File Number: [to be assigned]
Federal Court of Appeal File No. A-205-25
Federal Court File No. T-294-25 / T-432-25

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IN THE SUPREME COURT OF CANADA
(ON APPEAL FROM THE FEDERAL COURT OF APPEAL)

BETWEEN:

UNIVERSAL OSTRICH FARMS INC.

Applicant

and

CANADIAN FOOD INSPECTION AGENCY

Respondent

Motion for Stay Pursuant to s. 65.1 of the *Supreme Court Act*

AFFIDAVIT

I, Steven Pelech, of the City of Vancouver, in the Province of British Columbia, MAKE OATH AND SAY:

A. Qualifications and Duty

1. I am a Professor in the Department of Medicine at the University of British Columbia. My Curriculum Vitae is attached as **Exhibit "A"**. I have over 46 years' experience in immunology, virology, and molecular diagnostics.

2. I understand that my duty is to the Court to give fair, objective, and non-partisan evidence, and that this duty overrides any obligation to those by whom I am engaged. I have

prepared this affidavit in accordance with that duty. Attached as **Exhibit "B"** is my certificate concerning code of conduct for expert witnesses, signed September 21, 2025.

B. Instructions and Materials Reviewed

3. I was asked to provide opinion evidence addressing: (a) the immunologic significance of H5 and N1-specific antibodies detected in frozen ostrich egg yolks collected in summer 2024; (b) the likelihood of chronic or long-term asymptomatic shedding in recovered ostriches months after apparent resolution; (c) the relevance and limits of mouse virulence studies to ostrich pathogenicity; and (d) whether continuation of the flock under enhanced quarantine entails a tolerable public-health risk for a short, defined period.

4. In forming my opinions, I reviewed: (i) my report dated September 10, 2025, entitled "Testing for H5N1 influenza antibodies in frozen egg yolks from Universal Ostrich Farms Analysis of natural immunity and scientific merits of preservation of the Universal Ostrich Farms herd" (Attached as **Exhibit "C**"); and (ii) the Federal Court and Federal Court of Appeal decisions and related materials, including CFIA assertions regarding mouse virulence findings and genomic linkage to U.S. outbreaks, and the reported timeline of events on the Universal Ostrich Farms Inc. ("UOF") premises.

C. Methodology and Findings (Serology from 2024 Egg Yolks)

5. In my Sept. 10, 2025, report, I tested archival ostrich egg yolks collected in summer 2024 (months before the December 2024 outbreak) for H5- and N1-specific antibodies, using standard immunochemical methods appropriate for IgY detection in yolk. The assay controls and peptide/protein targets were selected to minimize cross-reactivity and to confirm specific binding to H5 hemagglutinin and N1 neuraminidase epitopes.

6. Result: The samples demonstrated positive detection of H5- and N1-specific antibodies, consistent with prior exposure/immune priming *before* December 2024. In my opinion, this is probative of pre-existing immunity in a portion of the flock prior to the winter outbreak.

7. The observed ~80% survival of the flock through January 2025 and the sustained absence of clinical disease, mortality, or transmission for ~239 days thereafter are consistent with effective immune control of infection and clearance.

D. Chronic Infection and "Silent Shedding"

8. Based on established avian immunology and influenza kinetics, chronic, months-long asymptomatic shedding after complete clinical recovery and sustained health is not biologically plausible for HPAI in recovered ostriches. Typical viral dynamics involve acute infection with clearance; after weeks, residual infectivity is extinguished by humoral and cellular responses. There is no evidence I am aware of supporting ongoing infectious shedding months after recovery in this context.

9. Dubious environmental persistence (e.g., cold water, organic matter) is a separate question from chronic infection of the host. Furthermore, the prior pond has been drained, and additional biosecurity measures are in place, materially reducing environmental-persistence vectors.

E. Mouse Virulence Data and Cross-Species Extrapolation

10. CFIA has asserted in these proceedings that mouse studies show high virulence of the D1.3 genotype. While mouse models can inform mammalian pathogenicity, they are not determinative of ostrich-specific disease dynamics. Avian and mammalian immune systems have significant phylogenetic and functional differences; extrapolation from mice to ostriches must be cautious. The actual field outcome at UOF (high survival and prolonged health) is more probative of ostrich pathogenicity than cross-species models.

F. Genomic Linkage and Epidemiologic Plausibility

11. Assertions that the UOF genotype seeded outbreaks in the U.S. must be viewed through epidemiologic plausibility**:** distinct flyways**,** substantial geographic separation, and multiple alternative reservoirs reduce the probability that UOF was a necessary source. Phylogenetic relatedness alone is insufficient to establish directional transmission from

the UOF premises absent spatiotemporal epidemiologic links **and** exclusion of alternative pathways**.**

G. Risk Perspective and Short-Term Quarantine Continuation

12. In my opinion, given (a) the documented absence of disease, mortality, or transmission for ~8 months; (b) evidence of pre-existing immunity; and (c) enhanced quarantine undertakings (weekly veterinary oversight, third-party audits, immediate reporting, no movement without approval), the public-health risk of maintaining the flock for a short, time-limited period pending SCC leave/reconsideration is low and tolerable.

13. Preservation of these naturally immune birds offers a unique scientific opportunity (including understanding protective epitopes and IgY applications) that would be lost by depopulation.

H. Conclusions

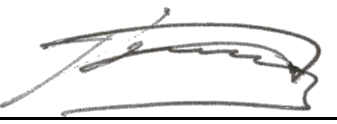
14. It is my opinion, on a balance of scientific probabilities, that:

    - (i) The serologic findings from summer 2024 egg yolks support pre-existing exposure and natural immunity prior to the winter outbreak;
    - (ii) The absence of disease or transmission for ~239 days is consistent with viral clearance and against chronic shedding;
    - (iii) Mouse virulence results are not reliable predictors of ostrich outcomes; and
    - (iv) With enhanced quarantine, the risk profile over the limited stay period is acceptable from an immunologic perspective.

15. I reserve the right to provide supplemental opinions if additional data become available.

The Deponent was not physically present before the commissioner but was present through video conferencing, and the process described for remote commissioning of Affidavits as outlined by the Law Society of British Columbia was utilized.

SWORN (OR AFFIRMED) BEFORE
ME REMOTELY at Victoria, British Columbia
On September 21, 2025



DR. STEVEN PELECH

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A commissioner for
affidavits for British Columbia