to build two homes on the property, one on the western side in the middle of the pastured area and one in the middle of the eastern treed area. Ms. Gardiner referred to photographs showing the tree removal and land clearing undertaken to establish the building site in the treed portion of the property. They installed a septic system, brought in electrical service, dug a well for the back field and installed irrigation lines. In 2014, they got the gardens going in the back field, and in 2015 they built a chicken coop and bought 20 chickens for egg production. They had started building an enclosure to house meat chickens. She calculated their investment to date at \$100,000.
- 36. Ms. Gardiner gave evidence that she and her siblings were aware both properties were within the ALR but did not consider that Springbend could have been used for intensive agriculture as most of the farms in the area were in forage or crops.
- 37. Ms. Gardiner testified that they were not sure how they were going to be impacted by the barn when it was being built. They had a conversation with Mr. Stefanyk before he bought the property when he told them that there would be some noise from the fans, but that the barn would be state-of-the-art and would not smell. She was very surprised by what in fact happened after the barn was built. Her hand-written notes from several days beginning May 1, 2017 until July 20, 2017 include her observations of the impacts of the operating barn on her, her siblings and their property. She makes brief observations on: the weather for each day, occasionally noting the wind direction and speed; unusual climatic or environmental conditions such as smoke from fires in the region; the operation of the barn fans throughout the day; the presence, absence and nature of the odour throughout the day; any dust events; activities at

Springbend such as chicken catching and shipping and field ploughing; and, in the notes for July 20 (referring to July 19 and July 20) the presence of flies. "We have noticed a LOT of flies at our place in the last couple days. There were approximately 35 of them on the outside of our screen door (trailer) We have never had any problems with flies like this before."

- 38. She described the dust and odour as awful and it left them gasping for air. "At times it was so overpowering you could almost throw up." They could smell the odour throughout the treed area of the property, in the back field and in the area where their homes were going to be built. She noted in her written observations the times of each of the many days from May 1, 2017 to July 19, 2017 when the smell was strong and the specific and fewer days (e.g., early May, June 25 and 26) when the smell was light or absent for periods of time. She notes the intermittent nature of the smell (e.g., June 29, June 30, July 2) and when the wind blows from the south toward Springbend, a less intense smell or no smell at all (June 26, July 15). In summary, she reports that smell may be absent or low in the morning, intermittently strong throughout the afternoon reaching its peak around 6 to 7 PM, and then despite some variability, usually tapering through the evening hours to be low around "bed-time". She testified that there was a dust and odour problem as soon as the barn started operating.
- 39. Ms. Gardiner stated that often the dust affected their breathing and built up in the trailer and on the foliage. She said that while they had edible berries and other wild foods on the farm that they would harvest before the barn was built, now they do not eat anything from their land. She expressed concern about how the dust would impact the produce from the garden.
- 40. Ms. Gardiner spoke to video evidence in the Complainants' submissions that shows dust moving toward their property, from the direction of Springbend, and photos in their submissions and the 2019 KP report which she says demonstrate the accumulation of dust on vegetation and vehicles. Ms. Gardiner notes dust blowing toward their property on July 3, 2017 and indicated that source was from field ploughing at Springbend. She reports dust around their trailer and floating throughout the yard on July 5 and notes an accumulation of dust near the south end of the barn near the fans. She saw dust moving from the south end of the barn into their yard on July 6 and notes dust by the east barn fan on July 7. On July 15, Ms. Gardiner notes "lots of dust coming out of fans" and settling in their yard. "Can see feathers floating around in air also. Remains dusty most of afternoon. Our whole yard seems to be in a dust haze." On July 19, she "noticed again a big haze of dust hanging in our trees behind the RV, later afternoon." Ms. Gardiner reported another "dust event" from ploughing at Springbend on July 20. She disagreed with Mr. Stefanyk's assertion that there was a natural haze that appeared on the Complainants' property in the trees about mid-day in the summer.

- 41. Ms. Gardiner indicated that the noise from the fans was a constant background noise "like a constant propeller sound." They could no longer enjoy evenings sitting outside down at the river. She noted that it often prevented them from opening their windows and disrupted their sleep. She expressed that lack of sleep would have an ongoing impact on their health and was especially concerned about escalating depression. She indicated that the noise from trucks and people on "catching nights" was excessive.
- 42. Ms. Gardiner's notes for May 1 to July 20, 2017 report when the small barn fans are on and off; and when the tunnel fans are on and off, throughout the day. On warmer days, the tunnel fans can come on in the morning and operate throughout the day. She notes that the fans usually shut down by mid-evening although she reports for July 14 "fans still roaring away at 10:30 (PM)." Ms. Gardiner reports Mr. Stefanyk "spraying" the ground at the east side of the barn on July 20, 2017.
- 43. Ms. Gardiner testified that the Complainants sent a letter to the regional district opposing the variance to reduce the required setbacks from property lines and to allow the barn to be built in its current location. She says they had just suffered the loss of one parent and were dealing with rehousing the other, and simply did not have the time or emotional strength to attend any rezoning related meetings. They appealed to the local MLA and the manager of the regional district when they determined that the barn was not being built in accordance with the application. Their correspondence forms part of the Complainants' submissions.
- 44. When asked if she tried speaking with Mr. Stefanyk directly, Ms. Gardiner said she had discussed his plans with him. Once the barn was built, she did not speak with him again because she was too angry and did not want to say or do something that she would regret later.
- 45. In August 2017, the Complainants had an appraisal prepared that established the value of the property in an "unimpaired" state at \$597,000. The appraiser further offered the opinion that the market value of the property as "impaired" by the operations of the poultry barn was \$398,000.

Jason Paul

46. Jason Paul owns the property with his sisters, Ms. Gardiner and Ms.Paul. From 2013 to 2016, he worked on the property in the summer and took on other jobs in the winter. Mr. Paul looked into getting the property certified for organic production and was aware that it would be a three-year process. They decided to begin their operation without certification. It had been some time since he had worked on the land and the process of working and testing the garden for capability reminded him of the intensity of the labour required. He installed irrigation infrastructure and started the garden in the back field. He also bought

laying hens. His plan was to start selling eggs, vegetables, meat chickens and turkeys in Spring 2016, but he put those plans on hold at the end of 2015 when he learned that their neighbour was selling his property to someone who wanted to build a chicken barn.

- 47. Mr. Paul remembers the first time that the fans came on to try them out, they were "cranked like nothing I had ever seen." He said dust accumulated in front of the fans and would hit the trees, curling up 100 feet high before drifting through their yard. After five days of fan operation, Mr. Paul got angry and left. He says that he feels forced off his property like his job and life has been taken away. He has only been back a dozen times in the last four years. "I can't live on there, it's disgusting. I wouldn't eat anything off that land." Mr. Paul was so overwhelmed during the hearing that he was unable to fully describe his reaction to the start up of the chicken barn.
- 48. Mr. Paul spent the following two summers (2016 and 2017) driving around the province looking at poultry barns. He says he could not find another set-up similar to Springbend where tunnel fans were blowing into a neighbouring yard. He said most of the barns he saw were blowing into open fields, not somebody's yard. He reported one barn that was 40-50 metres from a neighbouring house, but the fans of that barn were pointed away from the house. Over two summers, he estimates that he has driven by a couple of hundred poultry operations and has not seen anything like the situation at Springbend where the barn is so close to a farm boundary and to a neighbour's property line. Google Earth images of some of the barns are included in the Complainants' submissions. Two farms are in the Enderby-Grindrod area and the setbacks from the closest roads are over 100 metres. In these examples, there are no neighbouring residences nearby, and the properties are in pasture.
- 49. Mr. Paul testified that before barn construction started at Springbend, the siblings discussed their plans for building homes on their property with Mr. Stefanyk. Mr. Stefanyk advised that the barn should not be a problem. He said it was going to be state-of-the-art, with no smell and no noise. Instead, Mr. Stefanyk built a barn with "some of the loudest fans out there." Mr. Paul stated clearly that the main issue that they have with Mr. Stefanyk's operation is that the fans are blowing into their yard including the area where they would like to build homes.
- 50. Regarding the flies, Mr. Paul said they were not present all the time because they would land on the discarded chicken carcasses and lay their eggs there and emerge as adult flies all at once. On cross-examination, he admitted that he had only experienced an issue with flies once.

Anne-Marie Jackson

- 51. The Complainants requested and were issued a summons for Anne-Marie Jackson, who prepared the vegetative buffer plan installed by Springbend. She has a master's degree in Landscape Architecture from the University of British Columbia and has been practicing in the field of landscape architecture for 13 years. Ms. Jackson has prepared three plans for vegetative buffers for inclusion in Environmental Farm Plans in the past two years.
- 52. Ms. Jackson testified that she visited Springbend to discuss the primary objectives for a vegetative buffer plan odour and dust mitigation as well as the requirement from the regional district for a vegetative buffer as a condition of the variance of setbacks for the barn from property lines. They discussed how the barn and chicken production operation function, the number of production cycles per year as well as neighbour relations and any farming on neighbouring properties, to provide context.
- 53. Ms. Jackson completed the vegetative buffer plan, which includes a buffer design and plan, an implementation plan (planting and maintenance) and a cost estimate. There were few options for the placement of the buffer but she said it should be placed as far back from the barn as possible. She followed the guidelines for environmental farm planning adopted by ARDCorp⁵.
- 54. Given the location of Springbend and the growing conditions, she chose Douglas fir to provide year-round coverage. The trees were planted close together to intercept the flow of particulates from the barn emissions. The length of the buffer stretches along the west side of the barn, and the south side as well. She noted that typically her preference would be to plant at least two rows of trees, but that in these circumstances it was unlikely that a second row of trees would survive. To compensate, she recommended the trees be planted more closely together than they would be for other applications.
- 55. In ideal conditions (sun, good irrigation), Ms. Jackson commented "I would suggest a healthy Douglas fir would grow one metre per year in height and would take ten years to reach maturity". To mitigate concerns that the dust could limit plant growth, her plan recommended that the trees get a wash down at least once a year to help their ability to photosynthesize.
- 56. In response to the Complainants' questions about the expected duration of effectiveness for a Douglas fir buffer (30 years), Ms. Jackson was not sure why some of the juvenile trees were not thriving. She confirmed she included a brief description of wind and weather in the plan and concluded the prevailing wind direction was from the south-south west to the north-north east (from the direction of the Complainants' property toward Springbend). She always considered the cost effectiveness of any plan and did so in this case.

⁵ Agriculture Research & Development Corporation

RESPONDENT'S EVIDENCE

Kevin Stefanyk

- 57. Mr. Stefanyk testified in the initial hearing and in December 2020. He and his spouse own Springbend. He admits that it has "taken a few years" to adjust and fine tune the tunnel ventilation system on the barn. When first built, Springbend installed nine large tunnel fans with one located on the barn's west side. He stated he could reduce the number of tunnel fans to eight, leaving seven on the south end of the barn and operate six with one in that location as "back up". The eighth would remain on the west side of the barn.
- 58. Mr. Stefanyk explained that there are three fans involved in cross-ventilation mode including one of the large tunnel fans; they draw in air through the inlets at the top of the barn on the east and west sides. In cross-ventilation mode, there is very little air movement because it is not intended to cool the birds, but rather to give them oxygen so they can breathe. When it gets hot enough to require a fourth cross ventilating fan, the system closes the side vents and starts using cooling pads in tunnel mode.
- 59. Regarding the construction and siting of the barn, Mr. Stefanyk received guidelines and fact sheets from the regional district, the BC Chicken Marketing Board and the Ministry. He situated the barn along the western property line to meet the required setback from the river and allow room for a future barn on the east side. He chose to put the fans at the south end of the barn because he was afraid that putting the office and control room by the road would invite break-ins that could pose a threat to the security of his barn and his flocks.
- 60. He did not know his operation would affect the Complainants the way that it has and said he "wished they had come talk to me first." He said that once he realized there was a problem, he tried to reach out to them, but "they didn't get back to me and were a little upset." He would like to have better communication and a relationship with the Complainants.
- 61. Mr. Stefanyk chose to buy and build on this particular property because there were no neighbouring houses in the vicinity of the barn and told the Panel "I believe if the neighbours had a house on this property, we would not have built this barn here. We'd still be looking for property. Restrictions of the BCCMB (Chicken Board) meant we had to hustle to find a location, get the permit and build the barn."
- 62. Mr. Stefanyk referred to an inspection report from the Ministry of Environment regarding compliance with Agricultural Waste Control Regulations in November 2018 issued in response to a number of odour complaints between November 16-20, 2018. The inspector found on-farm waste management practices to be in compliance with all of the required regulations.

- 63. Springbend entered a photograph of its composting shed beside the barn which is placed on a concrete pad which extends out in front of the shed. The composting shed and pad are used for the collection of any farm waste including dead chickens before being moved to a waste disposal site on the neighbouring property where there is a large composting facility. These facilities met the Ministry of Environment requirements as demonstrated by the inspection report and also met the Code of Agriculture Practice for waste management.
- 64. Mr. Stefanyk has adopted a practice of immediate removal of the manure from the barn after shipping. His usual practice is to ensure that the chickens are caught and removed from the barn by early morning, the barn cleaned out before noon and the manure collected on the concrete pad, prior to removal to the adjacent waste facility by noon of the same day. This is intended to prevent or reduce the flies often associated with manure or other decaying organic material.
- 65. Mr. Stefanyk believes one of the complicating factors of the site is that the neighbours' trees create a barrier that prevents the prevailing winds from flushing out the dust and odour from the barn. He says a little fog or haze sits in the property at the neighbours' property on an ongoing basis.
- 66. Mr. Stefanyk provided a list and photographs of what he describes as comparable poultry operations that use tunnel ventilation and were built in proximity to either neighbouring crops or other developments. Of these five farms, three were located 15 metres or less from an adjacent property line and two were located 30 metres from an adjacent property line. None of the photographs show distances to neighbouring residences. One of the farms is in Abbotsford and is ten metres from a neighbour's property who grows berries. That chicken farm has installed a dust screen to restrict barn dust from settling on the berry crop.
- 67. Mr. Stefanyk referred to a number of photographs to demonstrate different deflectors (solid wooden structures) and how the dust disperses around them when the fans are on. He installed deflectors because he recognized there was a problem with escaping dust. His deflectors, while successfully used on other farms, did not prevent dust escaping from Springbend's barn. When asked what he has in place on the south side of the property, he said he had recently installed a dust screen after consulting with QSD Inc., a company in Alberta that has experience designing dust screens for chicken farming. He submitted a sample of the fabric that he purchased into evidence which is an 80% sun/shade block, abrasion resistant poly mesh.
- 68. In addition to the dust screen, Mr. Stefanyk installed a 14' high barrier constructed of poly sheeting to prevent draft and dust from reaching Foxwood Road. He provided photographs of the poly wall in evidence.

- 69. He has taken the following mitigative actions since the 2018 complaint was filed:
 - reduced tunnel fans from nine to eight, and only uses seven;
 - oiled Foxwood Road between the two properties;
 - engaged a professional landscape designer to design a vegetative buffer to reduce dust and odour, and planted juvenile trees on the south and south west sides of the barn;
 - installed dust screen and cap to trap dust from the fans;
 - built 14' poly wall and installed between the dust screen and vegetative buffer, to stop dust from reaching Foxwood Road.
- 70. In December 2020, Mr. Stefanyk testified about the changes made on-farm or in his operating practices since the 2019 hearing which include:
 - further refining barn ventilation system and decreasing the number of tunnel fans on the south end of the barn from eight to four;
 - resurfacing his driveway with asphalt to reduce dust from his yard; and,
 - reducing feed delivery to once a week to limit traffic and keep dust down on the road.
- 71. In addition, Mr. Stefanyk said he maintains the dust screens on his property by rinsing them off every few days. The vegetative buffer is regularly watered, rinsed and maintained, and it seems to be growing well on the south end of the barn.
- 72. As to the operations of the barn since 2019, Mr. Stefanyk felt that the summer of 2020 was overall cooler than in the past. The tunnel fan ventilation system ran for 15 days total from noon to 8 PM. Of this time, the tunnel fan system operated fully during the last week of production. During these 15 days, he noticed a change in the usual pattern of wind it increased and blew from north to south away from the Complainants' property for one of the two weeks the tunnel fans were in operation. Mr. Stefanyk also pointed out that although there are two fans on the southwest corner of the barn, the large tunnel fan is used only as a back up if one of the four tunnel fans on the south end shuts down. The cross ventilation is provided by another fan in that location.
- 73. Mr. Stefanyk questioned the KP's observation of heavy dust accumulating over night since he installed mitigation measures. He submits that the poly wall is no longer needed because of the effectiveness of the dust screen which he suggests he could enhance by extending it around the south east and south west corners past the fans and placing it at a 45° to the barn roof. He believes that the combination of vegetative buffer and modified dust screen (excluding the poly wall) as shown a drawing he submitted would be adequate to prevent dust from escaping onto the Complainants' property. Mr. Stefanyk also

indicated that the Foxwood Road is sand and gravel and can be a source of dust, especially because it was not oiled in 2020.

D. EVIDENCE OF KNOWLEDGEABLE PERSONS

- 74. BCFIRB retained two staff members from the Ministry as KPs.
- 75. Ms. Foyle has experience and knowledge of air emission control technology for the agriculture sector from a professional and educational perspective. She has a Bachelor of Applied Science in Chemical and Biological Engineering from the University of British Columbia. Ms. Foyle has worked as an environmental engineer for the Ministry since 2009, specializing in air emissions and controls for the agriculture sector. She provides expertise in developing options for managing and controlling air emissions from farms in British Columbia, including air flow around barns. She researches and supports beneficial management practices for the control of air emissions. She has managed many projects over the past decade for poultry barn dust control including the installation and assessment of electrostatic precipitators to reduce in-barn dust and the installation and assessment of vegetative buffers to control outgoing dust emissions from poultry barns. The Panel qualified Ms. Foyle as an expert with regard to farm practices related to control technology for air emissions in the agricultural sector, particularly related to poultry production.
- 76. Mr. Zabek graduated with a Bachelor of Science (Plant Ecology) from the University of Saskatchewan in 1992 and has been a Regional Agrologist with the Ministry since 2000. He provides information to the public and local governments on agricultural and land use planning practices, including siting and setbacks, and agricultural production in general. He has worked extensively with conventional, large-scale, confined poultry operations including those producing broiler chickens. The Panel qualified Mr. Zabek as an agrologist and educator for planning with regard to siting of poultry barns and farm operations.
- 77. The KPs made a site visit on July 31, 2018 and coauthored KP Report 1. Ms. Foyle visited the property on August 1-2, 2020 and prepared KP Report 2.
- 78. The KPs visited the properties during times of peak summer temperatures and one week before chickens would be shipped from Springbend, when the chickens were fully grown. The following summarizes their observations and findings.

Overview of chicken barn and operation

- 79. The KPs describe the Respondent's chicken barn as follows:
 - The barn is 360 x 62 feet and can house approximately 30,000 birds.
 - The barn is orientated in a northeast to southwest direction along the westerly property line.
 - The front office and barn access face northeast. The south side of the barn directly faces the Gardiner/Paul property with the south end of the barn approximately 35 metres from the Gardiner/Paul property line.
- 80. The broiler barn operates using a combination of two distinct systems, a cross ventilation system and a tunnel ventilation system:
 - There are three main cross-ventilation exhaust fans: one 48" fan with discharge cone on the east side of the barn and two fans (36" and 48") with discharge cones on the west side. There are several hooded passive vents near the barn roof line.
 - The tunnel fans ventilate air along the length of the barn are located on the south end. In 2018, there were eight (52") tunnel ventilation fans located on the south end of the barn. In 2020, there were four (52") fans on the south end of the barn.
 - All tunnel ventilation fans draw air through the barn then vent it to the outside.
 - All tunnel ventilation fans have discharge cones and which are not designed to function with fan hoods.
- 81. The cross and lengthwise ventilating systems operate in a coordinated manner to meet changing temperature and atmospheric conditions inside the barn, taking into account both bird age and density. In low temperature conditions and/or when the birds are in the early stage of the cycle, the barn operates in cross ventilation mode and the tunnel fans for lengthwise ventilation are not used. Lengthwise tunnel ventilation mode operates when internal temperatures are in the higher range. When the KPs attended in 2018 and in 2020, the outside temperature was 28°C, and the lengthwise tunnel fans were operating.
- 82. In the summer when the chickens are close to full size, the cross-ventilation fans operate about 14 to18 hours per day during evenings and nighttime; the lengthwise fans operate for the remaining daytime hours (6 to 10 hours). The operating times may extend over two to three production cycles per year for an average of four to nine weeks depending on seasonal temperature highs.
- 83. Once mature chickens are shipped for processing, Springbend cleans out the barn. Manure is removed from the property to a compost recycling facility that

shares a western property line with Springbend. Any dead chickens removed from the barn during a production cycle are stored in a "dead shed" east of the barn. A small amount of manure is retained to compost mortalities on a concrete pad located adjacent to the dead shed. Finished compost is removed from the farm. After shipping, it is 15 to 18 days before a new flock is placed.

- 84. The KPs summarized the complaints as follows:
 - The dust, odour, noise and flies arising from Springbend have made it impossible for the Complainants to build a house, start an organic farm or enjoy their property.
 - The Respondent has not met the conditions of the zoning variance issued by the regional district when the barn was built, including installing hooded fans and a vegetative barrier to reduce level of dust and odour.
 - The orientation of the tunnel fans creates unacceptable levels of dust and odour which is pushed towards the Complainants' property.
 - Noise generated by the tunnel ventilation creates disturbance.
- 85. The KPs noted they could hear the tunnel fans when on the Complainants' property during both the 2018 and 2020 site visits. The tunnel fans produce a "propeller" sound which the KPs indicate is characteristic of the fans. The KPs indicate that these fans are in use on many chicken farms.
- The KPs observed no flies on either property during the site visit in 2018.
 Ms. Gardiner and Ms. Paul joined Ms. Foyle during the 2020 KP visit but Report 2 does not address flies.

2018 Observations

- 87. At the time of the 2018 site visit, the poultry barn was full of birds in the final week of the broiler cycle with shipment scheduled for later that week. Ms. Foyle noted that full sized birds require cooling; this along with the fact that the ambient temperature was approximately 28°C resulted in the barn operating under maximum ventilation conditions. All tunnel ventilation fans were in operation but not the cross-ventilation fans.
- 88. Ms. Foyle explained that as air is drawn through the barn by the fans, the air picks up particles from such things as feed, chicken waste, dander, feathers or dead chickens that have settled on the sawdust bedding on the floor of the barn. Some of these air-borne particles as well as gaseous ammonia are drawn through the fans and emitted from the barn.
- 89. Both KPs observed significant dust accumulation on the trees, on groundcover and in cobwebs on the Complainants' property. The heaviest accumulation was along a band 0-20 metres from the northernmost edge of the Complainants'

property line, near the south end of the barn. There was dust in the air, drifting southwards across Foxwood Road from the barn and they could shake dust off the vegetation in this zone.

- 90. Under cross-examination, the KPs advised that they did not take samples of the dust because they do not have the equipment to analyze dust composition, nor do they do that kind of assessment.
- 91. The KPs identified the primary source of dust and odour as the barn tunnel fans. The KPs observed odour, particularly within the northernmost 25 metres of the Complainants' property which they attributed to substances associated with air-borne particles discharged by the fans. Ms. Foyle stated that it is important to the health of chickens in barns, that gaseous ammonia be removed from the air through ventilation. Gaseous ammonia is often a source of odour near poultry barns; it is a "heavy" compound which ordinarily falls from the air to the ground fairly quickly after discharge from a barn. It can be carried by wind, if there is any. The KPs noted the odour arrived in wafts. Mr. Zabek indicated he did not smell ammonia outside the barn on either the Springbend or the Complainants' property.

2020 Observations

- 92. On the 2020 site visit, the Complainants indicated to Ms. Foyle that dust and odour from Springbend continued to be a problem. Springbend had installed the same mitigation measures as it had in the summer of 2019 (which the KP had not seen in action), consisting of a dust screen, a poly wall and enhanced vegetation. These measures are shown in a diagram in KP Report 2 (Figure 4, p. 13) and summarized below under the subheading Mitigation Measures.
- 93. Ms. Foyle established five sample locations at various heights to assess dust accumulations (KP Report 2 pages 10 to 12) and described as:
 - location 1 area on the south west side of the barn on Springbend property;
 - location 2 south east corner of the barn in front of the mature vegetation on Springbend property;
 - location 3 area on the Springbend property in between the poly wall and the property line (at the south end of the barn);
 - location 4 on the Gardiner property in the area directly across from the poultry barn; and,
 - location 5 on the Gardiner property in the area to the south west from the corner of the poultry barn.

- 94. Ms. Foyle summarized her observations from the five locations in Figure 5 of KP Report 2:
 - location 1: depending on the height of the sample (lowest at ground) there was a fine to heavy covering of dust on the foliage at the time of arrival and after 24 hours of cleaning.
 - location 2: there was a heavy covering of dust on foliage at the time of arrival and after 24 hours of cleaning, at both heights.
 - location 3: there was a heavy covering of dust on foliage at the time of arrival and after 24 hours a light covering.
 - location 4: there was very little dust covering foliage at the time of arrival and after 24 hours none.
 - location 5: there was a fine covering of dust on foliage on arrival and after 24 hours there was a light fine dust accumulation.
- 95. Ms. Foyle observed a heavy odour at location 1 and a very heavy odour at location 2 and location 3. For the assessment sites on the Complainants' property, she reports little to no odour at location 4, and she reported a significant odour, the strongest of all locations, at location 5.
- 96. Ms. Foyle's "walk-through" observations noted that, in general, there was less dust and odour on the Complainants' property than in 2018. The heaviest accumulations of dust and presence of odour were on the Complainants' property just off the south-west corner of the barn, penetrating westward about 50 metres and extending the width of the Complainants' property (about 100 metres northward). She noted lighter dust accumulations and light smell over a band of property east of that band (toward the river) for about 120 metres, and the depth or width of the entire property. Finally, she observed no odour or dust over the Complainants' property westward from the edge of the band with heaviest dust accumulations, and as far as the western edge of the garden. This is well described visually in KP Report 2 (figure 3, p. 8). Ms. Foyle suggests mature vegetation in a band immediately across from the barn is catching the dust and preventing its escape to the pasture area.

Similar Farms / Similar Circumstances

97. Mr. Zabek provided examples of other chicken farms in similar circumstances to Springbend for KP Report 1 (p. 12):

In comparing the siting, configuration and buffering of the Stefanyk (Springbend) farm to similar farms in similar circumstances I have considered broiler farms utilizing tunnel ventilation from an end wall. In addition to a farm in the Okanagan/Shuswap two farms in the lower mainland are included. The common use of tunnel vent systems combined with a mix of farm and non-farm uses on a variety of lot sizes provides relevant context for the lower mainland farms.

- 98. When asked why he did not rely on more comparator farms, Mr. Zabek indicated he was careful to select the ones he did because they reflected similar barn types and set-backs to the Springbend farm and were adjacent to neighbouring properties with residences.
- The KPs summarize details of the siting of comparator barns in relation to other properties and residences (Table 1. Site Comparisons, KP Report 1 – (page 14).

Site	Lot Size (Acres)	Fan Orientation	Distance to Lot Line (m)	Distance to Nearest House Downwind (m)	Buffer (Y/N/Partial)
Stefanyk	7.8	SW	15	230*	P (Existing Natural veg: Tall foliage, missing low level foliage
OK/Shuswap	8.2	SE	25	102	Y (Existing Natural veg)
Abbotsford	22	E	20	175	N
Langley	8.6	N	15	96	Υ

Table 1. Site Comparisons

Site Specific Factors

- 100. The KPs include the orientation of the barn fans and the siting of the barn relatively close to the southern lot line (15 metres), with a total distance of 35 metres to the Complainants' property, as factors contributing to their opinion that this farm needs a greater level of management of barn emissions to mitigate dust and odour levels on the Complainants' property.
- 101. The other contextual factors they considered are wind and air flow. The KPs provide a diagram (KP Report 1, p. 20) representing local wind speeds for the summer months from July to mid-September. The average wind speed noted is about 2.7 metres/second and the wind is calm about 53% of the time. The KPs report that the wind was "light" on their visits. Since winds are typically light in this area at this time of year, the KPs concluded the main source of air flow is the tunnel ventilation fans on the south end of the barn.
- 102. In addition, the KPs point to the absence of low ground foliage between the south end of the barn extending several metres into the north side of the Complainants' property where, if anything, the trees are fairly tall, producing an upper canopy. They observe (KP Report 1, p. 10):

The trees on both properties (between the two sites) have foliage mainly at a tall height from the ground with little foliage at the ground to ~5m levels. The low level foliage has significant gaps, especially in the area in front of the exhaust fans (photo 7). Additionally, on the Gardiner property there are many tall high level foliage trees

that create a 'canopy' on the property, with little ground level vegetation. <u>The gaps</u> on foliage on both properties allow the dust/odour and fans airflow to be directly blown onto the Gardiner property. [emphasis added]

103. The KPs attribute the dispersal of dust (and the associated odour) on the Complainants' property to several factors including the distance from the south end of the barn to the Complainants' property line, the generally light winds in summer, the power of the exhaust from the tunnel fans, and a tree canopy over the nearest part of the Complainants' property with little ground foliage. The KP's note that in "windy" situations, barn dust is dispersed preventing accumulations of dust on adjacent properties. If there were stronger winds, the dust build-up observed on the Complainants' property would likely not occur.

Mitigation Measures

104. The KPs report that prior to the July 2018 site visit, Mr. Stefanyk had installed two wooden deflectors to mitigate the impact of emissions from his barn on the Complainants: one on the west side of the barn in front of the cross ventilation fans and one on the south end of the barn extending in front of the lengthwise tunnel ventilation fans. This structure was raised off the ground with its base angled to the ground and its top leaning toward the south end of the barn so that the top of the structure was slightly higher than the tunnel fan hoods. Other than the base which had openings, the structure was solid (KP Report 1 – photo 2). Ms. Foyle's photos in her report showed these structures and the heavy dust accumulation around them on the ground and in proximal foliage. The KPs concluded that, based primarily on the significant accumulation of dust observed on the Complainants' property, these mitigation measures were inadequate, and accordingly, they made a number of recommendations.

2018 KP Mitigation Recommendations

- 105. After acknowledging that no mitigation technique will prevent all dust and odour from impacting the Complainants' property, the KPs recommended mitigation measures for both the farm and the Complainants (KP Report 1,p. 18 and 19):
 - 1. Install and maintain a fabric dust screen along the tunnel ventilated wall between the fans and the trees. Consult a professional dust screen company for design including, height, length and porosity. Otherwise utilize the Ministry vegetative buffer recommendations for height and width (discussed in the vegetative buffer section of this report). Maintenance will include regular washing down of the screen.
 - a. After establishment, assess the dust screen for dust reduction and impacts to neighbours.
 - b. If the dust screen is not working effectively 1) re-assess the design, or 2) consider other approaches such as moving the tunnel ventilation fans to the north end of the barn.

- 2. If a vegetative buffer is established, ensure proper maintenance of the buffer. Given the lack of space to locate the buffer farther away from the barn, maintenance of the trees will be critical to buffer health. Maintenance must include: proper irrigation, washing dust accumulations from the trees, replacing or adding trees as necessary if they are stressed or dying.
- 3. Continue to minimize dust creation by traffic on Foxwood Road by informing truck drivers to maintain a low rate of speed.
- 4. Provide advance notice of yearly scheduled flock placement and shipping dates so the Complainants can anticipate the times of greatest disturbance from noise, particularly during the summer months.
- 5. Provide advance notice of pesticide applications so that the Complainants can plan their activities accordingly.
- 6. If the Complainants decide to build a house on their property, locate it farther away from the Stefanyk barn.
- 7. Establish and maintain a continuous vegetative buffer on the Complainants' property line.
- 8. If the Complainants decide to build a house on their property or initiate an organic farm it is recommended to remove as much tall high foliage trees as possible.

106. With respect to a dust screen, they recommend (p. 16):

- Extend the length to create a corner to improve the buffer's effectiveness: extend the buffer (dust screen) the full length of the end of the barn to a point roughly 45° to the corner of the barn and then perpendicularly (to create a corner) to at least half the width of the barn.
- Establish a mature buffer height that roughly corresponds to a 45° angle or higher from the bottom of the fan or fan hood to the height.
- Use a moderate density for porosity no porosity is specified in the vegetative buffer guidance. It would be recommended to use a porosity that can capture particle size PM10 and larger.
- 107. In summary, and in response to questions from the Complainants, the KPs stated their initial assessments focussed on visual comparative analysis of the dust. Vegetative dust buffers can filter particulates of PM 2.5 in size, but for the dust screens, they would choose a pore size that could trap particulates of a larger size (PM 10 and larger). When asked about testing of dust screens, the KPs indicated that they had not seen them in use and there had been no formal testing by the Ministry. Ms. Foyle referenced other studies with vegetative filters or porous walls that look at filtration and deflection. She expressed concern that a dust fence should be porous enough to filter dust effectively while still allowing air through. She stated that choosing the right porosity of fabric would be very important in order to get required performance.
- 108. The KPs gave evidence that many species of plants recommended for use in vegetative buffers are prone to dying from dust loading, so establishing and maintaining vegetative barriers is challenging in circumstances like these where

there is limited space between the discharging fans and the vegetative buffer. The use of a dust screen would make it more likely that the vegetative buffer would survive and they recommended regular washing of vegetation to enhance survival.

- 109. When asked if it was possible to move the tunnel fans from the south to the north end of the barn, Ms. Foyle's opinion was that moving the fans is not reasonable. "From my experience, the barn doesn't necessarily work as well as the way it was designed the first time. Might cause airflow issues." She estimated that moving fans would cost over \$30,000 and require significant infrastructure changes.
- 110. The KPs reviewed the Guide for Bylaw Development in Farming Areas (KP Report 1, p. 11), which recommends poultry barns be set back 15 to 30 metres from property lines. Mr. Zabek agreed that the Springbend barn met that guideline at the south end. Ms. Foyle indicated that the guideline was established at a time when tunnel fans were not the predominant ventilation system used in the industry. Mr. Zabek indicated the information provides guidance to local governments and the industry but that local governments must make their own decisions.
- 111. The KPs acknowledged that the mitigation measures installed by the Springbend were not consistent with their recommendations in KP Report 1 and they could not offer an opinion on the effectiveness of these measures at limiting the odour and dust disturbances. The hearing was adjourned to allow the KPs an opportunity to assess the effectiveness of farm's mitigation efforts.

2020 KP Mitigation Recommendations

- 112. Ms. Foyle's 2020 observations regarding dust and odour are outlined above. She reviewed the Springbend installations noting that the installations include a dust screen, a poly wall and an improved vegetation buffer of juvenile trees, on the south and south-west corner of the barn. There were two fans on the south west side of the barn and one on the south east side of the barn for crossventilation. Four of the tunnel fans responsible for lengthwise ventilation have been removed, leaving four on the south end of the barn. The dust screen the farm built is not identical to her 2018 recommendations and she had not expected to find the poly wall.
- 113. She reports as follows:

The dust screen is approximately 12 ft high and 12 ft from the fans, it has a 'roof' that extends from the screen to the barn eve. The roof is made of the same screen material. The screen runs the length of the end of the barn and does not include sides or corners. This means that the edges of the screen are open and the screen will not intercept all of the airflow from the tunnel ventilation fans; so the dust and associated odour will not be captured. The screen material is an 80% block out made of A.R. Mesh (Abrasion Resistance) to ensure long life.

114. Ms. Foyle makes the following observations regarding the dust screen installed at Springbend:

a) Corners on the dust screen, as with vegetative buffers, are very important in capturing the dust and odour. **The current set-up does not have edges or corners**.

b) The dust screen is quite a bit lower than the recommended height, which would have been roughly 24 ft high when it was placed at 12 ft from fans. But the height was replaced with a "roof" area over the tunnel fans. This method exceeds the recommendation. It is an excellent method to trap the dust and odour, and it allows the height to be lower and therefore costs to be lower.

c) The porosity (size of holes) of the screen material that was recommended was a best guess based on vegetative buffer designs but due to the best available screen material a larger pore size was chosen. This should function adequately. [Emphasis in original.]

- 115. When asked how well the dust screen worked in comparison to a vegetative buffer, she responded, "the dust screen worked shockingly well. Was very good at reducing the dust and movement of air from the tunnels. In comparison to a fully established vegetative buffer, I think it would be very comparable. Vegetative buffers inherently have gaps in vegetation and take a long time to grow. You get immediate impact from a dust screen. Overall, it's more effective because it provides immediate relief."
- 116. Ms. Foyle observes that the vegetation overall has grown and filled in, but the newly planted juvenile trees could take up to 15 years to mature and they are sparse on the south-west side of the barn.
- 117. Ms. Foyle reports (KP Report 2, p. 4):

The poly wall (plastic sheeting) is approx 12 ft high, extends the length of the south end of the barn and around the corner on the east side where there is a single tunnel fan. The screen does not extend around the corner on the west side of the barn. The poly wall is an additional measure that was added on top of the recommendations from the 2018 KP report. It is a good addition as it aids in the function of the vegetative buffer as the buffer is maturing. The vegetative buffer in the south is currently maturing but has a few minimal gaps that are covered by the poly wall.

- 118. In addition to reducing airflow, she said the dust screen reduces dust loading and prolongs the life of the vegetative buffer. Ms. Foyle concluded the combination of the screen, the poly wall and the vegetative buffer was the reason that the mitigation efforts had been so successful. She cautioned against removing the poly wall, stating that it may reduce the overall effectiveness of the system in place.
- 119. As a result of her 2020 assessment and the need to "block the gaps" where dust was not being trapped (primarily the west side of the dust screen) allowing dust and associated odour to blow across to the Complainants' property,

Ms. Foyle recommended that Springbend continue with and maintain the mitigation efforts already in place and further that Springbend:

- 1) Install and maintain a fabric dust screen along south west corner of the barn. Create a box with one side open on the north edge to allow airflow to maintain the fan efficiency. The recommendations for design are as follows:
 - a) extend the dust screen down the west side of the barn long enough to go past the two side tunnel cross ventilation fans.
 - b) create a roof the same height as the current dust screen.
 - c) keep the end open on the north to allow airflow. Other than that open area, ensure that the entire box is closed in.
- 2) Install and maintain a poly wall with the same height on the west corner of the barn. Ensure that the wall in continuous from the existing poly wall and extends the length of the new dust screen.
- 3) Ensure proper maintenance of all of the vegetative buffers.
- 4) Particularly, ensure maintenance of the vegetative buffer on the east corner of the barn as this is the main control point for the dust and odour from the open side of the dust screen. Maintenance includes ensuring that the buffer does not get cut back and that any gaps from the growing vegetation get filled in and any dying vegetation be replaced.

120. In summary, the KPs findings in 2018 and 2020 were as follows:

- Overall, Springbend appeared well-run with management practices generally comparable to those they have observed in use on other broiler farms.
- It is now most common for newly built barns to incorporate tunnel ventilation to facilitate greater bird comfort and health. Springbend is an example of this practice.
- The levels of dust and odour generated by Springbend are similar to those observed at other farms using tunnel ventilation systems.
- The exhaust fans on the Springbend farm barn are primarily responsible for the dust and odour being emitted from the farm. To maintain fan efficiency tunnel fans should not be fitted with hoods.
- The compost pile generated no dust and minimal odour.
- The driveway is sealed (oil and later asphalt) limiting it as a dust source. Foxwood Rd. is gravel, not always oiled and a source of minor intermittent dust.
- Noise from the tunnel fans at Springbend is consistent with noise from other tunnel fanned barns.
- Flies were not a disturbance requiring further mitigation.
- The Springbend barn is sited similarly when compared to other similar farms producing chickens.
- Although the levels of dust and odour from the Springbend farm are similar to those observed at other farms using tunnel fans, <u>the Springbend operation</u>

requires mitigation because of site specific factors that lead to unacceptable disturbances to the Complainants. These factors are - the orientation of the fans, the relatively close placement of the barn to the southern lot line, the lack of dispersing winds, and gaps in ground foliage plus the height and presence of a canopy created by the branches of trees on the Complainants' property. [emphasis added]

121. The Complainants did not cross-examine Ms. Foyle on her 2020 evidence.

Submissions of Parties Complainants

- 122. The Complainants did not attend the resumption of the hearing and did not provide any closing submissions. However, their notice of complaint sets out their main arguments developed through the course of the presentation of their case. The notice of complaint states "We are no longer able to enjoy our once beautiful, serene riverside property due to the constant noise, dust, pollution, bio-materials and horrendous odors being emitted from the barn exhaust fans which point directly at our property". They seek an order that the farm cease or modify its farm practices.
- 123. The Complainants argue that Springbend is not using normal farm practice due to the size of the operation (barn can house 30,000 chickens) in relation to the property size, and in comparison to other chicken operations in the area. The riverside farms in the area usually grow crops and do not raise livestock. Springbend's barn is sited too close to its property line (15 metres) and too close to their property line (35 metres) to be considered a normal practice. Springbend built its barn 15 metres from the property line on Foxwood Road and 9 metres from the west property line after receiving a variance from the regional district. The Complainants opposed the variance application and claim it was successful due in part to false assertions by Springbend regarding the distance dust would settle from the barn. The Complainants argue Springbend has not met all the conditions imposed by the regional district when approving the variance and say the current set back for the barn from the road is not acceptable and no other barns in the central interior or lower mainland are set this close to the farm's property line.
- 124. The Complainants argue normal farm practice would require the barn to be built as far away as possible from any other property. As a result, the emissions from the farm are not normal because of the barn's proximity to the Complainants' property. They say the use of tunnel fans is not a normal farm practice and the level of noise they produce is not normal. Springbend has not adopted sufficient measures to mitigate the impact of emissions, the smell from the barn or the level of noise from the fans. The vegetative buffers around the barn are inadequate because they do not meet the distance from the barn or the height required for an effective buffer.

- 125. In summary, the Complainants submit that "this poultry farming operation far exceeds tolerance limits of normal farming operation, primarily resulting from its unusual and unconventional proximity to our property, as well as the size, location and direction of the fans on the building, all of which results in high concentrations of particulate, fecal and other chicken emissions, toxic odours and gases, and other effluent attributed to such farming operations." The barn is so close and the fans point directly at their property which makes the effects of the emissions worse and not consistent with "normal farm practice". As a result, they seek an order directing Springbend to stop operating until it takes the following remedial action:
 - plant cedar trees, at least six metres in height, as close together as possible and three to four metres from the fans, along the west and south sides of the barn;
 - remove all fans from the south end of the barn and place fans on the north end of the barn; or, install vents onto the existing fans running along the barn walls and emitting to the north end of the barn;
 - install a vertical berm six metres in height, on the south end of the barn and around the west side of the barn for six metres;
 - adopt measures as necessary to eliminate flies from the poultry operation;
 - adopt other necessary measures after testing emissions; and
 - review remedial measures six months after implementation and again in one year.

Respondent farm

- 126. Springbend maintains that its farm operation meets normal farm practices. The location of its barn in relation to the Foxwood Road property boundary falls within the Ministry's siting recommendations (15 30 metres) and the location of the barn is similar to other farms in similar circumstances (properties with residences close to chicken farms). Springbend seeks a determination that its farm operation meets normal farm practice and seeks an order directing that it:
 - Maintain the existing vegetative buffer at the east, south and west sides of the barn
 - Modify the dust screen by installing "wings" at a 45° angle to the eves of the barn to the ground, and to extend around the east and west sides of the south end of the barn to cover the existing fans
 - Maintain the existing dust screen structure
 - Remove the existing poly wall.

E. ANALYSIS & DECISION

- 127. The parties provided evidence and documentation to support their cases. While the Panel references only a portion of the information provided, the Panel has reviewed and considered all the written submissions and oral evidence in the course of making this decision.
- 128. The complaints were filed pursuant to section 3(1) of the FPPA:
 - **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.
- 129. When a person files a complaint under the *FPPA*, section 3 requires Complainants to demonstrate both that they are aggrieved by the complained of disturbance which arises out of a farm operation conducted as part of a farm business, and that the disturbance arises from a practice which is inconsistent with normal farm practice. Normal farm practice is defined as a practice consistent with proper and accepted customs and standards as established and followed by similar farms under similar circumstances.
- 130. If, after a hearing, the Panel is of the opinion that the Complainant is not in fact aggrieved by the complained of disturbance then the complaint is dismissed. If, the Complainant is found to be aggrieved but the odour, noise, dust or other disturbance results from a normal farm practice, then the complainant is aggrieved by a disturbance and the disturbance results from a practice that, following a contextual analysis, is found not to be consistent with a normal farm practice, that it may order the farmer to cease or modify the complained of practice.
- 131. There is no dispute in this complaint that the Respondent is a farm business and the disturbance complained of results from the Respondent's farm operations related to the growing, producing or keeping of animals (chicken). The Panel now turns to consider the first branch of the legal test.

Are the Complainants aggrieved by any odour, noise, dust or other disturbance *resulting from a farm operation conducted as part of a farm business, in this* case the chicken producing operation of Springbend?

132. The Complainants allege they are aggrieved by dust, odour, noise and flies, which disturbances arise from Springbend's chicken production operation. They claim that the chicken production operation does not apply normal practices because: it is too intensive an operation compared to other farms in the region; it is too large an operation for the property; the barn placement is too close to the property line and not similar to the placement of barns on other chicken farms; and, it relies on the use of tunnel fans which are not commonly used in

the industry and which should not be used where a neighbouring property is so close to the barn.

133. The Panel must first determine if the Complainants have demonstrated that they are aggrieved by the alleged disturbances from Springbend.

Other Disturbance - Flies

- 134. The evidence of fly disturbance is limited to specific times and dates. Mrs. Stupka indicated that she did not spend much time at the Gardiner property after the barn was built and on one occasion, observed that "the trailer was gross with flies". Ms. Gardiner noted the presence of flies on July 19 and 20 counting as many as 35 on the trailer door around the time chickens were being shipped and the barn was cleaned out. Mr. Paul noted the presence of flies on one day and thought they were emerging from larvae in dead chickens in Springbend's "carcass pit".
- 135. Mr. Stefanyk conceded that there may have been flies early on in establishing the broiler operation. He suggested their presence was due to the composting facility not yet being fully operational. He observes that flies from the chicken production operation are no longer an issue since he removes manure and composted chicken as soon as possible from the farm and sprays pesticides around the composting facility after each shipment of chickens from the barn.
- 136. The KPs reported no evidence of flies on their first site visit and Ms. Foyle did not comment on flies following her 2020 visit and it does not appear from Report 2 that the Complainants made her aware of any fly issues in 2020.
- 137. Based on the evidence, the Panel finds that any fly disturbance on the Complainants' property has been intermittent and occasional since 2017. While the presence of flies can be annoying and worrying, the Panel finds that the Complainants are not aggrieved by the presence of flies due to the infrequent nature of the disturbance in 2017 and the limited evidence of flies beyond the summer of 2017. Having determined that the Complainants are not aggrieved by flies, the Panel need not consider whether this disturbance resulted from a normal farm practice.

Dust and Odour

138. The Complainants' witnesses, Mr. and Mrs. Stupka both report the presence of dust (white-yellow or yellow in colour) on the Complainants' property and in the air in 2017 and as late as May 2018. They describe a gagging smell coming from the farm. Ms. Gardiner provides detailed and graphic evidence of the ongoing presence of dust and odour emanating from the farm almost daily in the summer of 2017, noting an accumulation of dust in the trailer and on vegetation on their property and indicating she would not eat berries from the

property anymore. These problems of dust and odour continued into the summer of 2018, the spring and early summer of 2019 and again in the summer of 2020. Mr. Paul noted the accumulation of dust in front of the fans in 2017 and observed the dust hitting the trees, curling up 100 feet high before drifting through their yard. After seeing the dust accumulating on vegetation on their property, he said he would not eat anything from the property. The KPs observed and reported the significant effects of dust and odour from the farm on the Complainants' property during the summers of 2018 and 2020. The KPs advised that odour is physically associated with dust, carried by airborne particles. Ms. Foyle's 2020 site visits confirmed that dust accumulation and smell persisted on that part of the Complainants' property immediately across from the south west corner of the Springbend barn.

- 139. Mr. Stefanyk admits that it has taken time to fine tune the operation of the tunnel ventilation system in the poultry barn, and that the initial design was over-powered for the needs of the barn. When Mr. Stefanyk noticed a draft from the tunnel fans reaching Foxwood Road, he took steps to try and reduce the movement of air and dust between the properties.
- 140. Based on the evidence of the Complainants, Mr. and Mrs. Stupka, Mr. Stefanyk and the KPs, the Panel finds that the Complainants were aggrieved by dust and odour from the Springbend farm operation at the time of filing the complaint. The Panel accepts, based on the KPs' evidence, that odour is associated with particulates in dust and will be present whenever particulates or dust from barn emissions are in the air. The evidence of Ms. Foyle is that in 2020, the Complainants continued to experience dust and odour over a smaller portion of their property extending about 50 metres westward from the south west corner of the barn, and 100 metres to the north (across the full width of the property).
- 141. In summary, the Panel finds that while the Complainants were aggrieved by dust and odour over most of their property in 2017 when they filed the complaint, the area of impact of dust and odour on the Complainants' property has been reduced substantially. However, the Panel finds that the Complainants continue to be aggrieved by the dust and odour on a portion of their property.

<u>Noise</u>

142. Mr. Paul gave evidence that the level of noise when Springbend first started the fans left him no recourse but to leave the property after five days in 2017. Mrs. Stupka said that in the summer of 2017, there was no where to go on the property to get away from the noise of the fans. Ms. Gardiner provided specific evidence of the fans running throughout the hot days in 2017, and on one occasion well into the night. Ms. Gardiner also reported that the chicken catchers and shippers were very noisy preventing a good night's sleep.

- 143. Mr. Stefanyk points out that the fans are run persistently in warm weather and as required in cooler weather to ensure the health of the chickens. The KPs indicated that the sound of the fans is like a propeller. Based on the totality of the evidence, the Panel finds that the Complainants were aggrieved by the noise of the tunnel fans at the time of the filing of the complaint.
- 144. Ms. Gardiner also complained that the noise of catching and shipping was unacceptably loud on one occasion in 2017. Chickens are shipped at the end of each cycle, usually six times per year. Mr. Stefanyk advised the catchers of the need to reduce the noise from voices and loading from the barn to trucks takes place at the north end of the barn, the furthest point possible away from the Complainants' property. Given that the location of chicken loading on the farm and the distance from that location to the Complainants' property, the Respondent's direction to catchers and shippers to reduce noise, and the relatively infrequent nature of the noise (six times per year), the Panel finds that the Complainants are not aggrieved by the noise from catching and shipping chickens at Springbend.⁶
- 145. In summary, the Panel has determined that the Complainants are aggrieved by dust, odour and tunnel fan noise from the Springbend farm. The second branch of the legal test asks the following question.

Are Springbend's practices with regards to dust, odour and noise consistent with normal farm practice?

- 146. To determine whether a complained of practice falls within the definition of normal farm practice, the Panel must determine whether the practice is "consistent with proper and accepted customs and standards as established and followed by similar farm businesses under similar circumstances."
- 147. A determination of normal farm practice requires an assessment of the proper and accepted customs (that result in the disturbances) as carried out by similar farms in similar circumstances. Generally accepted industry practices are considered in conjunction with any specific contextual or site specific circumstances related to the farm itself and/or in relation to neighbouring properties that may result in a disturbance that inordinately impacts an neighbour. In short, circumstances vary. What is a normal farm practice in some circumstances may not be necessarily be "proper and accepted" when conducted in some other circumstance. Qualitative differences must be taken into account when determining whether the farm practices complained of are "proper and accepted".

⁶ This case can be distinguished from the farm practices complaint in *Ollenberger v. Breukelman*, (November 18, 2005) where the magnitude and frequency of the complained of noise disturbance coupled with the proximity of the Respondent's barn to the Complainants' home was sufficient to demonstrate that they were aggrieved.

- 148. Where the disturbance exceeds the tolerance levels that a reasonable neighbour should be expected to endure, the farmer will be required to take mitigation measures that go beyond accepted industry practices. This contextual analysis involves asking what, if any, reasonable steps the farmer should take to mitigate disturbances resulting from the farm operations on neighbours. This is sometimes referred to as applying the "good neighbour principle": see *Holt v. Swart* (January 12, 2016 at para. 96), *Harrison v. Mykalb*, (January 30, 2013 at para. 66), *Ollenberger, supra* at para 62, Eason v. Outlander Poultry Farms Ltd. (March 10, 2000 at para. 69-70)].
- 149. At the centre of this complaint is the Springbend chicken barn its structure, operation and siting. The Panel must consider whether Springbend is following BC broiler chicken industry standards with respect to its chicken barn.

Barn Structure and Operation

- 150. The Complainants submit that there are no other comparable intensive chicken farms in the region and that the Springbend barn's intensive production is too large for the size of property and in the Grindrod area, farms tend to produce crops. They also argue that tunnel fans are not commonly used in the chicken production industry.
- 151. Mr. Stefanyk's evidence is that he operated a chicken barn on another property in the Grindrod area before he bought the Foxwood Road property that was cross-ventilated. When beginning the process of building his barn, he learned from other producers and suppliers that the industry was commonly building long narrow barns ventilated by tunnel fans to move air along the length of the barn with some active cross-ventilation as well. He took advice from a barn ventilation supplier regarding how to set up the barn. He took into account the whole of Springbend's parcel of land and sited the barn based on the efficient use of the property, the location of the river and the future uses he had planned for the property. He determined the barn should extend north-south along the west side of the property. Any additional barn would be on the east side of the property also running north-south. He concluded that the tunnel fans should be installed on the south end of the barn so the office and area of the barn with electronics would be furthest from the road to avoid production interruptions related to theft and vandalism.
- 152. The many photographs of barns provided by the Complainants, the Respondent and the KPs clearly show that long narrow barns are common in the chicken industry in BC. The KPs concluded that it is most common for newly built barns to incorporate tunnel ventilation to facilitate greater bird comfort and health. Springbend is an example of this practice. The KPs point out that many farms often have several barns to efficiently use relatively high cost land and gave examples of an 8.6 acre chicken farm in Langley with six tunnel ventilated barns side by side on the property where two of the newest barns are double decker

barns. An 8.2 acre farm in the Okanagan-Shuswap area had one chicken barn, similar in format and size to the Springbend farm. The KPs explained "the common use of tunnel vent systems combined with a mix of farm and non-farm uses on a variety of lot sizes provides relevant context for the lower mainland farms." (KP Report 1, p. 12). In addition, Mr. Stefanyk provided photographs of four operating barns in the Okanagan-Shuswap area north of Grindrod. Of these, two farms used cross-ventilating fans and two, one with several barns, used tunnel ventilating barns.

- 153. The KPs confirm the Respondent's evidence that a barn ventilation system is required to prevent chickens from over heating or being too cold, to bring fresh air into the barn and to ensure mixing of the air in the barn to ensure the levels of oxygen the chickens require. Ms. Gardiner, the KPs and Mr. Stefanyk all agree that for several hours a day, over four to six weeks during the summer (and possibly other times of year), the tunnel fans produce a recognizable sound. The KPs noted there is no method to reduce the noise from the fan through modification without interfering with fan efficiency.
- 154. Based on all the evidence and in response to the Complainants' claims that tunnel fan ventilation is not common in the industry and that chicken farms in the region are not as intense as Springbend, the Panel makes the following findings:
 - The size and dimensions of the Springbend barn are similar to those of many other chicken production barns in the Okanagan-Shuswap and lower mainland;
 - The use of tunnel fan ventilation is common throughout the Okanagan-Shuswap and lower mainland;
 - The intensity of chicken production is related to barn size and the size of the Springbend barn is comparable with other chicken barns in the Okanagan-Shuswap region;
 - The size of Springbend's property as a whole (about eight acres) is comparable to the size of several other chicken farms in the Okanagan-Shuswap region and lower mainland.
- 155. The Panel concludes that the type (tunnel fan ventilated) and size (long and narrow) of barn and the intensity of chicken production at Springbend are consistent with industry standards and other farms of comparable size in the region and the lower mainland.

Barn Placement (Siting)

156. The Complainants submit that the placement of the barn in relation to their property makes the barn inconsistent with "normal farm practices" because it results in intolerable dust, odour and noise due to the siting of the barn in close

proximity to their property line. The south tunnel fan end of the barn is 15 metres from the Springbend property line, factoring in the road, the fan is 35 metres from the Complainants' property line. They also note that the west side of the barn is 9 metres from the shared property line with the neighbours to the west.

- 157. Springbend provided evidence of three other chicken barns in the region located 15 metres or less from a property line; two other barns 30 metres from a shared property line; and, one in the Fraser Valley ten metres from a shared property line. Springbend relies on these comparators to support that the fanend of the barn is placed in a manner consistent with normal farm practice. The Complainants provided evidence of many farms where the distances from barns to property lines is substantially greater and the location of the Springbend farm is not normal farm practice. They argue local government should not have agreed to a variance enabling Springbend to locate the south end of the barn five metres closer to the property line than the bylaw ordinarily requires.
- 158. The Respondent says that the local government applied its normal process in making its decision to approve the variance. He also submits that the final siting of the barn is consistent with the Ministry guidelines to local governments of placing a barn 15 to 30 metres from the farmer's property line on the south end of the property. As to the placement in relation to the west side of the property, he says the neighbour on the west side agreed to the variance situating the barn nine metres from the shared property line.
- 159. The KPs' evidence is that the tunnel fan end of the barn on a farm comparator for the Okanagan-Shuswap area is 25 metres from a shared property line, and the tunnel fan end of the barn on a farm in Abbotsford is 20 metres from a shared property line. The Complainants' property line is 35 metres from the tunnel end of the Springbend barn. The KPs provided an example of a property in Langley with several barns, where the tunnel fan ends of these barns are 15 metres from the property line running along a roadside, the same distance as for the Complainants' property. Ms. Foyle was familiar with the farm where the fan end of the barn is sited ten metres from a shared property line in the Fraser Valley.
- 160. The Panel finds the examples of comparator farms given by the KPs to be most helpful and places considerable weight on that evidence because of the KPs' conclusions related to the comparable circumstances of these farms to the Springbend farm. Further, the Panel observes that we are not tasked with reviewing the wisdom of decisions made by local government. After considering the photographic evidence provided by the Complainants of barn placement on several properties and the evidence provided by the Respondent and KPs, the Panel finds that the siting of the Springbend farm falls within industry standards.

161. However, as noted above, it is not enough to simply assess the practices at Springbend and compare them to industry standards, we must also consider whether there are other contextual factors of the type as identified in the following passage from *Geertsma, supra* to take into account in making our determination of "normal farm practice":

This analysis involves a close examination and weighing of industry practices but also includes an evaluation of the context out of which the complaint arises. This evaluation may include many relevant factors such as the proximity of neighbours, their use of their lands, geographical or meteorological features, types of farming in the area, and the size and type of operation that is the subject of the complaint.

Contextual Factors

- 162. The Complainants submit that the Springbend operation far exceeds tolerance limits of a normal farming operation mainly due to its unusual and unconventional proximity to their property in combination with the location and direction of the fans on the barn. When the KPs visited Springbend in July 2018, Mr. Stefanyk acknowledged that his farm created dust and odour that upset the Complainants and he had installed various wooden structures to deflect the movement of air from the fans away from the Complainants' property which efforts were not successful. He installed further mitigation measures in 2019.
- 163. The KPs concluded "...given the site-specific context, particularly the orientation of the fans and the variance to allow siting the barn relatively close to the southern lot line, a greater level of management to mitigate dust and odour is appropriate." (KP Report 1, p.18)
- 164. The KPs also considered the impact of wind, air flow and the type and level of vegetation between the tunnel fans and the Complainants' property on the disturbances experienced by the Complainants. The KPs concluded that from July to mid-September, the wind is calm about 53% of the time and the prevailing direction of the wind is from north to south (from Springbend to the Complainants' property). On each site visit, the KPs noted the wind was "light". In relation to the observation of light winds, the KPs concluded the main source of air flow from Springbend is the tunnel ventilating fans on the south end of the barn.
- 165. For completeness, the Panel notes Ms. Jackson also considered wind direction as part of her vegetative buffer plan provided to Springbend. She concluded that the predominant wind direction was from south-south west to north-north east (from Complainants' property toward Springbend). We note that this evidence is based on a different time frame (a full year) than the KPs' evidence and appears to conflict with the KPs' assessment of wind direction. The Panel prefers the KPs' evidence because they were focussed on looking at wind direction to ascertain its role in the reported dust and odour disturbances in the warmer months when dust and odour were at their highest.

- 166. The KPs also considered the impact of existing vegetation and observed that the trees on both properties (from the tunnel end of the barn to approximately 25 metres into the Complainants' property) "have foliage mainly at a tall height from the ground with little foliage at the ground to ~5m levels. The low level foliage has significant gaps, especially in the area in front of the exhaust fans (KP Report 1, photo 7). Additionally, on the Gardiner property there are many tall high level foliage trees that create a 'canopy' on the property, with little ground level vegetation. The gaps on foliage on both properties allow the dust/odour and fans airflow to be directly blown onto the Gardiner property."
- 167. The Panel accepts and relies on the KPs' conclusion that, winds are typically light in this area from July to mid-September, which is consistent with Ms. Jackson's evidence and supported by Ms. Gardiner's notations about wind from May to July 20, 2017. Based on this conclusion that the wind is often light during the warm months, the Panel finds that "prevailing winds" at this time of year play little role in spreading dust from the barn, and it is the tunnel fans that are the primary source of the spread. We agree with the KPs that if there were stronger winds present, we would not see the type of dust build-up observed on the Complainants' property.
- 168. The KPs concluded that the various contextual factors, when taken together, result in significant dispersal of dust (and associated odour) onto the Complainants' property which requires further mitigative efforts.
- 169. The Panel appreciates that there is always dust and odour associated with intensive chicken production and the presence of such disturbances alone would not be sufficient to support a valid complaint before BCFIRB. A valid complaint requires the Panel to find that the magnitude of the disturbance causes too great an impact on the farm's neighbours and "normal farm practice" requires reasonable mitigation measures.
- 170. While we have concluded that the siting of the Springbend barn and its use of tunnel fans are acceptable industry practices, when the contextual factors related to use of tunnel fans, proximity of neighbours, prevalence of light winds and gaps in vegetation are all considered, we find the complained of odour and dust disturbances exceed the tolerance limits of a reasonable neighbour. Proper and accepted customs and standards require this farmer to take further steps aimed at mitigating those effects. We note that Mr. Stefanyk has readily acknowledged the negative impact of his farm on the Complainants and his efforts, since 2018, to mitigate its impact have had varying degrees of success.
- 171. In deciding what is a reasonable and/or appropriate mitigation measure, the Panel may require a modification over and above that which is typically found on other farms, as for most farms "the minimum consideration for one's neighbours is reflected in the scale, location and other circumstances of particular farms". *Eason*, supra, paragraph 72. Where the Panel concludes that

a farm has not met the minimum consideration of a good neighbour, the Panel will make an appropriate modification order.

172. Here, the KPs concluded that there is likely no suite of mitigation measures that can eliminate all dust and odour, but that reducing the levels of dust moving onto the Complainants' property will also reduce odour. The Panel acknowledges that significant dust and odour may remain even after mitigation measures have been installed. However, proper and accepted practices require no more or less than the taking of reasonable steps to ameliorate negative impacts. The Panel agrees with the KPs that mitigation efforts to disrupt and prevent movement of emissions from the barn to the Complainants' property are required and essential to manage odour and dust.

Mitigation Measures

- 173. With respect to noise, the evidence is that the tunnel fans are the primary source of persistent noise. The Complainants submit that Springbend should install a berm as a mitigation measure for all disturbances (noise, dust, odour). The KPs advise that there is no mitigation for sound available through adjustments to the fans. The KPs do not support a berm and instead recommend that Springbend provide the Complainants with a chicken production schedule to allow them to make choices to deal with noise from Springbend. Ms. Foyle suggests that if the Complainants continue to be aggrieved by noise after the adoption of all mitigation measures, the Complainants may want to consider installing a "noise wall" on their property.
- 174. The Panel observes that Springbend has reduced the number of tunnel fans at the south end of the barn from the eight operating in 2017 to four in 2020. There was no comparative evidence from the Complainants of fan noise before and after the reduction in fan numbers, but the Panel finds the only evidence of a practical method of reducing the noise is to reduce the fans and Springbend has done so. In addition, the space between the south end of the barn and the property line is where the mitigation efforts for dust and odour must be installed. The Panel concludes based on Springbend's reduction in tunnel fans and the impracticality of installing a berm across the south end of the barn, Springbend has taken reasonable and appropriate steps to mitigate the impact of fan noise on its neighbours and no further mitigation is required beyond the reduction of tunnel fans to four on the south end of the barn. The Panel however endorses the KPs' recommendation that Springbend provide the Complainants with information about its annual production cycle so they can predict when the fans are likely to be noisiest and take any steps necessary to mitigate the noise. Such steps might include for example, leaving their property for a time or wearing personal sound modifying devices, but do not include further mitigations at Springbend.

- 175. With respect to dust and odour, the KPs recommended mitigation measures in 2018 including the installation of a dust screen, and enhancement of the vegetative buffer. They also recommended Springbend reduce the number of large vehicles visiting the farm to reduce road dust. Springbend has reduced the number of visits to the farm by feed delivery trucks. The KPs also recommended that the Complainants consider placement of future residences and removal of certain trees. The KPs did not recommend moving the tunnel fans to the north end of the barn based on cost and barn function efficiency and did not endorse the Complainants' proposal of venting the tunnel fans to the north end of the barn.
- 176. By early June 2019, Springbend had installed a dust screen, planted its vegetative buffer and installed a continuous poly wall between the buffer and dust screen, which wrapped around the east side of the dust screen to some extent, but not around the west side of the barn to cover the open end of the dust screen.
- 177. As a result of the 2020 assessment, Ms. Foyle determined that dust and odour from the west side of the barn was continuing to escape onto Complainants' property through gaps in the vegetation where there was no effective barrier. Her 2020 mitigation recommendations included extensions to the dust screen and poly wall and maintaining the vegetative buffer to encourage growth so that the poly wall would at some future time no longer be needed.
- 178. Springbend proposed extending the dust screen around both the east and west corners of the barn and removing the poly wall as the trees in the vegetative buffer have grown offsetting its need. Other than advising Ms. Foyle during her 2020 site visit, that dust and odour from Springbend remained intolerable, the Complainants did not make specific submissions on the 2020 mitigation recommendations or Springbend's final proposal.
- 179. As noted previously, the Panel may make directions to modify a farm's practices to be consistent with normal farm practices and to reflect the "good neighbour" principle. After considering KP Report 2, including the evidence that there still remains dust accumulations on the Complainants' property, the Panel finds that Springbend's mitigation measures in 2019 and 2020 were inadequate. There are gaps in the coverage of the dust screen, poly wall and the vegetative buffer is not dense enough to prevent accumulations of dust (and associated odour) on certain parts of the Complainants' property.
- 180. The KPs' recommendations rely on what other farms operating tunnel fans have done to trap and reduce the emissions of dust and include the installation of impermeable walls, dust screens and vegetative buffers. The Panel is persuaded that a reasonable mitigation effort requires Springbend to do more to fill existing gaps in its dust capture system. As the combination of a dust screen and poly wall has proven successful in blocking and capturing dust to date,

these installations need to continue, and be modified to address gaps. The Panel accepts Ms. Foyle's recommendations that the poly wall should be extended around the west side of the barn beyond the existing side fans and a corner should be added to the existing dust screen of a similar design as the existing dust screen wall and cap so that it covers the area of emission of the side fans. In our view, these modifications are necessary to prevent as much dust as is practical from reaching the Complainants' property during times of high tunnel fan operation during summer months.

- 181. With respect to the vegetative buffer, the Panel rejects the Complainants' argument that the vegetative buffer should be replanted using cedars. Springbend planted its vegetative buffer consisting of Douglas firs on the west side of the barn in a single row to ensure the space the trees require to reach maturity based on the advice of a qualified professional. Ms. Foyle concluded the buffer was well maintained.
- 182. The KPs advise that the success of the mitigation measures to trap and block barn emissions not only depends on the effectiveness of the combined poly wall and dust screen, but also on the vegetative buffer. Ms. Foyle testified it was too soon to remove the poly wall as the trees had not filled in enough yet, especially on the west side of the barn but when the vegetative buffer fills in, the poly wall could be removed.
- 183. The Panel finds that the poly wall remains an essential part of the farm's mitigation efforts until such time as the vegetative buffer is fully functional and accept Ms. Foyle's conclusion that it is simply a matter of time and maintenance of existing trees before this occurs. The Panel also finds, based on Ms. Foyle's evidence, that the poly wall could be eliminated when the vegetative buffer has filled out in approximately five years time.
- 184. The Complainants asked this Panel to order the farm to install new tunnel venting structures. There was no evidence offered to demonstrate how this could be accomplished in practice or that it could be considered normal farm practice. As a result, we reject this argument.
- 185. When Springbend implements the order regarding extensions to the dust screen and poly wall, the Panel is satisfied that Springbend will have taken reasonable steps that a neighbourly farmer would normally employ in the circumstances to ameliorate the impacts of its operation on its neighbours. Despite these modifications, the Panel acknowledges that from time to time, significant dust, odour and noise disturbances will remain and that this is unavoidable.

- 186. This Panel's conclusions are consistent with those made in *Learmonth, supra* (para. 98). The *FPPA* was designed to protect farms as long as they follow normal farm practices. The legislature has made the fundamental policy decision that the right to farm in accordance with normal farm practice prevails over the disturbances caused by farming. While it is clear the Complainants are disturbed by Springbend, it is not a Panel's role to apply the *FPPA* as if it were a nuisance or zoning statute, telling farmers, based on noise, odour or other impacts, what they can and cannot grow or raise in areas provincially designated for agriculture. Where, as here, a normal farm practice produces a real and substantial disturbance, the farm operations prevail unless on the contextual analysis, modification is required.
- 187. In this case, the Panel's determination is that as a consequence of the contextual analysis, modifications to the farm's practice are required to mitigate the accumulation of dust and the associated odour on the Complainants' property. Springbend made significant efforts to adapt its operations prior to the June 2019 hearing. The Panel has taken these into account and determines that with minor adjustments, the mitigation measures will meet the standards of normal farm practice for an operation of its kind in light of the barn siting, the configuration and size of each property and characteristics specific to the Complainants' property. The Panel also notes that the Complainants have a role to play in mitigating the impact of the farm on their use of their property but those are matters solely for the Complainants' consideration.

ORDER

- 188. The Complainants are not aggrieved by flies or noise from catching crews and barn clean out activities; and accordingly, these aspects of the complaint are dismissed.
- 189. The Respondent's use of tunnel fans is inconsistent with normal farm practice. The Panel orders the Respondent to:
 - a) adopt and implement the mitigation measures for dust screen and poly wall according to the specifications in KP Report 2, no later than June 30, 2021; and
 - b) repair and maintain the dust screen, poly wall and vegetative buffer on an ongoing basis.
- 190. The Panel further directs that the Respondent, may vary and/or remove the poly wall after October 15, 2026, upon receipt of written advice from either the Ministry, an environmental farm planner or an agricultural landscape planner confirming that the vegetative buffer is operating to a satisfactory level.
- 191. The Panel makes no order with regards to costs.

Dated at Victoria, British Columbia this 18th day of May 2021.

BRITISH COLUMBIA FARM INDUSTRY REVIEW BOARD Per:

D. E. Stamel

Daphne Stancil, Presiding Member

O. Thigh

Tamara Leigh, Member