

# Natural Products Marketing (BC) Act Mandatory Notifiable Avian Influenza Insurance Review

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*Phase 1 Report  
Why is a Financial Response Needed?  
March 17, 2017*



# *Natural Products Marketing (BC) Act*

## Mandatory Insurance for Registered Poultry Producers

### Phase 1 Report – Why is a Financial Response Needed?

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#### Executive Summary

The Mandatory Notifiable Avian Influenza Insurance Review (the “Review”) is intended to provide the regulated poultry boards and commission in BC with the research and analysis to determine whether or not to apply the authorities granted under the *Natural Products Marketing (BC) Act* to require producers to maintain insurance against losses resulting from Notifiable Avian Influenza (NAI) discoveries. The regulated poultry boards and commission must ensure that the application of the requirement is in keeping with sound marketing policy. This report is the first phase of a five phase project to conduct the requisite due diligence to support the regulated poultry boards and commission decision making process. This phase establishes the sound marketing policy rationale as to why a financial response is required in order to return the regulated poultry industry in BC to a system of orderly marketing.

Through past experience gained from responding to and managing the 2004, 2005, 2009 and 2014 NAI discoveries, the roles and responsibilities of government and industry have evolved and are more fully understood and accepted by all parties. The Canadian Food Inspection Agency (CFIA), under the authority of the *Health of Animals Act* leads the management of the response in order to contain, control and eradicate the virus to eliminate the risk of reinfection and spread. CFIA assumes the cost of the control from confirmatory testing to establishing and maintaining quarantine zones to the ordered destruction of infected birds and the treatment of the infected material through the use of in-barn biological heat treatment (BHT) to destroy the virus. In the process CFIA pays market value compensation for birds ordered destroyed in addition to the costs of destroying the source of the virus.

Once CFIA has determined that the BHT process has reached critical temperatures for the desired duration, the cleaning and disinfecting (C&D) process can commence. The C&D process falls within the infected premise owner’s management and financial responsibility. CFIA does not compensate for the cost of infected premise C&D but has final approval authority to minimize the risk of reinfection.

As part of the management of the response, the CFIA declares Infected Place (quarantine) on all premises with poultry within a 1 to 3 km radius (Infected Zone) of the index premises where NAI has been suspected, presumed or confirmed. Surveillance and movement controls are established for existing flocks within the Infected Zone. As well, the placement of new flocks is restricted until such time that the CFIA has lifted the Infected Place designation within the Infected Zone. The lifting of the Infected Place designation cannot occur until a minimum of 21 days has passed following the CFIA signing off the completion of the C&D of all infected premises. The ability of the boards and commission to exercise their authorities to return the industry to a system of orderly marketing is precluded until the C&D process is declared completed by the CFIA.

The experience gained from 2004 and 2014 Highly Pathogenic Notifiable Avian Influenza (HPNAI) outbreaks found that the cost of infected premises C&D can be significant enough to cause the owner to pause and delay the initiation or completion of the C&D. Industry leadership quickly realized in 2004 that leaving responsibility with the 53 infected premises (42 commercial and 11 non-commercial) to carry out the required C&D would have resulted in variable timing of initiation and completion and further delayed the commencement of the return to a system of orderly marketing. Logistic and financial constraints drove the need for poultry processors, boards and commission to agree to direct the undertaking and fund the \$3 million cost of infected premises C&D.

The cost in 2014 to C&D the 13 infected premises (11 commercial and 2 non-commercial) was in excess of \$750,000 of which the federal and provincial government through the AgriRecovery Program covered up to 90% of eligible costs. One of the infected premises facing costs exceeding \$100,000 had contemplated the use of an extended fallow period. Such an approach would have precluded the restocking of operations within 3 km of the infected premise for a further 6 months and delayed the declaration of disease-free status to enable access to export markets for BC processors. In essence the boards' and commission's ability to return the industry to a system of orderly marketing would have been in jeopardy.

The federal and provincial governments stated following the 2014 HPNAI outbreak that they would not consider future industry requests for financial assistance under the AgriRecovery Program given the recurring nature of NAI in BC. The stated government position and the absence of a coordinated industry-wide financial response leave the infected premise owner with the responsibility and financial burden for the extraordinary costs of C&D. As such, the boards' and commission's ability to return the industry to a system of orderly marketing is dictated by the infected premise owner's willingness and timing to initiate and complete the C&D process.

Irrespective of the type of operation that has contracted NAI, the entire BC poultry industry can be held in abeyance from returning to a system of orderly marketing if the financial burden of infected C&D is not addressed in a proactive manner. An industry-wide financial response to support or defray the extraordinary costs of infected premise C&D is required and is consistent with sound marketing policy and would support the boards' and commission's ability to return the poultry industry in BC to a system of orderly marketing in a timely manner.

# *Natural Products Marketing (BC) Act*

## Mandatory Insurance for Registered Poultry Producers

### Phase 1 Report – Why is a Financial Response Needed?

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## Expected Outcome

The poultry boards and commission determination that a financial response to a Notifiable Avian Influenza (NAI) discovery is required to effectively and efficiently contribute to a system of orderly marketing following a NAI discovery.

## Introduction

The passing of the amendments to the *Natural Products Marketing (BC) Act* (the “NPMA”) in May 2015 made explicit the authority of boards and commissions to require producers to maintain insurance against losses resulting from the interruption or termination of production for any reason or for a notifiable or reportable disease. The regulated poultry boards and commission have given due consideration to the enabling authority and collectively agreed in January 2016 to initiate the Mandatory Notifiable Avian Influenza Insurance Review (the “Review”). The purpose of the Review is to conduct the requisite due diligence in accordance with the SAFETI<sup>1</sup> principles for each board and commission to make a decision on whether or not to implement mandatory insurance requirements to address the financial consequences of Notifiable Avian Influenza (NAI) discoveries in regulated poultry flocks.

This Report is the first phase of a five phase Review. It is important in determining whether or not mandatory insurance falls within the realm of sound marketing policy to address the following questions:

- How to effectively and efficiently return the poultry industry to a system of orderly marketing?
  - Is a financial response necessary?
  - What other options/tools are available to the boards and commission?

This Report will provide

- A brief background on NAI
- A summary of the BC Poultry Industry Strategic Risk Management Strategy
- Factors affecting the return to a system of orderly marketing
- The financial impacts to the industry
- Sound marketing policy considerations
  - The need for a financial response to a NAI discovery
  - The options and tools available to address the financial impacts

Subsequent reports will be prepared on the remaining four phases:

- What is the scope of financial response
- Do the conditions of insurance exist
- Do viable insurance delivery mechanisms exist
- What mandatory insurance delivery mechanism is appropriate

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<sup>1</sup> SAFETI stands for the British Columbia Farm Industry Review Board governance principles; Strategic, Accountable, Fair, Equitable, Transparent and Inclusive.

## Process

The poultry boards and commission will take into consideration direction provided by the BC FIRB in various letters on mandatory insurance:

- August 14, 2014 – Supervisory Decision – Sound Marketing Policy and Board Authority – Mandatory Poultry Disease Insurance
- March 3, 2015 – Poultry Disease Insurance – Supervisory Decision Follow-up
- May 12, 2015 – Amendments to the *Natural Products Marketing (BC) Act*, Poultry Disease Insurance and August 14, 2014 Supervisory Decision
- September 12, 2015 Mandatory Disease Insurance Review and Assessment – Draft Work Plan.
- October 13, 2015 Mandatory Disease Insurance Review and Assessment - Next Steps.
- October 11, 2016 Mandatory Disease Insurance Review and Assessment – Assessment Completion Schedule and Updates.

The substantive directions provided by BC FIRB include:

- “Use of an appropriate SAFETI process to determine what, if any, insurance may be required to help ensure orderly marketing.”
- The need for mandatory insurance within the context of sound marketing policy.
  - How to effectively return the poultry industry to a system of orderly marketing?
- Consideration of the impact of mandatory insurance on the industries as a whole, including competitive pricing, foregone opportunities, the availability (or lack thereof) of government funding and related considerations.
- Decisions and rationale are publicly available in a timely manner.

## SAFETI Approach

The boards and commission have embraced a stakeholder engagement strategy as part of the Review’s work plan. Specifically the engagement strategy will

- Utilize the poultry boards and commission websites for posting information and reports on the Review and invite industry stakeholder and public comment.
- Distribute information and presentations to the five poultry associations for input and comment.
- Distribute information to and direct follow-up with the allied trades for input and comment.
- Compile input and comment into a report with response where appropriate and posted to the poultry boards and commission websites for validation.

To date (February 2017), two notices have been posted by the boards and commission on the Review (Attachment 1). Input was received from one producer in response to the initial notice (Attachment 2). The items raised, along with any other input receive during the Review will be duly considered and addressed by the boards and commission as part of the Review and decision making process.

## Background

In February 2004, a case of Highly Pathogenic Notifiable Avian Influenza (HPNAI) was discovered on a broiler breeder farm on Matsqui Prairie in Abbotsford. This was the first commercial discovery of NAI in BC and at the time the industry did not expect that the discovery would change the nature of the poultry industry in BC forever as borne out by the subsequent discoveries in 2005, 2009 and 2014.

Following the 2004 outbreak, considerable time, energy and work has been undertaken by the poultry industry at the urging of government to identify, plan and implement measures to mitigate the risks of future NAI discoveries. Subsequent discoveries in 2005, 2009 and 2014 have reinforced the value and need for the industry and government to have an effective risk mitigation strategy in place.

### *Risk Assessment Process*

Following the 2004 HPNAI outbreak the industry initiated a risk assessment process with the objectives to:

- Identify and assess risk factors which predispose the poultry industry to infectious disease outbreaks.
- Provide opportunities and risk management options for industry and government.
- Minimize impact of disease outbreaks on public confidence in poultry produced in BC.
- Maintain expansion of domestic and international markets for poultry products produced in BC.

The risk analysis was built in four major phases:

- Identifying and ranking a broad range of risk factors which could impact on the frequency and intensity of future animal disease outbreaks. This phase led to the ranking of 17 risk factors applicable to the BC industry.
- Assessing and evaluating the gaps that exist with respect to the mitigation of these risks from industry structure, policy and management practice perspectives. This phase led to the consolidation of the risk analysis into a range of possible options and alternatives by which risk could be mitigated or eliminated.
- Conducting an economic and financial evaluation of a limited number of possible and practical response options. This phase identified that an “effective risk management response will necessarily involve an integration of a number of related and complementary actions, that collectively will lead to a positive impact on risk reduction.” Three risk response options were identified for further analysis and consideration by decision makers.
- Developing a series of strategies, recommendations and actions for consideration. Six interrelated options were recommended.

In May 2007, Serecon Management Consulting Inc. filed their Risk Analysis of the BC Poultry Industry Report. See Attachment 3 for a further description of the industry risks associated with a NAI discovery.

## **Risk Analysis Steering Committee (RASC)**

A joint industry/government steering committee including senior level representatives from the BC Farm Industry Review Board (BC FIRB), BC Ministry of Agriculture, Agriculture and Agri-Food Canada and the Canadian Food Inspection Agency (CFIA), industry associations (producer and processor), boards and commission received the Serecon Risk Analysis for approval. In 2009, the steering committee unanimously adopted the report and in recognizing the significant implications of the recommendations, developed a risk mitigation strategic plan focussing on five key area of actions that built on the Serecon recommended integrated risk management model. Under the direction of RASC, A Strategic Plan for Risk Mitigation of Avian Influenza in BC Poultry was completed in June 2009. The BC Poultry Risk Mitigation Strategy has subsequently evolved into four main components:

- Emergency Preparedness and Response Capacity
- Mandatory Biosecurity Protocols
- Enhanced Pro-active Surveillance Program
- Responsive Financial Management and Compensation System

While development has occurred on each component separately, it must be recognized and emphasized that there remains a fundamental linkage between all four components whereby all work in an integrated manner to optimize risk mitigation. Two of the four components have been implemented and undergo periodic review and revision, particularly after an outbreak. Active surveillance is approaching the implementation stage and the financial management and compensation system has developed an insurance-based model for response, but does not yet have a solid foundation in place. Attachment 4 provides a description of the four components of the risk mitigation strategy.

## **Factors Affecting the Return to a System of Orderly Marketing**

The 2004 response involved the federal, provincial and local governments and the entire poultry industry value chain in BC and at the national level. Over a period of two months, approximately 125 poultry operations made up of commercial and backyard flocks of chicken, turkeys, ducks, geese and other birds were depopulated within three kilometres of the 53 “Infected Premises” (commercial and non-commercial) to stop the spread of the virus. A total of 16.2 million birds were ordered destroyed.

The Economic Impacts on British Columbia Poultry Industry Due to the Avian Influenza Outbreak was prepared by Serecon Management Consulting Inc. in July 2004. The total economic impact of the 2004 HPNAI outbreak was \$393.2 million. The impact was felt throughout the poultry value chain and local economies. The direct impacts for the entire poultry industry were estimated at \$222.6 million. The direct impacts include the loss in output (farm gate receipts) with respect to the breeding and growing operations, plus the cost impacts in the hatching and processing activities as relevant in each industry sector.

The 2004 HPNAI outbreak provided many challenges to government and industry being the first major poultry disease with zoonotic (human health) implications. To minimize the risk of reinfection and spread the ensuing intensive cleaning and disinfecting (C&D) process for infected premises presented logistical and financial challenges to the industry. Subsequent discoveries in 2005, 2009 and 2014 have resulted in further lessons learned in addressing these challenges.

## **Canada's International Obligation**

As part of its obligations to the World Organization for Animal Health (OIE), the CFIA must report the discovery of any number of listed diseases. Presence of the diseases affects the trade status of the country. Canada is listed as NAI-free and must follow specific protocols following the discovery of NAI in Canada.

Based on past experience, a NAI discovery impacts the system of orderly marketing, including exports of Canadian poultry products. Within hours of notification, other countries close their borders to the importation of Canadian poultry products until such time that Canada can re-establish its disease-free status with the OIE.

## **Notifiable Avian Influenza Hazard Specific Plan**

The CFIA is guided by a Notifiable Avian Influenza Hazard Specific Plan in the event of a NAI discovery. The Plan has evolved and been revised after review of responses to NAI discoveries. Canada's primary policy for NAI in domestic poultry is stamping out, including the possible use of pre-emptive slaughter to stop the outbreak and possible secondary outbreaks, as well as to prevent related economic and genetic losses, and zoonotic (human health) risk to enable prompt return to disease-free status.

When NAI is discovered and confirmed, the infected poultry farm is quarantined and all farms within a 1 to 3 km radius are included in the "infected zone" declaration. The consequence for non-infected farms within the 1 to 3 km infected zone is a system of rigorous movement controls including testing and permitting. As well the CFIA designates a "Primary Control Zone" for purposes of enabling the continued movement and limited export of poultry and poultry products without testing and permitting in the rest of Canada.

As set out in the NAI Hazard Specific Plan, premises where NAI is detected will be declared an "Infected Place" and the poultry and poultry products will be ordered destroyed. The CFIA may prioritize the depopulation of premises that have significant epidemiological contact with the known Infected Premises, and also may undertake a pre-emptive depopulation through destruction of all commercial poultry flocks within a 1 km radius of the Infected Premises based on the situational analysis, in particular if the discovery is a HPNAI.

## **Financial Impacts and Considerations**

### **Market Value of Birds Ordered Destroyed**

The CFIA under the authority of the *Health of Animals Act* (the "*HoA Act*") may compensate producers for the market value of birds ordered destroyed in order to contain, control and eradicate a reportable disease such as NAI. The CFIA has a formula that attributes a market value of the bird based on the type and week of production. The lessons learned from the 2004 HPNAI outbreak identified a significant gap in what was paid and the market value of the birds ordered destroyed. A Loss Quantification Model (LQM) developed by Serecon using cost of production data, established industry-average market values by species by week. The LQM enabled industry to quantify the gap in market value compensation for the commercial flocks ordered destroyed. Despite infected farms receiving in excess of \$60 million for birds and other farm inputs such as feed and bedding ordered destroyed under the compensation provisions of the *HoA Act*, there remained an estimated gap exceeding \$18 million.



The identification and quantification of the gap led the federal government to increase the maximum bird values for compensation and revise the formula for calculating market value. The new formula and bird values were first applied in BC for the 2014 NAI discovery. Despite no subsequent industry concern with respect to market value compensation for birds ordered destroyed being raised, the CFIA initiated a review of the current formula following the 2014 HPNAI outbreak.

Personal communication with national feather agencies to date (March 2, 2017) indicate that CFIA continues to press for changes to the formula. The national feather agencies have maintained their position that the compensation must be individualized to each infected premise. The agencies remain positive that the proposed revisions to the CFIA compensation formula will retain most of the provisions of the current formula and will reflect fair market value for birds ordered destroyed.

The poultry industry in Ontario, BC and Quebec has at various times initiated work and are currently examining the opportunity to use financial instruments, such as insurance to address gaps in market value as determined by the difference between the LQM market value and the CFIA payment. With the stated national feather agency position for individualized compensation along with the yet to be finalized revised CFIA formula, it is difficult to assess whether or not a gap in market value exists.

While the gap in market value in 2004 resulted in delays in commencing destruction due to the financial impact to the infected premise owner, subsequent changes to the maximum bird values and formula have virtually eliminated industry concerns regarding market value. Impending changes to the CFIA formula may result in a gap in market value however this will not preclude or adversely impact the ability of the boards and commission to return to a system of orderly marketing.

The *HoA Act* enables the federal minister to exercise discretion in determining whether or not to provide compensation. Past levels of support provided under the *HoA Act* and federal/provincial programming to cover the costs and losses resulting from a NAI discovery are not assured. Notwithstanding the federal minister's ability to exercise discretion with respect to compensation, the need to minimize the risk of spread of a NAI discovery is of paramount concern. It is expected that compensation for market value of birds ordered destroyed will continue.

### **Infected Premise C&D**

When a farm has been declared an infected premise by CFIA, a rigorous cleaning and disinfection process is required in order to reduce the potential for reinfection and spread. Restocking of the infected premise and other premises within the 3 km infected zone cannot be considered or proceed until the infected premise C&D has been completed to CFIA's satisfaction and a 21-day fallow period has passed.

The owner is required to prepare a decontamination plan and carry out the decontamination process. CFIA will provide oversight of the C&D process of the infected premise, including

- Approval of the cleaning process;
- Supervision and approval of the disinfection process; and
- Inspection to affirm that C&D has been completed to the satisfaction of the CFIA.

A description of the C&D process is provided in Attachment 5.

Past experience has identified two key challenges with respect to infected premises C&D. The logistical challenge, particularly when there are multiple infected premises as experienced in 2004 and 2014 is coordinating the initiation and completion of the C&D on the infected premises in as short of time possible. The financial challenge is that the infected premise owners are responsible for the extraordinary cost of C&D. To address the logistical challenge, industry took on the responsibility for planning and coordinating the C&D efforts. The processing sector and the boards and commission collectively assumed financial responsibility for the extraordinary costs in 2004. The financial challenge was addressed in 2014 by the federal and provincial government through the AgriRecovery Program providing up to 90% of the eligible C&D costs. The coordination and financial support minimized to the extent possible delays in allowing the boards and commission to commence the process of re-establishing a system of orderly marketing.

Given the close proximity of poultry operations, a NAI discovery limited to a single index premise in the Fraser Valley would see 30 to 50 farms falling within the 3 km Infected Zone, with resulting restrictions on their ability to produce and restock. Broiler operations on a six week cycle could be precluded from placement and miss the next one or two production cycles. Turkey and longer-cycle broiler operations may miss their next production cycle depending on the timing of their next placement date. Hatching egg and layer operations may have limited impact or may miss a placement and be out of production for over a year, depending on the timing of the next placement date.

### ***Responsibility for the Extraordinary Costs of Infected Premises C&D***

The industry analysis in developing the responsive financial management and compensation system pillar of the risk mitigation strategy identified that failure by industry to address the risk created by the requirement for the producer to assume financial responsibility for C&D would hamper industry return to a system of orderly marketing in as short of time possible following an NAI discovery. The uncertainty with respect to the range of C&D costs and the financial ability of the producer to pay those costs during a time of extreme stress could jeopardize the BC poultry industry's return to a system of orderly marketing.

Under the *HoA Act* producers are not eligible for compensation from the CFIA for the costs of C&D. In 2004, the total cost of C&D for the 53 infected premises was \$3 million or an average of \$71,000 per farm. Coordinated action by processors, boards and commission to organize and finance the C&D of the infected premises was necessitated to ensure the timely completion of C&D activities and enable industry to commence the return to a system of orderly marketing in as short of time possible.

In 2014, the absence of an industry financial program to cover the extraordinary costs of infected premises C&D led to an industry request to the federal and provincial governments to commit financial support under the AgriRecovery Program. Failure to gain such commitment would have led to significant delay in the recovery process. The knowledge and understanding that government would give serious consideration to such support helped to minimize the recovery time to re-establish orderly marketing systems. Without such commitment there was a point during the response in 2014 whereby the estimated cost of C&D threatened to put industry recovery efforts on hold for a further 6 months.

While not used or promoted, it is possible after the completion of the BHT of organic material on an infected premise to leave the material in place under quarantine for a period of 120 days to

eradicate the virus. Restocking would be subject to normal C&D and the placement and testing of sentinel flocks for the presence or lack thereof Influenza virus. Had this approach been implemented the result would have all poultry premises within 3 km of the infected premise held in abeyance from placing flocks and regular testing of existing flocks to enable movement of poultry and poultry products for that full period. This would approach would seriously impact the boards' and commission's ability to return the industry to a system of orderly marketing. As well, CFIA would not be able to attain disease free status from OIE, resulting in export markets remaining closed to the receipt of poultry products from BC.

While the 120 day standstill option was not entertained, it serves to illustrate the impact and effect of not having a responsive policy or program in place to provide producer financial support for the extraordinary cost of infected premises C&D.

Detailed financial information on the 2014 HPNAI outbreak is not publicly available. Based on industry estimates developed in the Lessons Learned process, the 2014 cost of C&D was in the order of \$750,000 to \$1 million for the 13 infected premises with the cost per farm ranging from \$6,000 to in excess of \$300,000. The Canada/British Columbia AgriRecovery Program reimbursed infected premises for up to 90% of eligible C&D costs. The federal and provincial governments have stated to industry that future requests under AgriRecovery would not be considered given the recurring nature of NAI in BC would not fall within the program's stated objectives.

Apart from the British Columbia Turkey Marketing Board's self-insurance contingencies for future disease outbreaks, there are no industry programs in place to address the infected premises' financial burden to cover the extraordinary cost of C&D and enable industry recovery to commence.

To further illustrate how delays in infected premises C&D impact and affect the industry as a whole, when NAI is discovered, the index farm is quarantined and declared by CFIA to be an "infected premise". The CFIA establishes a 3 km "infected zone" around the "infected premise". Any poultry farms within the 3 km zone are subject to testing and movement controls. As well, the poultry farms within the "infected zone" cannot restock until the C&D of the "infected premise" has been approved by CFIA. Thus, the impact of timing of C&D sign-off not only affects the "infected premise" but also poultry farms located within 3 km. While the impact and effect is felt by poultry farms within 3 km of the index premises, in 2014, a total of 50 farms were identified within 1 km of an infected premise with a total of 944,000 birds. Many of the farms were broiler operations who were unable to accommodate their next scheduled placement and had to make alternate placement arrangements.

## **Sound Marketing Policy Considerations**

### ***Need for a Financial Response to a NAI discovery***

The 2004, 2005, 2009 and 2014 NAI discoveries resulted in varying degrees of disruption to the system of orderly marketing of poultry in BC. This experience with NAI over the past decade has shifted industry and government perspectives to accept that it is no longer a case of "if" NAI is discovered, rather it is "when" NAI is discovered, how best to respond.

## Compensation for Market Value

Apart from 2004, the industry has been satisfied with the level of compensation provided by CFIA under the *HoA Act* for birds and products ordered destroyed. While the CFIA review of compensation following the 2014 outbreaks creates uncertainty as to whether or not the *HoA Act* will effectively compensate for birds ordered destroyed it does not impair the ability of the boards and commission from exercising authorities to return the BC poultry industry to a system of orderly marketing. Requiring insurance to cover the gap in market value compensation for birds ordered destroyed does not accord with sound marketing policy.

Notwithstanding the above, the industry and government have been jointly working toward an enhanced, rapid response to provincial detection of NAI. Lessons learned from the 2014 HPNAI outbreak identified the first 24 to 72 hours as a critical control point. The need for CFIA to assemble and mobilize resources from across Canada to respond to an outbreak is a time limiting factor in initiating the response.

The proposed rapid response plan could involve the province using its authorities under the provincial *Animal Health Act* to order the immediate destruction of the flock with or without CFIA confirmation. The industry and the province would then be responsible to initiate the implementation of the order. This action could preclude compensation for market value of birds and costs of eradication under the *HoA Act* particularly if CFIA does not order the destruction.

It has yet to be determined who, industry and/or the province would be responsible for the costs to eradicate the virus and compensate for birds destroyed. The analysis of the financial implications and the benefits of the earlier response is required. One possible option would be to look at insurance mechanisms. The requirement for insurance to cover the market value loss as well as other costs to contain and eradicate the virus could be considered as part of sound marketing policy as it would reduce the time in returning to a system of orderly marketing.

The uncertainty of the outcome of the CFIA review of market value compensation also has implications for advancing the implementation of an enhanced surveillance program in BC. The integrated industry risk mitigation strategy requires having a responsive financial management and compensation system in conjunction with an enhanced, proactive surveillance program.

## Infected Premise Cleaning and Disinfecting

The experience gained from the two HPNAI outbreaks in BC highlight the need for a coordinated and collaborative approach to enhanced C&D of infected premises. The producer is responsible for the costs of C&D activities. There are no provisions in the *HoA Act* to cover C&D costs. The federal and provincial government have stated that they will not consider future requests for funding through AgriRecovery giving the recurring nature of NAI in BC. Currently there are not any other predictable or reliable programs to cover or off-set these extraordinary costs.

The British Columbia Turkey Marketing Board maintains a fund to address the impacts and effects of NAI discoveries on turkey growers in BC. The Egg Farmers of Canada have a Risk Management Fund to provide compensation to Canadian Egg Producers who participate in a reciprocal insurance exchange for *Salmonella enteritidis* (Se) coverage. None of the existing industry funds have been used to support enhanced C&D activities to date.

The failure of the BC poultry industry to have in place a responsive financial management and compensation system to address the extraordinary costs of enhance C&D activities on infected premises can serve to undermine the return to a system of orderly marketing in a timely manner following the response to a NAI discovery. Respecting that individual action or lack of action on an infected premise with respect to C&D can seriously compromise the ability of neighbouring poultry farms (within 3 km) to restock and replace flocks directly impacts the boards and commission to return to a system of orderly marketing. As such, facilitating a responsive financial management and compensation system for C&D on infected premises is in accordance with sound marketing policy.

### ***Options and Tools Available to Address Financial Impacts***

There are a number of existing programs and tools (policy instruments) that are available to the boards and commission and the individual producer that may address some of the financial impacts of a NAI discovery. These options and tools will be described in this section.

### **Further Enhance Mandatory Biosecurity Requirements**

The current BC on-farm biosecurity program serves to minimize the risk of incursion and spread of disease. Nineteen mandatory standards for poultry biosecurity have been in place since 2009. There are currently no Mandatory Biosecurity Standards for C&D of infected premises given that infected premises C&D given the CFIA lead responsibility and requirements.

Biosecurity standards are audited each year and a process of compliance and enforcement is in place for each of the boards and commission. The ultimate penalty for continued non-compliance with the mandatory standards is the revocation of the quota licence.

While the boards and commission require poultry producers to be in compliance with the poultry biosecurity program, biosecurity, in and of itself will not prevent a future NAI discovery. On-farm biosecurity as stated in a recent Avian Influenza Poultry Industry Workshop (October 2016) presentation, can only prevent disease incursion to a certain level. The current BC on-farm biosecurity program serves to minimize the risk of incursion and spread once discovered. At the same conference, CFIA reported in its Case Control Study that they were unable to find a significant difference between similar infected and non-infected premises biosecurity programs that could potentially identify the pathway for AI incursion into the infected premises. Based on the two separate presentations, it is can be concluded that even the best on-farm biosecurity program will not prevent disease incursion. Presentations at the Workshop also pointed to airborne transmission as a realistic pathway for AI incursion into poultry barns.

There are currently no Mandatory Biosecurity Standards for C&D of infected premises given that infected premises C&D is a CFIA requirement. The boards and commission could work with the poultry associations to establish and adopt standard protocols for infected premises C&D. As well as establishing standard protocols, the boards and commission could require licenced producers to have draft protocols prepared and maintained as part of the mandatory biosecurity requirements or as a separate order. While useful from an emergency preparedness perspective and improving the timeliness of response, the protocols do not address the extraordinary cost of infected premise C&D.

## **Board and Commission Contingencies**

The poultry boards and commission have established and maintain contingencies for unexpected and unforeseen events. A description of each board and commission's approach to contingency funding is provided below.

### ***British Columbia Broiler Hatching Egg Commission (BCBHEC)***

The BCBHEC has \$1.2 million in restricted funding set aside for projects and initiatives intended to benefit the sector as whole subject to prior approval by BC FIRB. While dedicating these funds to compensate for C&D of infected premises is an option, the Commission currently has BC FIRB approval to utilize the funds to establish a new office with the BC Chicken Marketing Board.

The BCBHEC has a Reserve for the Unforeseen with a balance at December 31, 2016 of \$624,574. The Reserve for the Unforeseen includes a \$167,000 assigned security to the Canadian Hatching Egg Producers to cover potential future assessments for over allocation production. The Reserve for the Unforeseen was established in 2013 and could be used in the future to provide funding C&D for producers of infected premises.

The BCBHEC has also experienced through the various NAI outbreaks a reduction in levy income resulting from lost production due to the ordered destruction of broiler breeders. The loss in levy income reduces the ability of the BCBHEC to compensate producers for the cost of C&D of infected premises without jeopardizing the on-going operation of the BCBHEC.

### ***British Columbia Chicken Marketing Board (BCCMB)***

The BCCMB has a Restricted Contingency Fund pursuant to the General Orders. By order, the fund will be maintained with a minimum of \$2 million and not exceed one year's operating expense budget. For the fiscal year ending December 31, 2015, the Restricted Contingency Fund balance was \$2,468,808.

The purpose of the Restricted Contingency Fund is to fund expenditures for unforeseen circumstances. While not explicitly stated, the fund may be used to mitigate poultry disease management related costs. As such, the BCCMB could fund future C&D costs of infected broiler premises.

### ***British Columbia Egg Marketing Board (BCEMB)***

The BCEMB has recently created a formal contingency which will be funded over the next few years. Currently, year over year, the BCEMB reports excess revenue over expenses greater than \$1 million which could be used in the event contingencies arise. The BCEMB has in the past increased the producer levy to generate funds for specified purposes, as was the case in 2004 to cover the egg industry share of infected premises C&D costs.

### ***British Columbia Turkey Marketing Board (BCTMB)***

The BCTMB is the only regulated poultry board that has a dedicated fund for "self-insurance". Following the 2004 HPNAI outbreak, the BCTMB put aside budget surpluses to provide a contingency in the event of future turkey disease outbreaks. The BCTMB has dedicated \$750,000 of their Investments to the Internally Restricted Fund for self-insurance.

The Internally Restricted Fund enables the BCTMB to respond to disease outbreaks and their impacts on the industry as well as cover any errors or omissions claims that may occur in on-farm audits.

## Regulatory Authority

Should the poultry boards and commission determine that it is within sound marketing policy to pay for the extraordinary costs of infected premises C&D, are they afforded the authority under the *NPMA* to do so? Section 11 of the *NPMA* lists the enabling powers and duties that can be applied to the boards and commission. With respect to paying for C&D costs, the *NPMA* enables the use of retained levy proceeds “to pay costs and losses incurred in marketing a regulated product”<sup>2</sup>. The individual marketing schemes contain specific references to the powers and duties included or excluded from the scheme and in the case of the British Columbia Chicken Marketing Scheme and British Columbia Turkey Marketing Scheme the above *NPMA* provision is excluded whereas it is included in the British Columbia Broiler Hatching Egg and the British Columbia Egg Marketing Schemes.

Legal opinions provided to the BCTMB and BCCMB differ in their interpretation of the authority. Opinion provided to the BCTMB (November 2011) flagged that *NPMA* section 11 (1) (o) (iii) was not vested in the BCTMB and the power “cannot be subsumed with any of the other subparagraph”. The opinion provided to the BCCMB (April 2013) focuses on the ability of the BCCMB to be enabled to increase levies for the purpose of purchasing insurance to cover growers’ costs in the event of an avian influenza outbreak. The opinion expressed indicated that the Board has the authority, but does not refer to the authority to “pay costs and losses incurred”.

The lack of explicit authority in the marketing schemes for chicken and turkey that enable the boards to use retained levy proceeds “to pay costs and losses incurred in marketing a regulated product” presents a risk of challenge to the two boards ability to respond financially to address the extraordinary costs of infected premise C&D. While the risk of challenge is considered low, the risk of successful challenge is high and amending the schemes to include the authority already enabled by the *NPMA* should be pursued.

The lack of express authority not only affects whether a board may or may not pay the costs of infected premise C&D within the scheme, it may also affect the ability of the boards and commission to share the costs of enhanced C&D of infected premises on an industry-wide basis. Sharing the costs would serve the collective interests of the industry as a whole by reducing the burden of cost on the individual producer and expediting the return to a system of orderly marketing.

Boards and commission in determining the amount of levy necessary to build the fund must also weigh the impact and effect of such a levy on the ability of producers to absorb the costs and any impact and effect on the price of product to the consumer.

## Quota Credits and Quota Leasing

Some, but not all of the boards and commission have policies to lease or to provide credits for quota not placed.

The BCCMB, BCCEM and BCTMB have quota leasing policies within their general orders that can be applied to enable producers to lease their quota if they are unable to place their flocks due to a NAI discovery. The BCBHEC has a permissible lease policy however it limits the lease to 10% of the placement allocation which renders the policy ineffective to address a NAI

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<sup>2</sup> *NPMA* section 11 (1) (o) (iii).

discovery. While quota leasing can minimize the impact on orderly marketing by enabling the placement of the allocation to occur as scheduled and off-set future income loss, it does not address the costs of infected premises C&D.

The BCEMB is the only board that has a quota credit policy that enables the producer to produce the allocation at a later date. As with quota leasing policies, quota credits serve to minimize the impact of the inability to restock and off-set future income loss, however the policy has limited ability to address costs of infected premise C&D. The policy does not cover insurable losses.

## Existing Government Programs

### *AgriRecovery*

The poultry industry has been able to access the federal-provincial AgriRecovery Program for two NAI events (2009 and 2014). For the 2014 HPNAI outbreak, AgriRecovery provided approximately \$750,000, covering up to 90 percent of the eligible costs of cleaning and disinfection of infected premises. The federal and provincial governments have publicly stated that an industry request for assistance under the federal/provincial AgriRecovery program for future NAI discoveries would not be entertained. While the policy objective for AgriRecovery is to provide financial assistance for the extraordinary costs necessary for recovery, the program is not intended to cover recurring events.

### *AgriStability*

The Canada-British Columbia AgriStability Program helps stabilize farm income by managing the risk of large income declines and is available to poultry producers in British Columbia. A disease outbreak can trigger coverage provided that the current year gross margin falls below 30 per cent of their historic reference margin. Payments received from CFIA for the birds ordered destroyed are included as farm income in determining the current year margin. Not all of the additional costs of C&D of infected premises may be considered allowable expenses (agricultural contract work and non-arm's length salaries, machinery lease/rental). Depending on when in the production cycle and fiscal year that the loss is incurred affects the resulting compensation paid under the Program.

Producer experience with the Program through previous outbreaks has been mixed, with some receiving support and others receiving no support despite being out of production for up to two years. While the Program offers support, the lack of predictability limits the value of the Program in providing an effective response to NAI.

### *AgriInsurance*

British Columbia provides insurance coverage to protect producers against severe market volatility and weather-related disasters through a Livestock Price Insurance for cattle and hogs and Production Insurance for crops. The Province does not offer insurance programs for poultry.

### *AgriInvest*

Agri-Invest enables farmers to make annual deposits that are matched by government to support investments to mitigate risks or improve market income. As AgriInvest contributions are based on non-supply managed farm income, the program has no value to the poultry industry in responding to a NAI discovery.



## **AgriRisk**

While the federal and provincial governments cost-shared programs provide tools for business risk management, the analysis indicates that the existing suite of federal/provincial risk management programs cannot fully address the extraordinary cost of infected premise C&D in a predictable manner. Given the stated position of the federal and provincial governments with respect to AgriRecovery no longer being available to the BC poultry industry, there is a general expectation that the industry would examine private sector risk management tools to address the need for a program to address the extraordinary cost of infected premise C&D.

The AgriRisk Initiative provides funding to support research and development related to the development of new risk management tools and to support pilot administrations during the early years of delivering new risk management tools. The BC Poultry Association continues to build on its prior work on an insurance based approach through funding support under the federal AgriRisk Program.

## **Conclusions**

While a number of programs and policy tools exist for the boards, commission and industry to use in response to a NAI discovery, there is a lack of a specific dedicated program or system of support for the extraordinary costs of infected premise C&D following a NAI discovery. The existing programs and policy tools are limited in their ability to comprehensively address the variable range of C&D costs which are dependent on the type, size and structure of the operation. The degree to which the owner is willing to accept the financial responsibility to pay those costs during a time of extreme stress brings into jeopardy the BC poultry industry's return to a system of orderly marketing.

In 2004 and 2014, the costs to the individual infected premise owner for C&D were virtually eliminated. The poultry processors, boards and commission covered the \$3 million in extraordinary costs in 2004. The federal and provincial governments covered up to 90% of the eligible extraordinary costs of infected premises in 2014 through the AgriRecovery program. The financial support provided helped to minimize the recovery time to re-establish orderly marketing systems. Without such commitment there was a point during the response in 2014 whereby the estimated cost of C&D threatened to put industry recovery efforts on hold for a further 6 months.

The federal and provincial governments have publicly stated that the BC poultry industry would not be eligible for future compensation for the extraordinary costs incurred for enhanced C&D of infected premises under the federal/provincial AgriRecovery Program. The stated government position shifts the burden to industry to have in place financial measures to cover the extraordinary costs of C&D.

The lack of a financial support for infected premises puts in jeopardy the boards' and commission's ability to enable the timely recovery of the industry from a NAI discovery and the resumption of a system of orderly marketing. The inaction by one infected premise on C&D can lead to delayed repopulation by other poultry farms and full resumption of commerce by the entire BC poultry value chain as it will be left to the individual producer to cover the full cost of infected premise C&D.

Quota leasing and quota credit policies vary between boards and are not applicable in addressing the extraordinary costs of infected premise C&D. These policies accord with sound marketing policy and can serve to off-set the financial impact of delays in ability to restock following a NAI outbreak.

Industry concerns with respect to gaps in the market value compensation for birds ordered destroyed have not manifest since the changes to the maximum bird values were made by the federal government in 2011. The market value compensation for birds ordered destroyed have limited to nil effect on the boards' and commission's ability to return the industry to a system of orderly marketing following a NAI discovery. Unless changes to the Notifiable Avian Influenza Hazard Specific Plan are made or the BC government and poultry industry agree on revised response protocols to a NAI discovery in BC whereby control action would be initiated under provincial authority, mandatory insurance requirements for market value compensation does not accord with sound marketing policy.

*Natural Products Marketing (BC) Act*  
Mandatory Notifiable Avian Influenza Insurance Review

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*Notice to Producers*  
*February 2016*



## Mandatory Notifiable Avian Influenza Insurance Review

In response to industry requests to provide legal clarity around the authority of boards and commissions established under the *Natural Products Marketing (BC) Act (NPMA)* regarding mandatory disease requirements and given the impact and effects of the 2014/15 Highly Pathogenic Avian Influenza (HPNAI) outbreak, the BC Ministry of Agriculture amended the *NPMA* during the Spring 2015 Legislative Session. The poultry boards and commission are now enabled to consider establishing disease insurance requirements as part of the scheme by way of amendment to their General/Consolidated Orders.

BC FIRB has stated that the boards and commission must “determine in the first instance, through a demonstrated SAFETI based approach – the information they require to make decisions that are in compliance with their scheme and in accord with sound marketing policy”. BC FIRB indicated that prior approval would be required if a board or commission were to want to establish mandatory disease insurance requirements.

The Ministry of Agriculture considers that Notifiable Avian Influenza (NAI) discovery has shifted from being an “if” to a “when” occurrence and should be looked at from the perspective of “how to build the response into industry practice”. There is an expectation that the boards and commission would actively consider establishing mandatory disease insurance requirements. The Ministry also indicated that the ability to access AgriRecovery for a subsequent NAI outbreak was not guaranteed, given its objective to cover exceptional events not previously covered by the program.

During the fall of 2015, each of the four feather boards independently determined the need to make a decision on whether or not to proceed with pursuing the implementation of mandatory disease insurance. In November 2015, the four boards met to discuss the matter and determined there to be value in working collectively and collaboratively to address the question of mandatory disease insurance. A Work Plan has been developed (available on the website) outlining the information to be gathered as well as the key questions to be answered as part of the review.

The boards and commission have established a Steering Committee to oversee the work. The committee members include:

- Broiler Hatching Egg Commission – Allan Cross and Stephanie Nelson
- Chicken – Greg Gauthier and Bill Vanderspek
- Eggs – Aryn Alibhai and Dwight Yochim
- Turkey – Michel Benoit
- BC Poultry Association – Ravi Bathe and Garnet Etsell

Greg Gauthier will Chair the Steering Committee; Christine Rickson, BC Chicken Marketing Board is the Committee Secretary; and Michel Benoit, BC Turkey Marketing Board will engage consultants to conduct the work and coordinate with the BC Poultry Association on behalf of the boards and commission.

The boards and commission have agreed to engage Harvey Sasaki, Agri-Saki Consulting Inc. to manage the implementation of the work plan and complete the work in key phases under the direction of the Steering Committee, including the preparation of the submission to BC FIRB.

Information and reports on each phase of the work plan activities will be posted to each of the board's and commission's website as they are completed.

If you have any questions or comments regarding the work plan, please direct them to Harvey Sasaki @ [harveysasaki@gmail.com](mailto:harveysasaki@gmail.com).

February 1, 2016

# *Natural Products Marketing (BC) Act* *Mandatory Notifiable Avian Influenza Insurance Review*

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*Notice to Producers*

*Update*

*November 2016*





## Mandatory Notifiable Avian Influenza Insurance Review Update

Following the February 2016 announcement of the Review, work was initiated on determining the expected losses that could result from a Notifiable Avian Influenza (NAI) discovery. Serecon has updated the Loss Quantification Models (LQM) for each sector and is currently awaiting the results of the Canadian Food Inspection Agency's (CFIA) revised compensation formulas. Serecon reported that CFIA presented the revised compensation formulas to the national feather boards in August. The revised formulas are expected to result in a "market value" gap. The full extent of the expected loss of a NAI discovery cannot be established until such time as the CFIA's formulas have been confirmed.

The Review has been stalled as a result of the delays in the completion of the LQM work due to CFIA not having finalized its compensation formulas. The Mandatory Insurance Steering Committee (MISC) met on October 19, 2016 to consider its options based on this delay. The MISC was of the view to narrow the focus to mandatory insurance for Cleaning and Disinfecting only, rather than compensation for grower losses. The group should continue to work towards fair and reasonable compensation from CFIA, but not make it part of the mandatory insurance review.

The Mandatory Insurance Review Work Plan has subsequently been revised and posted to the boards and commission websites for information. As reflected in the Work Plan, the timelines for information have been revised and it is expected that the first report will be posted to the websites for your review and feedback on December 23, 2016 with subsequent reports posted by the end of January 2017.

If you have any questions or comments regarding the work plan, please direct them to Harvey Sasaki @ [harveysasaki@gmail.com](mailto:harveysasaki@gmail.com).

## Attachment 2 Input Received

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FIVE-FRY FARMS LTD.  
50285 CAMP RIVER ROAD  
CHILLIWACK, BC V2P 6H4  
PHONE: 604-794-7741

March 28, 2016

Mr. Harvey Sasaki

Re: Mandatory AI Insurance

I am in agreement with establishing an mandatory AI insurance, but would like the committee to consider the following issues:

1. It is important that BC Insurance be a complement to CFIA compensation and AgriStability, not a replacement. As long as CFIA provides payment to outbreaks in other provinces, BC should not be adding to its cost of production by paying for insurance that simply reduces CFIA payments to growers. BC producers already face a higher cost of production which is not reflected in the price received by the farmer.
2. In past, insurance looked at paying the producer that was depopulated. CFIA may already be paying this grower. It is the grower that is within the control zone of the infected premise that is harmed, and he has no control over how long depopulation takes. Therefore insurance should assist this farmer, or in some way mitigate his loss.
3. Also, insurance should not let the marketing boards off the hook from mitigating the losses. I have already seen this by the BCEMB with SE insurance. They test a farm and if they get a positive result, they do not do a second confirmation test, they simply depopulate and say "Don't worry, insurance will cover you". Firstly, they should do a confirmation test since there may have been an error. Secondly, they could mitigate the loss by redirecting these eggs to the breakers and redirecting other eggs that would usually go to the breakers to the table market.

Here is how I see some mitigation, and I think the marketing boards need to be a part of the solution:

Since an AI positive farm would most likely limit chicken exports, the board could allow producers who are inside the control zone lease 100% of their quota to producers outside the control zone, whose export quota would have been cut. This will allow processors to get the product they need to service their customers, that they do not want to lose. Not producing is not the answer. The same can be done for turkey farmers



The BCEMB could reduce one of the most significant costs a depopulated farm faces. This is the marketing board levy. The majority of the levy goes to a fund that offsets the difference between the price the farmer receives for eggs and the price breakers pay for industrial product. If a farm is depopulated, the Board would not be on the hook for this large differential as either fewer eggs would go to the breaker or eggs would be imported. Since the world price is usually lower than the price paid to by graders and breakers, the Board could end up making money. Why should BC insurance fill CEMA's pockets.

If a breeder producer is depopulated, eggs will have to be imported to meet the chick requirement of broiler producers. Why shouldn't the difference between the world price of these eggs and the price normally paid by hatcheries be utilized to reduce the loss to the farmer.

4. One of the most significant concerns as a producer is the fact that either a producer or a non-registered flock is infected and the cleanup drags on, because of lack of funds or the fact that they received insurance money and there is no need to expedite the cleanup process.

My recommendation:

a) Producers should be required to carry enough insurance to pay for cleanup or post a bond high enough to cover cleanup costs. In addition, they should be required to sign a document authorizing the BC Cleanup Crew to enter their premises and cleanup the site at the producer's cost, less CFIA compensation. The insurance policy should cover all BC Cleanup Crew costs, without deductibility, thereby encouraging producers to choose the insurance option versus a bond.

b) Loss of earnings insurance should be voluntary. Currently as a producer, I may be compensated by CFIA, may have obtained private insurance, may have opted to participate in AgriStability or may have decided to take a risk. I am not going to be upset that my neighbour lost his farm because he failed to carry insurance, whether it be for fire, theft, earthquake or AI. As an industry we are not making these types of insurance mandatory. However, I suspect that the banks may make it a financing requirement.

c) The "Insurance Company" should have a BC Cleanup Crew ready to go with all the necessary equipment and supplies. If I was in the insurance business I would want to reduce my payout by having all the loss mitigation equipment and crew ready to go. This crew would also be available to cleanup non-registered producer sites and possibly be compensated by CFIA.

d) Loss of earnings should be available to all farmers within the infected zone. This could be a separate policy, and the cost reduced by providing the reinsurer with steps the marketing board would take to reduce losses.

I think my recommended approach is palatable to both producers for and against mandatory insurance. With Board loss mitigation in place, the cost of this insurance could be quite reasonable.

It is difficult in a letter to articulate my concerns clearly for all readers, it is impossible to anticipate all questions which may arise and without discussion, understand why my recommendations may not be practical. In this regard, I would be happy to meet with the either the steering committee or yourself informally to discuss my concerns.

Yours truly,

*Art Friesen*

Art Friesen  
Egg Producer  
Broiler Producer

## Attachment 3 Industry Risks of a NAI Discovery

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Reports of sporadic avian influenza outbreaks involving domestic poultry date back to the 1960s. With the exception of the 1966 detection in a turkey breeding operation in Ontario, there were no cases of HPNAI in Canada until 2004. The poultry industry and government were aware of the risk of an incursion of HPNAI, and despite the existence of the Canada-British Columbia Foreign Animal Disease Emergency Support (FADES) Plan, the 2004 HPNAI outbreak became the highest cost poultry emergency response in history.

The 2004 outbreak response and recovery process highlighted the need to better understand the risks facing the sector as well as how to best manage the risks. Serecon Management Consulting Inc. was retained by the BC poultry industry to undertake a risk analysis of the BC poultry industry. In the January 22, 2007 Interim Report, Serecon provided a table (Table A-3, Appendix A) to summarize the seventeen major risk factors facing the BC poultry industry.

• Concentration of the industry*	• Manure Management*
• The mixing of poultry species	• The degree of business intensity*
• Compensation issues*	• Lack of a proactive surveillance system*
• Multi-age, and long life poultry management	• Disposal risk*
• Cease movement risk	• Market risk*
• Degree of economic integration	• Unregulated sale of eggs
• Non-regulated poultry management practices	• Loss of processing capacity
• Lack of government-industry cooperation	• Limitation of biosecurity program*
• Migratory and wild bird populations	•

\* Denotes risk factors that RASC identified as most important.

Through the integrated Risk Mitigation Strategy, the BC poultry industry working with government agencies have developed measures to address most if not all of the seventeen risk factors identified by Serecon to varying degrees. A description of the response measures is provided below.

***Concentration of the industry, in particular, the degree to which buildings and premises are in proximity to each other*** – The primary risk is the spread of disease once introduced. Studies have shown (as reported in the January 2007 Serecon Interim Report) that the risk of infection is the same irrespective of the degree of concentration or density of production, but once introduced, the degree of concentration and density dramatically increase the risk of spread. Developing and implementing strategies and measures that control the spread of the disease once found is critical in minimizing the risk of spread.

The industry today is more aware and mindful of the implications of industry concentration. It is unreasonable to expect a dramatic shift in the concentration of poultry farms in the Fraser Valley given their close proximity to processing facilities. The concentration of farms and processors in the Lower Mainland/Fraser Valley region is critical in maintaining the competitiveness of the BC

industry, particularly the processing sector. A major shift of any significant amount of poultry production to areas outside the Fraser Valley will increase transportation costs that could jeopardize the continued viability of BC processing operations.

Notwithstanding the competitive pressures, the industry has taken measures to address the issue of concentration by relocating operations away from the core areas in Abbotsford and Chilliwack. Examples include new egg barn construction north of the Fraser River, increased broiler production in the interior region and moving poultry breeding operations out of the Fraser Valley. Siting of buildings and location of barn intakes and the use of vegetative screening are given greater consideration in the new construction or retrofitting of existing facilities.

During the 2014 HPNAI outbreak, it was noted that one infected premise that was down wind of other infected premises had ventilation fans located on the north side of the barns and were not protected by any nearby vegetation. The neighbouring farm was not infected despite being located less than 500 metres away; the barns ventilation fans were located on the south side with a vegetative screen of trees.

***Manure Management: the storage, removal and disposal of manure in ways that contribute to disease spread*** – The primary risk is disease spread. Influenza A virus survives on organic matter and can become a source of infection if transferred. Developing and implementing strategies and measures that control the spread of the disease is critical in minimizing the risk of spread. Standard operating procedures have been established including biological heat treatment of birds and organic matter on “infected premises” to reduce the risk of spread.

The industry has adopted management practices that include composting which generate temperatures above which the Influenza virus cannot survive and proper storage for an appropriate duration (120 days) prior to movement to minimize the risk of disease spread. The Sustainable Poultry Farming Group developed and communicated these and other approaches to managing poultry manure in the Fraser Valley to further reduce the risk of disease spread.

***The mixing of poultry species, either within one farm premise, and/or in close proximity to other premises*** – The primary risk is the susceptibility to infection, particularly if the mix includes waterfowl which are known hosts of avian influenza. Greater awareness and understanding of how the disease can be introduced and lead to infection are important to limiting the introduction of disease risk.

There are a number of poultry farms that operate different types of poultry operations. Greater care in separation and segregation of facilities has been taken as well as improved biosecurity practices. Mixing of species is more common in non-regulated farms where the operator may have layers, broilers, turkeys, ducks and geese on the same farm but in small numbers. The Ministry of Agriculture and CFIA have been working at increasing awareness and education of both regulated and non-regulated sectors on the risks of multi-species of poultry on a single farm.

***The degree of business intensity, reflecting the frequency of any and all business activities that involve movement onto and off the premise, inclusive of all supply and service functions*** – The primary risk is disease transfer. The ability to limit movement onto and off of infected premises or premises within close proximity to infected premises are critical to minimizing the risk of spread. The disease control provisions of the *HoA Act* and CFIA

policies and protocols for disease control provide the primary mechanism to minimize the spread risk. Emergency response has well established standard operating procedures and permitting requirements during an outbreak to address the movement onto and off of premises within the “infected zone”.

The adoption and maintenance of mandatory on-farm biosecurity requirements serve to further mitigate the risk. Industry-wide (full value-chain) adoption and adherence to biosecurity protocols are important in minimizing risk. Following the 2014 HPNAI outbreak, the industry adopted a green/amber/red systems approach to enhanced biosecurity during times of high risk exposure to NAI.

**Compensation issues, that if not resolved, restrict the movement towards a proactive surveillance system** – The primary risks are undetected disease incursion, risk of spread and delayed/extended recovery risk. There are two main components to compensation; firstly compensation under the *HoA Act* for birds ordered destroyed and costs to contain and eradicate the virus; secondly the costs of enhanced cleaning and disinfection (C&D) required on infected premises that are borne by the producer.

One of the major takeaway messages from the 2004 HPNAI outbreak was the need to update the *HoA Act* maximum bird compensation schedules to reflect the “market value” of birds ordered destroyed to encourage producer cooperation and submission of samples for testing.

Early detection, rapid containment and eradication are critical in reducing the risk of spread once the disease has been discovered. Debating and negotiating the “market value” of birds at a time when decisions and actions to eradicate the disease are required only serve to increase the risk. The federal government post 2004 HPNAI did amend the *HoA Act* maximum bird compensation schedules and in 2011 revised the compensation formulas for the different types of poultry operations. As a result of the 2014 HPNAI outbreak, the CFIA initiated a review of the compensation formula which is still in progress.

The lack of a clearly defined and easily understood compensation formula that enables the producer to know what is to be expected as compensation for birds ordered destroyed creates uncertainty in the industry and increases risk. The experience gained through the series of NAI discoveries in Canada should be used to “formalize” an agreed upon approach to compensation.

The second element cost of enhanced C&D has been shared in the past by processors and producers (2004); government and producers (2005, 2009 and 2014). The Government has provided assistance through programs such as AgriStability and AgriRecovery. Providing greater certainty with respect to compensation to cover the cost of enhanced C&D through insurance based approaches have been and continue to be explored by industry.

***Lack of proactive surveillance system*** – The primary risk is disease introduction. The current surveillance programs are not proactively testing poultry flocks. The Canadian Notifiable Avian Influenza Surveillance System (CANAISS) tests to demonstrate the absence of NAI to maintain “disease free” status with the OIE. The wild bird surveillance program monitors wild bird submissions for the presence of avian influenza. The Ministry of Agriculture is developing a sampling protocol to further enhance detection of the presence of influenza virus in the environment in close proximity to poultry production.

Following the 2004 and 2005 outbreaks, the Ministry of Agriculture’s Animal Health Diagnostic Laboratory saw a dramatic decrease in the number of poultry samples for testing. Sample submissions remain at 40 percent of pre-2004 levels. Extension efforts by the Ministry of Agriculture to provide growers with information on clinical signs of possible presence of influenza virus in flocks continue.

A strategy was developed following the 2014 HPNAI outbreak included the need to explore the development and establishment of a proactive surveillance system. Industry and the province are developing a surveillance strategy.

***Multi-age and long life poultry management versus all-in, all-out production practices*** –

The primary risk is disease introduction. The ability of the influenza virus to mutate and transform from low pathogenicity (LPNAI) to highly pathogenic is the underpinning of the risk. All-in, all-out production practices enable producers to C&D facilities prior to their next flock placement. The multi-age, long-life poultry operations create an environment that enables the virus to go potentially undetected over extended timeframes.

Strict adherence to biosecurity protocols in managing multi-age and long life flocks is a critical first step in reducing risk. Monitoring flocks and production as indicators of poultry health is also important to early detection.

***Disposal risk of depopulated, diseased birds either in peace time, or within an outbreak*** –

The primary risk is disease spread. Lessons learned from the 2004 HPNAI outbreak led to the acceptance of in-barn BHT as the primary protocol for virus destruction. Only after the BHT process has achieved the desired duration of optimum temperatures for virus destruction can disposal of the material from the farm take place.

During the 2014 HPNAI response, BHT was the standard protocol used for all infected premises. Improvements in the preparation and timeliness of initiation of BHT are important in further minimizing the risk of disease transfer in the future. As well, protocols to deal with large volumes of eggs on infected premises must be established.

***Cease movement risk, the economic costs associated by producers within the control zone during a lock down period*** –

The primary risk is disease spread. This risk is similar in nature to the “degree of business intensity” addressed earlier. The emergency preparedness and response protocols adopted by the BC poultry industry have established cease movement requirements immediately following the receipt of notification of a NAI discovery.

The economic impact and loss sustained by producers within the control zone with the current cease movement protocols are minimized relative to the expansion of zones of infection and control zones in the event of uncontrolled spread of the virus. The lack of effective protocols in 2004 contributed to the spread of the virus (53 infected premises and 16.2 million birds depopulated). The immediate adoption of the protocols in 2014 served to minimize the risk of spread (13 infected premises and 240,000 birds depopulated).

***Market risk, particularly as related to the potential loss of consumer confidence due to continued disease outbreaks or temporary lockdowns within a surveillance program, and loss of export markets for poultry products*** – The primary risk is recovery from the outbreak. NAI is a reportable disease and as a result of reporting a discovery to the OIE leads to immediate responses from other countries, including the closing of borders to the importation of poultry products from Canada, including product in transit prior to the detection.

Maintaining a high public profile using respected animal and public health based government scientists with clear and consistent messaging has been important in maintaining public confidence in both industry and safe handling procedures for poultry products. Minimizing the duration of the declaration of “virus-free” status is important to the processing and further processing sector to resume international trade. The processing and further processing sector has reduced their reliance on BC only production through established processing facilities in other provinces to further minimize the risk of loss of important domestic and international clients and markets.

Federal government initiatives to gain trading partners acceptance of the practice to allow trade to continue from non-infected areas of a country through the establishment of individual quarantines and the Avian Influenza Control Zone has been established with the United States. Further work to secure other countries recognition and acceptance of the use of control zones to enable continued trade remains a high priority.

***Degree of economic integration or networking between premises due to ownership or supply chain linkages*** – The primary risks are disease spread and recovery. The CFIA’s disease control and response policy includes a traceability component. This involves tracing back and tracing forward the movement of poultry as well as examining all operations and facilities held by the owner of the infected premise irrespective of location of the facilities.

The extent of vertical and horizontal supply chain and ownership integration in the BC poultry industry results in an inherent risk in terms of the span of the “control zone” for a confirmed NAI detection. The CFIA’s declaration of “infected premise” included all production facilities held by the owner of the index farm. Subsequent positive confirmations at other locations result in new 3 km infected areas in which testing and movement controls are required. The greater number of infected premises results in a longer duration of the control response and recovery process.

Board and commission policies that limit the total quota held by a “person” can mitigate the risk to a degree. Ensuring biosecurity protocols are implemented and adhered to is also important in managing the risk.

***Unregulated sale of eggs and other products outside of grading or marketing system –***

The primary risks are disease introduction and spread. The regulated marketing system provides the advantage of having a high quality premise identification system in place to plan emergency responses. The existence of unregistered small flock owners require increased resources in managing an outbreak to identify and manage.

The continued outreach and extension efforts by CFIA and the Ministry of Agriculture to small flock owners to educate them on the importance of maintaining poultry health, good management practices and reporting of diseased animals is important in managing this risk. In 2014, two non-commercial farms were primary infection premises, meaning that the infection was not the result of disease transmission or spread from an existing infected premise. The events of 2014 serve to highlight the importance of continued outreach initiatives beyond the regulated sectors.

***Non-regulated poultry management practices –*** The primary risks are disease introduction, spread and recovery. The issues and approaches to mitigation pertaining to this risk are very similar to those for the previous risk, “Unregulated sale of eggs”.

***Loss of processing capacity, the potential to see major processors diversify geographically, if disease outbreaks continue in BC –*** The primary risk relates to industry recovery. Retaining processing infrastructure is critical to the return to a system of orderly marketing in BC. Loss of processing capacity can directly affect the ability to produce provincial quota allocation.

Following the 2004/05 outbreaks, BC chicken processors and further processors initiated plans to establish or acquire operations in other provinces in order to minimize the risk of market loss during a NAI event in BC. Initiating surveillance programs intended to proactively discover NAI must be carefully planned. Measures to manage the market consequences of such discoveries must be addressed with the full engagement of all parties in the poultry value chains.

***Lack of government – industry cooperation, the degree to which there are conflicts between different industry segments and between industry and government on surveillance, compensation, and other issues –*** The primary risk is industry recovery. The BC Poultry Association came into existence following the 2004 HPNAI outbreak to provide a united voice for poultry producers in BC and to lead the regulated poultry associations on common issues that strengthen and improve the well-being of BC poultry farmers.

The BCPA took the lead in working with government to establish the BC Poultry Biosecurity Reference Guide. The BCPA has been directly involved in working with associations, boards, commission and government in the development of a responsive financial management and compensation system. The BCPA biosecurity and surveillance committee has actively worked with government in reviewing and revising biosecurity measures and developing an enhanced surveillance system. All initiatives require unanimous consent by the four regulated poultry associations.



Following the 2014 HPNAI response, industry and government agreed to a multi-faceted strategy to further improve preparedness, mitigation and response to future NAI discoveries. The current environment fosters collaboration between industry and government, however, as has been experienced in the past, lack of continuity of key personnel and staff turnover, have left industry in the position of having the most experienced staff in responding to NAI's. It is important for all parties to have an effective succession plan in place to minimize the disruption that can result in bringing new personnel to the table.

***Limitations of biosecurity program in not extending to all sectors in the poultry industry***

– The primary risks are disease introduction and spread. Despite the mandatory biosecurity requirements for the regulated sector, the inability to extend the requirements to all sectors and allied trades contributes to risk exposure for the sector as a whole.

The BCPA has worked with the allied trades to develop and implement biosecurity measures on a voluntary basis. The allied trades have cooperated and have adopted biosecurity protocols, however there are no audits of the allied trades performance. As well, the BC Investment Agriculture Foundation has sponsored work with the non-regulated sector in developing practical, easy to use biosecurity guides. The Ministry of Agriculture and CFIA continue outreach initiatives to improve awareness, understanding and adoption of best management practices relating to biosecurity in the non-commercial sector.

***Migratory and wild bird populations*** – The primary risk is disease introduction. Migratory and not migratory waterfowl are carriers of avian influenza virus. The 2014 HPNAI was linked to confirmed strains found in wild migratory waterfowl. There is limited ability for industry to control this risk factor, however, diagnostic techniques and wild bird surveillance can support industry measures to attempt to guard against this risk.

The use of wild bird surveillance results and diagnostic indicators of presence of NAI in the surrounding environment can and does support industry decisions to increase or decrease enhanced biosecurity requirements. A three stage, green, amber and red system for enhanced biosecurity has been adopted by the regulated poultry sector in BC in an effort to reduce the risk of incursion.

## Attachment 4

# Risk Mitigation Strategy

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The Risk Mitigation Strategy developed by the BC poultry industry has four integrated components described below. Each component is dependent and supported by the other three components.

### Emergency Preparedness and Response

In addition to the recommendations contained in the Serecon Risk Analysis, the BC Poultry Association has put in place an emergency response plan that mirrors the federal/provincial Joint Emergency Operations Centre (JEOC) utilizing an Incident Command System (ICS) approach. Industry has received training in ICS and continually updates the emergency response plan based on reviews of recent events. The BC system has received national recognition in the most recent, federal/provincial/territorial Emergency Management Framework for Agriculture in Canada. The industry decision to self-impose movement controls of poultry and poultry products upon notification of the discovery significantly reduced the risk of spread.

Based on the 2014 HPNAI outbreak, the industry and government are examining options for including industry in the JEOC to combine resources and improve the overall effectiveness of the response to future discoveries as well as measures to reduce the time to destroy the infected flocks on the initial infected premise to reduce the risk of further spread.

### Mandatory Biosecurity

Serecon recommended the “BC poultry industry develop a universal biosecurity program which encompasses the full value chain of the sector”. The industry working with federal, provincial and industry technical experts developed the BC Poultry Biosecurity Reference Guide outlining meaningful standards to minimize the risk of introduction and spread of poultry diseases.

While implementation of biosecurity practices commenced with the completion of the manual, the full effect of the biosecurity measures were not realized until they became a fundamental and on-going requirement for all registered producers in the regulated poultry industries in 2010. The boards, commission and industry associations agreed to the mandatory requirements despite various views regarding whether or not the boards and commission had the legislative authority to make the requirements mandatory. Amendments to the *NPMA* in May 2015, made explicit the boards and commission’s authority to require implementation and compliance with the established poultry biosecurity program.

### Active Surveillance

Serecon recommended “as a mechanism for early detection and to reduce the intensity of animal disease outbreaks, the industry establish an on-going active surveillance program, inclusive of all production sectors, and supported by a compensation system that compensates industry for their economic losses and recovery costs in the event of detection and business disruption/closure.” The industry, working with CFIA and the province continues to participate in the CANAISS which is intended to maintain Canada’s NAI-free status with the OIE. The prevalence testing regime of the CANAISS is not considered to be an active surveillance program, i.e. it is not looking for NAI rather it is confirming the lack of presence of the virus.

Since the 2014 HPNAI outbreak the industry has been working with the Ministry of Agriculture to develop, design and test an efficient and affordable active surveillance program. The full implementation of active surveillance however is linked to there being an effective funding mechanism to facilitate recovery from a NAI discovery.

### Responsive Financial Management and Compensation System

Serecon recommended “the industry and government develop, and implement an integrated financial management and compensation program. “The Shared Risk Management System”, that provides funding mechanisms for recovery from disaster, self-insurance, government supported production insurance, private insurance, and compensation that substantively protects the industry from the significant perils it will face due to disease risks, and which will serve to sustain and grow the industry.”

Since 2009, the industry has worked diligently to identify the costs associated with a NAI discovery and engage industry in the development of an insurance based approach to mitigating the costs and losses to individual producers that are not compensated under the federal *Health of Animals Act*.

The BC FIRB initiated a Supervisory Review of Mandatory Poultry Disease Insurance in June 2013 to assess the extent to which the industry’s proposed insurance program fell within sound marketing policy and within the legislated authorities of the regulated poultry boards and commission. Notwithstanding the considerable work undertaken by the poultry industry in developing an insurance product, the Supervisory Review concluded that the authority was lacking within the *NPMA* to enable the regulated poultry boards and commission to require registered producers to maintain disease insurance and that it was not entirely clear that mandatory disease insurance fit within the parameters of sound marketing policy.

The most recent, 2014 HPNAI outbreak reinforced the need for having a sound financial response in place. The provincial government supported a federal/provincial AgriRecovery Program response to provide the financial resources to cover the extraordinary cleaning and disinfection costs incurred by infected premises. Both federal and provincial governments have since publicly stated that the AgriRecovery Program will not be available for future outbreaks as the AgriRecovery Program is not intended to cover reoccurring risks events.

## Attachment 5

### Cleaning and Disinfection Process

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Avian Influenza virus is shed by infected animals and can survive for extended periods of time under cool temperatures in organic material such as manure and watering systems. While the process for C&D is similar for all infected premises, the specific requirements and needs must be tailored to address the disease risks and issues specific to each premise. C&D of infected premises normally involves the following six steps:

1. Removal of contaminated materials and products not suitable for cleaning and disinfection and their proper disposal.
2. Dry cleaning of surfaces to remove gross organic material. It is the most important step in the C&D process; it removes the largest amount of infectious (contaminated) material for the pathogen and when performed correctly, reduces the amount of work required for wet cleaning.
3. Wet cleaning of surfaces (using soaps, detergents or products such as enzymes) to further remove gross organic materials and biofilms.
4. Drying (post cleaning which may or may not require the use of supplemental heat in buildings) to help to inactivate the pathogen.
5. Disinfection of surfaces (using a chemical disinfectant registered and approved for that purpose) or other suitable method/physical process to inactivate the agent of concern (e.g. heat treatment – target temperature over a fixed period of time).
6. Drying (post disinfection which may or may not require the use of supplemental heat in buildings) to assist in inactivating the pathogen. A vacant period/downtime (when no animals are present on the premises, usually 21 days) is required prior to restocking.

Following the completion of the C&D of all infected premises, the certification of disease-free status to enable export of poultry products is initiated. Restocking may not commence until such time as the CFIA, through surveillance has demonstrated no presence of NAI for a minimum of 21-days post C&D of the final infected premise. Following restocking, premises are subject to a 3 month post-outbreak surveillance to re-establish disease-free status to enable exports of poultry products.