

Protocol for In-Barn Biological Heat Treatment of Avian Influenza Infected Wastes

ENVIRONMENTAL PROTECTION DIVISION | November 2023

Purpose

The purpose of this protocol is to outline the conditions for delisting avian influenza related hazardous waste using In-Barn Biological Heat Treatment (BHT), resulting in an exemption from the requirements of the Hazardous Waste Regulation (HWR). The objective of this protocol is to better support response to avian influenza outbreaks on farms.

Scope

This protocol only applies to BHT of avian influenza infected wastes (carcasses, feed, manure/litter) inside a barn on the farm of origin (on-site).

For all other treatment scenarios, including BHT outside of a barn, a separate S.53 delisting must be obtained for each site.

In addition, the protocol does not authorize storage or the land application of post-BHT material. These activities need to be compliant with the *Environmental Management Act* via the Organic Matter Recycling Regulation (OMRR), the Agricultural Environmental Management Code of Practice and/or under directions issued by the Ministry of Environment and Climate Change Strategy (ENV).

Background

Poultry carcasses, feed, and manure/litter that are suspected or known to contain avian influenza virus meet the definition of Hazardous Waste in the HWR (Class 6.2- Infectious Substances). The HWR can pose significant challenges to farmers, as it does not specifically regulate waste resulting from disease outbreaks on farms. The HWR requires that anyone treating hazardous waste register as a treatment or disposal facility, which would typically require multiple approvals under the HWR (e.g. section 4, 11, 14, 18). This work is time consuming and not feasible during a disease outbreak event, as it impedes the rapid and safe response to outbreaks.

Further, the risks posed to the environment and human health by BHT of this waste are not commensurate with the effort required for registering as a treatment facility under the HWR, given that the treatment is subject to the federal *Health of Animals Act* administered the Canadian Food Inspection Agency.

After a premise is identified as positive for avian influenza, it is placed under quarantine by the Canadian Food Inspection Agency (CFIA), and disposal and broader cleaning and disinfection must follow CFIA requirements under the *Health of Animals Act*.

In the case of avian influenza infected material, BHT in accordance with the *Health of Animals Act* is an effective form of treatment as part of the broader cleaning and disinfection of a farm, when the waste quantity is sufficient to generate the temperatures required by BHT. In many cases, BHT is the preferred method for managing wastes by CFIA (although that depends on the site). However, waste treated by BHT needs to be delisted under Section 53 of the HWR to be exempt from the requirements of the regulation.

Delisting the waste in this case is meant to exempt the HWR requirements for registration and plan approvals.

Section 53 of the HWR allows for an exemption of HWR requirements if an approved protocol or method is followed to treat and/or dispose of the infectious material so it does not pose a threat to human health or the environment. Confirmation of successful BHT is the first step to ensuring the material does not pose risks. Secondly, ENV requires confirmation the material post-BHT will be managed in a manner that doesn't pose risks to the environment or human health. Post-secondary management may have waste discharges associated with storage and land applying the material. As such, ENV requires confirmation of the location for management of this waste **prior** to exempting post-BHT AI waste from the requirements of the HWR.

Protocol Conditions

For avian influenza infected waste to be delisted via BHT in compliance with this protocol, a person (i.e., farm owners/operator) must:

1. Comply with CFIA requirements for BHT under the *Health of Animals Act*, which includes meeting the time and temperature requirements of CFIA for virus inactivation
2. Obtain CFIA certification of BHT Completion
3. Confirm the location where the post-BHT material will be stored and/or land applied
4. Submit supporting documentation to ENV (instructions in Appendix A)

*BHT-treated material **must not be moved off-site** until ENV receives the information specified in 4.

Process for Obtaining Delisting

To support rapid and effective disease response, if ALL Protocol Conditions noted above are met, the Director does not need to issue letter to confirm delisting under HWR. Rather, if a person meets all the Protocol Conditions above, the waste is considered delisted under the HWR.

Process for Applying for Approval for Storage and Land Application

Questions related to storage, siting and land application of post-BHT material should be directed to the Communities, IPM & AgriFood Authorizations team within Regional Operations Branch, Environmental Protection Division at envcia@gov.bc.ca.



Cassandra Caunce
Director of Waste Management

November 16, 2023

APPENDIX A

Instructions for submitting this information are noted after this table

Required Information for Delisting Avian Influenza Infected Wastes	
Infected Premise Information	
Infected premise ID (IP-###)	
Name of producer (Company or Individual)	
Email address	
Phone number	
Waste Information	
Type of material treated	<input type="checkbox"/> Birds <input type="checkbox"/> Feed/bedding <input type="checkbox"/> Feces <input type="checkbox"/> Eggs
Number of birds and types	
Quantity of material in kg	
Address where BHT occurred	
Name of person completing BHT	
Date of BHT completion per CFIA	
Material Storage and Land Application Information	
Location of storage and/or Land Application post-BHT	<input type="checkbox"/> On-site where BHT occurred <input type="checkbox"/> Off-site at a different location
If material will be moved off-site, provide <u>all</u> of the following information:	
Name of the receiving site	
Address of the receiving site	
Type of facility (e.g. dairy farm)	
Area of the land base (acres)	
Receiving site contact name	
Receiving site email address	
Receiving site phone number	

By completing and signing this form you certify that disposal of waste via In-Barn Biological Heat Treatment was completed in accordance with the *Health of Animals Act* and CFIA requirements.

Owner's Signature

Date

Instructions:

Please complete all information requested in the table provided and submit the information by email as follows:

Subject line of the email should be as follows:

YYYY-MM-DD AI In-Barn Biological Heat Treatment - Notification – IPXXX
(e.g. 2022-09-01 AI In-Barn Biological Heat Treatment Notification – IP-010)

Submit the required information to: envcia@gov.bc.ca