RISK ANALYSIS FOR MOVEMENT: “A Risk Analysis to Evaluate Proposed Control Measures for the Managed Movement of Manure from Egg-Layer Operations during an Outbreak of Highly Pathogenic Avian Influenza.” Submitted for review; available upon request.

Definition: Sequestered manure is manure that has been removed from the house and isolated without the addition or contact with fresh manure. Sequestered manure can be considered to be stacked or piled manure, where no specific treatment is applied to reduce pathogen load, other than environmental exposure which is quite variable depending on geographic location.

Manure sequestered for a minimum of 7 days before moving from premises within an HPAI Control Area to an off-site location for spreading or storage represents a low risk, provided that the permit guidance below has been met. Sequestered manure may move off-site for spreading or storage within or out of the Control Area by permit. Sequestration may occur on or off the premises where manure was produced.

PERMIT GUIDANCE:

1. Sequestered manure is moving from a premises that meets the criteria for a Monitored Premises designation and has a national premises identification number.
2. Truck & driver biosecurity is implemented.
3. Manure is sequestered based on recommended standards.
4. Product-specific biosecurity is implemented.
5. Manure is moved directly and only to an off-site location without poultry on-site.
6. Daily active surveillance during the sequestration period.

1. Sequestered manure is moving from a premises that meets the criteria for a Monitored Premises designation and has a national premises identification number.

- A Monitored Premises (MP) objectively demonstrates that it is not an Infected Premises, Contact Premises, or Suspect Premises. Only At-Risk Premises are eligible to become Monitored Premises. Monitored Premises meet a set of defined criteria in seeking to move susceptible animals or products out of the Control Area by permit. For the Secure Poultry Supply Plans, the following criteria must be met:
  - Pre-movement RRT-PCR testing is negative,
  - Epidemiological questionnaire is completed,
  - No unexplained mortality, no unexplained clinical signs, and no unexplained changes in production parameters, and
  - Biosecurity measures are acceptable to state and federal authorities.
- For permitted movement through EMRS, an accurate national premises identification number (i.e., 7 character alphanumeric code as described in 9 CFR § 71.1, not the state ID) or other acceptable ID system for movement is required.
2. Truck & driver biosecurity is implemented.

- The risks of spreading virus to and from the premises associated with trucks (including possible transportation of insects or other fomites) must be managed in accordance with specific industry and commodity recommendations.
  - Dedicated vehicles for the premises of origin. If dedicated vehicles are not used, vehicles are required to have been C&D prior to entering the premises of origin.
  - After loading manure, C&D of the vehicle tires and undercarriages must occur at the poultry premises within the Control Area.
  - Vehicle windows should be kept closed at all times while on the poultry farm in order to prevent flies from getting into vehicles. Use insecticide, according to label directions, inside vehicles as needed to avoid the transporting of flies off the farm.
  - After manure delivery, if dedicated vehicles are used, C&D of the vehicle tires, undercarriages, and wheel-wells must occur at or near the delivery site prior to returning to the layer premises of origin. If a dedicated vehicle is not used, C&D of the entire vehicle exterior, including the truck bed, must occur prior to going to other poultry premises.
  - Clean & disinfect the inside of the vehicles daily with an approved aerosol disinfectant. Spray the floors, pedals, and bottoms of feet with disinfectant after every stop.

- The risks of spreading virus to and from the premises associated with truck cargos must be managed in accordance to specific industry and commodity recommendations.
  - The vehicle beds containing manure, or which previously contained manure, must be covered securely to prevent manure spillage and to prevent/minimize dust/particulate matter during transport off farm on any and all roadways.

- The risks of spreading virus to and from the premises associated with manure truck drivers must be managed in accordance with specific industry and commodity recommendations.
  - Dedicated drivers for the premises of origin should be used.
  - Drivers are not to exit the vehicle on the farm or at the destination site. If exiting the vehicle cannot be avoided, drivers must follow personal protective equipment (PPE) procedures:
    - Drivers must use hand sanitizer before leaving or reentering the vehicle; don C&D boots before exiting cab; remove boots prior to contact with floorboard when reentering the cab; spray soles of shoes, pedals and floorboard with disinfectant. Leave contaminated PPE at the sequestration/destination site.
  - Drivers must never enter poultry barns.
  - Drivers must shower and change clothes before visiting a poultry premises other than the farm of origin.
3. Manure is sequestered based on recommended standards.

- Sequestration requires that manure be removed, stored, and isolated without the addition of, or contact with fresh manure for a minimum of 7 days prior to movement.
- If sequestration occurs off the premises, the location of the sequestration site should not be within 5 mi (8 km) of another commercial poultry premises.
- Communal sequestration of manure from multiple different premises is not to be performed to avoid cross contamination of vehicles returning to farms.

4. Product-specific biosecurity is implemented.

- Dedicated equipment should be used on the origin premises for handling sequestered manure. If this is not possible and equipment used to move processed manure is also used to move fresh manure, equipment must be dry cleaned of manure and debris, and if possible C&D or heat treated prior to being used to move processed manure. The farm manager or other designated employee must sign off that the equipment has been cleaned and verify the cleanliness of the equipment prior to use for moving processed manure.
- Select a route to avoid exposure of poultry premises.

5. Manure is moved directly and only to an off-site location without poultry on-site.

- Sequestered manure should not be spread within 3 miles of other commercial poultry premises (i.e., other than the premises of origin).

6. RRT-PCR testing with negative test results in accordance with the recommended protocol.

- Daily testing of a pooled sample of 11 swabs per 50 dead birds per house must be performed during the 7-day manure sequestration period. If enough dead birds for an 11-bird pooled sample are not present, the available dead birds are tested.