

# PERMIT GUIDANCE- MOVING TURKEY SEMEN TO A TURKEY BREEDER HEN PREMISES

RISK ASSESSMENT FOR MOVEMENT: The following permit guidance utilizes results from the following risk assessments and analyses:

1. Cardona C, Wileman B, Malladi S, Ceballos R, Culhane M, Munoz-Aguayo J, Flores-Figueroa C, Halvorson D, Walz E, St. Charles K, Bonney P. *The Risk of Highly Pathogenic Influenza A Virus Transmission to Turkey Hen Flocks Through Artificial Insemination. Avian Diseases.* **2021 Jun**;65(2):303-9.
2. *An Assessment of the Risk Associated with the Movement of Turkey Hatching Eggs Into, Within, and Out of a Control Area during a Highly Pathogenic Avian Influenza Outbreak cleared by the USDA in January 2015.* (In-text Citation: Goldsmith et al. 2015)
3. *Premovement protocol modeling results (S. Malladi, unpublished data, 2022)*

Turkey semen from a turkey stud premises within an HPAI Control Area moving to turkey breeder hen farms within or outside of an HPAI Control Area for use in artificial insemination represent a **moderate** risk to destination turkey breeder hen farms. Turkey semen moving to turkey breeder hen farms may move within or out of the Control Area by permit, as long as **both** the origin turkey stud premises and destination turkey breeder hen premises involved in the movement meet the guidance below.

## PERMIT GUIDANCE INCLUDES:

1. Semen moving from a premises that meets the criteria for a Monitored Premises designation and has a national premises identification number.
2. Truck and driver biosecurity is implemented.
3. Product-specific biosecurity as described is implemented.
4. Two 11-bird pooled swab sample from sick/dead birds must be tested by rRT-PCR per turkey breeder tom house daily for 2 consecutive days prior to move. Antigen capture testing of semen on the day of movement (testing all semen from the barn in pooled samples with 16 toms each) is required.
5. 2-day hold on hatching eggs will be implemented at destination breeder premises post-semen movement/insemination per the STS Plan, where hen flocks on the recipient premises will be tested of 2 pools of 11 swabs results daily.

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### 1. Semen moving from a premises that meets the criteria for a Monitored Premises designation and has a national premises identification number.

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- Monitored Premises (MP) objectively demonstrate that they are not 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.

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## **2. Truck & driver biosecurity is implemented.**

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- The risks of spreading virus to and from the premises associated with the vehicle used for semen movement (including possible transportation of insects) must be managed in accordance with specific industry and commodity recommendations.
  - Semen deliveries must be dropped off outside of the PBA of the hen breeder premises.
  - Vehicle windows should be rolled up at all times when near the poultry farm in order to prevent flies from getting into the vehicle.
  - Insecticide must be sprayed inside vehicles as needed to eliminate the transporting of flies from farm to farm.
  - Floors, pedals, and bottoms of feet must be sprayed with disinfectant after every stop.
  - The outside of all vehicles will be cleaned and disinfected as approved by regulatory personnel with an approved disinfectant at a cleaning and disinfection station at or near the turkey premises within the Infected Zone. If cleaning and disinfection cannot be completed at the turkey premises, the vehicles must be accompanied by a permit issued by the Incident Command to travel to a cleaning and disinfection station within the Infected Zone.
- The risks of spreading virus to and from the premises associated with the driver must be managed in accordance with specific industry and commodity recommendations.
  - As stated above, semen deliveries must occur outside the PBA thus semen delivery drivers and personnel will not cross the PBA of a hen breeder premises.
  - All drivers and passengers must don disposable booties before getting out of the vehicle. Immediately prior to re-entering the vehicle, drivers must remove the disposable boots and place them in an appropriate disposal container that will remain at the farm and spray shoes with disinfectant.
  - Then immediately after disinfecting shoes, drivers must use hand sanitizer as they re-enter the cab.

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### **3. Product-specific biosecurity as described in individual plan is implemented**

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- Per the Secure Turkey Supply Plan, semen shipment to a *specific* destination hen breeder premises will occur no fewer than every seven days<sup>1</sup> if the tom breeder premises falls within a Control Area (although shipment of semen off the stud premises will occur more than once weekly if the stud is producing for more than one hen breeder premises).
- The risks of contaminated semen containers or any potential fomites in contact with the tom flock's environment that are going to hen flocks must be mitigated:
  - A dedicated personnel member at the hen breeder premises who is not performing insemination must come out to retrieve the semen at the edge of the PBA.
  - The dedicated personnel member receiving the semen must:
    - If using a hen breeder premises-specific cooler, wipe down the outside of each semen tube with an appropriate disinfectant prior to transferring each tube to the hen breeder premises' cooler. The outside of the hen breeder's cooler must be wiped down with an appropriate disinfectant prior to entering the hen breeder barn's LOS.
    - If using the stud premises' cooler, thoroughly wipe down the entire cooler, semen tubes, and tube rack prior to bringing the semen across the hen breeder barn's LOS.
  - The dedicated personnel member receiving the semen and the insemination crew must follow strict LOS procedures when passing the semen across the LOS.
- The risks of spreading virus to the hen breeder premises associated with the insemination crew must be managed:
  - The insemination crews at the destination site must have no contact with the stud premises.
  - The person inseminating hens is required to shower and don farm-specific PPE at each site prior to crossing the LOS.
  - The person inseminating hens are required to wear gloves during, or wash their hands immediately prior, to the artificial insemination process.
    - If gloves are used, the person inseminating needs to ensure that the outside of gloves do not become contaminated via contact with human skin, clothing, shoes, etc.
- The risks of contaminating the semen associated with humans as fomites during the collection and processing steps on the stud premises must be managed:
  - Proper standard operating procedures are in place and effective employee training has been carried out for semen collection to prevent fecal contamination of semen.

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<sup>1</sup> Any exceptions for higher rates of movement per week (i.e., more than one movement to a specific hen breeder premises) need to be dealt with on an as needed basis by IMT)

- Proper standard operating procedures are in place and effective employee training has been carried out for extender and semen preparation and processing to ensure that contamination of extender and semen is reduced.
- Semen should be processed by a technician and not by individuals responsible for collecting the semen to minimize the risk of cross contamination.
- The technician once the semen is prepared should disinfect the exterior of the semen vials prior to sending it to the hen farm.
- The risks of shared equipment as fomites on the stud premises must be managed:
  - Sharing equipment between or with other poultry premises is prohibited.
- The risks of mortality pick-up on the stud premises must be managed:
  - Off-farm disposal (e.g., rendering, landfill, etc.) of mortality must be reduced to as minimal pick-ups as possible during the active Control Area.
  - Risks associated with dead birds on-site should be managed.
- The risks of manure pick up on the stud premises must be managed:
  - Off-farm removal of manure or litter is prohibited. Risks associated with manure or litter movement on-site must be managed.
- The risk of garbage pick-up on the stud premises must be managed:
  - Garbage pick-up should occur outside of the PBA only.
  - Moving garbage to the dumpster should occur at the end of the shift only. No employees moving garbage to the dumpster should re-enter the barn.
- The risk of personnel as fomites on the stud premises must be managed:
  - Visiting other poultry farms should be prohibited for people who work on the stud premises. Personnel should have contact only with their assigned flock.
  - All non-critical visitors are prohibited from entering farms. All non-critical, routine, or operational visits must be replaced by telephone communication, if feasible.
  - Non-critical visitors who work with or have contact with another commercial poultry operation (farm, hatchery, processing plant, etc.) or have contact with a noncommercial poultry flock (backyard birds, hobby farms with birds, or game birds) are prohibited from entering the farm.
  - Any critical personnel that enter the poultry house must be wearing clothing dedicated to the farm and footwear dedicated to the house.

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**4. Two 11-bird pooled swab sample from sick/dead birds must be tested by rRT-PCR per turkey breeder tom house daily for 2 consecutive days prior to move. Antigen capture testing of semen on the day of movement (testing all semen from the barn in pooled samples with 16 toms each) is required.**

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- Two 11-bird pooled swab samples from sick/dead birds must be tested by rRT-PCR per turkey breeder tom house daily starting 2 consecutive days prior to move. Antigen

capture testing of semen on the day of movement (testing all semen from the barn in pooled samples with 16 toms each) is required. (3)

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**5. 2-day hold on hatching eggs will be implemented at destination breeder premises post-semen movement/insemination per the STS Plan, where hen flocks on the recipient premises will be tested of 2 pools of 11 swabs results daily.**

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- At any point, if the mortality rate in a turkey hen house exceeds 2/1,000 turkeys the Incident Command must be notified immediately.
- 2-day hold on hatching eggs will be implemented at destination breeder premises post-semen movement/insemination per the STS Plan, where hen flocks on the recipient premises will have two 11-bird pooled swab samples from sick/dead birds tested by rRT-PCR daily. (Hold period efficacy determined via predictive modeling conclusions reported on pg. 10 of Goldsmith et al. 2015 [see (2) in *RISK ASSESSMENT FOR MOVEMENT* section above])