

Guidelines for Landfill Disposal of Solid Waste from Avian Influenza Response

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Waste & Materials Management
P.O. Box 7921
Madison, WI 53707-7921

Landfilling Guidelines

Landfilling is considered an option for disposal of wastes from disinfection of farms contaminated with highly pathogenic avian influenza (HPAI). This includes shell eggs packaged for shipment, liquid eggs, and other poultry associated waste. Other wastes to be disposed of might include (but are not limited to) feed, personal protective equipment, general refuse, liquid from cleaning and disinfection, and farm and building materials such as synthetic belts, wooden cages or shelving or other materials that cannot be readily disinfected to a degree sufficient for reuse on the farm.

The recommendations below are based on the proposed waste type and considerations about confinement, prevention of spillage while unloading the waste, and prevention, to the extent possible, of release of air-borne particulates that may carry the virus. The goal is efficient handling and disposal of liquid or bulky solid-form material while at the same time minimizing the release of fine particulates to open air. Minimizing any potential for dispersal of waste, including fine particulates, should minimize exposure of the virus to wild birds and domestic poultry.

Prior to hauling any waste materials from an HPAI infected farm to a landfill, the farm should contact licensed landfills to determine if the landfill will take the material. In addition, due to special disposal methods, the landfill should be contacted in advance of each load being trucked to the landfill. Prior notification is necessary to allow the recommendations below to be carried out and to prevent loads from being rejected or forced to wait at the landfill until provisions can be made to follow the recommendations below.

Disposal of waste from farms infected with HPAI should be limited to licensed municipal solid waste (MSW) landfills that already have experience with special waste disposal and, further, to landfills that have sufficient waste handling business to efficiently cover the avian influenza waste in a timely manner. Disposal of substantial amounts of free liquid wastes should be limited to facilities with U.S. EPA Subtitle D research, development and demonstration plans approved by the DNR that allow for such disposal.

The disposal of wastes from avian influenza requires an operational plan that includes preparation of trenches dug into the existing waste mass with sufficient volume to accept the expected delivery of avian influenza waste. This could be on a truck by truck basis or, at most, what can be delivered in a single day.

Disposal should not take place within 20 feet of the leachate drainage layer measured from the invert of the disposal trench as described below.

Trenches should be close enough to the operating MSW filling area to provide easy access for run-of-delivery MSW waste for cover. It would be best for the trenches to be positioned outside the active filling area itself to avoid interference between trench filling and the usual hauling vehicle traffic discharging solid waste.

Waste handling and placement should minimize any potential for breaking up, spilling, or spreading the avian influenza wastes or associated dust or debris outside the trenches. Measures should be taken to prevent birds, particularly gulls, from contact with the waste, either by dispersing them (noise cannons, etc.) as needed or by immediate covering. These measures are intended to prevent direct contact with and further spreading of the virus via wild birds, insects and other vermin to domestic poultry operations in the area.

Trench contents should be covered by a minimum of three feet of MSW at the end of truck delivery. The initial three feet of MSW should be pushed over the trench such that landfill vehicles do not traverse over exposed avian influenza waste.

Once the initial 3-foot lift is in place, the trench surface cover of waste should be compacted by landfill compactor placing an additional waste lift. The goal is to consolidate the avian influenza waste and to allow for some breakage of egg cartons and pallets to encourage decomposition, while preventing any surface exposure of the waste. More aggressive compaction can be done on wooden articles such as cages and shelving from aviary platforms, as long as surface exposure of the waste is avoided. The operator will have to determine how many passes of the compactor are needed to achieve a stable fill. It may not be necessary or desirable to use as much compaction as the operator would use on MSW to achieve design fill density.

Trench locations should be shifted for subsequent deliveries so that there is no exposure of avian influenza waste from earlier trenches.

The horizontal and vertical location coordinates of the trenches in the MSW waste mass should be recorded by the landfill operator. These records of trench location should be used to avoid penetrations of avian influenza waste during installation of gas and leachate extraction wells.

The landfill operator should allow for reasonable access by staff from DNR, DATCP, and USDA for observation of the landfilling operation and records.

Cleaning and Disinfection Guidelines

All trucks, roll off boxes, and other hauling containers must be cleaned and disinfected according to DATCP permit conditions.

Questions about permits or cleaning and disinfection should be directed to:

State Veterinarian
DATCP, Division of Animal Health
Office 608-224-4872
datcpdahlabs@wisconsin.gov

Personnel Guidelines

Wisconsin Department of Health Services recommended best management practices for transport and landfill personnel include the following:

- Avoid direct exposure of personnel to waste materials

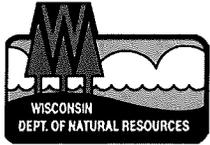
- Workers operating compactors should not leave the cab while covering and compressing landfill materials.
- Transport truck drivers should stay in the cab during loading and unloading of the cargo into and out of the truck. Once the cargo is loaded and the load covered and secured, the driver may enter and exit the cab as needed, e.g., at the landfill gate office if necessary to fill out paperwork, or on the landfill to open or close the truck tailgate (if applicable). The driver should stay in the cab while the load is being unloaded from the truck.
- If a driver has to exit the vehicle during unloading, but does not directly handle potentially contaminated material, he/she should wear appropriate PPE for task performed. This includes, but is not limited to, disposable coveralls, gloves and disposable booties. Drivers should carry disinfectant sprays (Lysol or a similar disinfectant) in their vehicles so that shoes and floor mats can be disinfected when entering an automobile, pickup or truck. The driver should remove PPE (e.g., booties and gloves) once back in the cab to the extent necessary to ensure safe driving conditions.

Contact DNRWasteMaterials@wisconsin.gov for further information.

Disclaimer: This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

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Pursuant to ch. 227, Wis. Stats., the Wisconsin Department of Natural Resources has finalized and hereby certifies the following guidance document.

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DOCUMENT TITLE

Guidelines for Landfill Disposal of Solid Waste from Avian Influenza Response

PROGRAM/BUREAU

Waste and Materials Management

STATUTORY AUTHORITY OR LEGAL CITATION

Ch. 287, Wis. Stats.

DATE SENT TO LEGISLATIVE REFERENCE BUREAU (FOR PUBLIC COMMENTS)

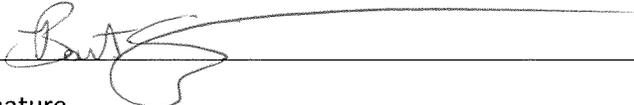
December 23, 2019

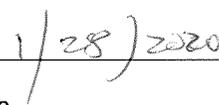
DATE FINALIZED

January 28, 2020

DNR CERTIFICATION

I have reviewed this guidance document or proposed guidance document and I certify that it complies with sections 227.10 and 227.11 of the Wisconsin Statutes. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is not explicitly required or explicitly permitted by a statute or a rule that has been lawfully promulgated. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is more restrictive than a standard, requirement, or threshold contained in the Wisconsin Statutes.


Signature


Date