

# **The Secure Egg Supply Plan: Business Continuity Planning for a Highly Pathogenic Avian Influenza Outbreak**

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**16 March 2015**



# Emergency Response to Poultry Diseases:

- Historically based on the containment and eradication of animal disease
  - Follows linear, sequential steps for “solving” the problem
  - Defines success as “disease free”
    - Returning country to disease free status
    - Restoring trade
  - Based at individual farm level
  - Recognized as “gold standard”



# In the event of an HPAI outbreak:

- Restrictions on movement of eggs and egg products
  - Impedes ‘just in time’ movement practiced by egg industry
    - Chickens still eat, drink, and lay eggs daily
    - Limited egg storage on farms (48hrs)
    - Physical and mechanical equipment limitations
    - Egg disposal (environmental and disease control considerations)
  - Affects security of egg supply to consumers
    - Lost consumer confidence



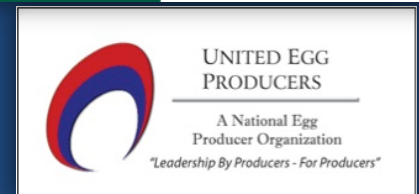
# Secure Egg Supply Plan (SES)

- Allows for managed movement of eggs and egg products from non-infected premises to market
  - Continued industry operations while mitigating risk of disease spread
  - Science-based approach
    - Virology
    - Epidemiology
    - Flock husbandry
    - **Proactive risk assessments**

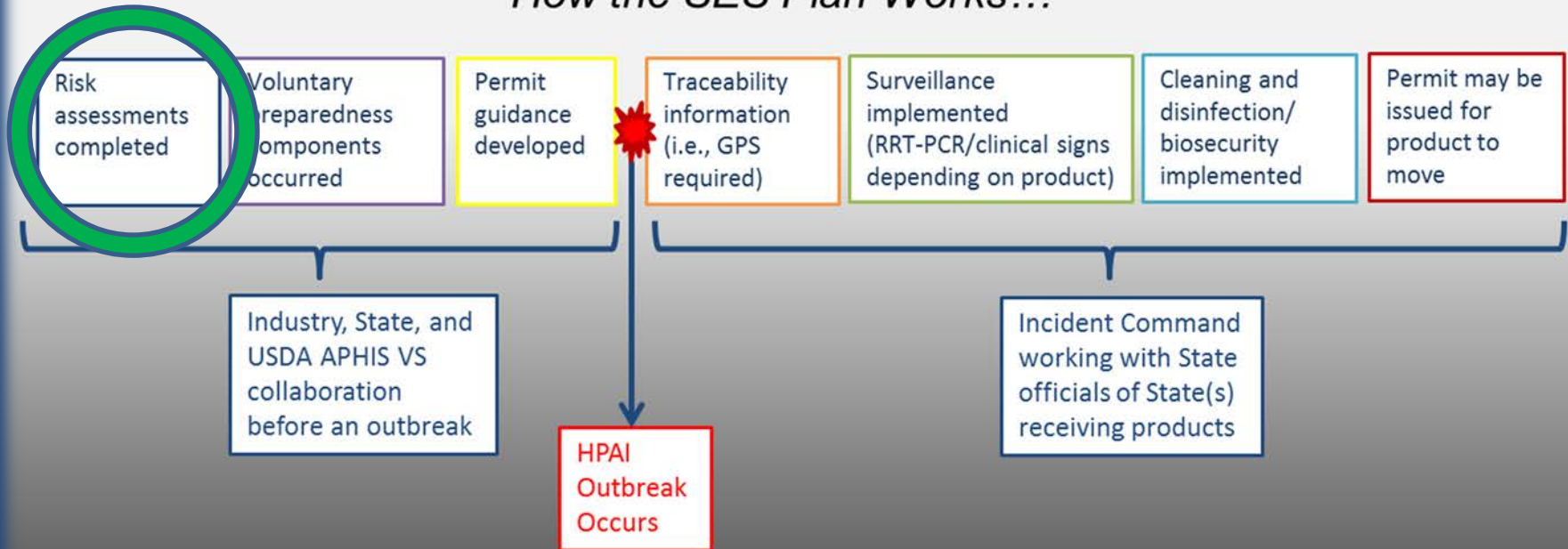


# Public-Private-Academic Partnerships

- Egg Sector Working Group
  - Provides practical, real-world expertise and guidance to inform implementation of research and proactive risk assessment findings



## How the SES Plan Works...

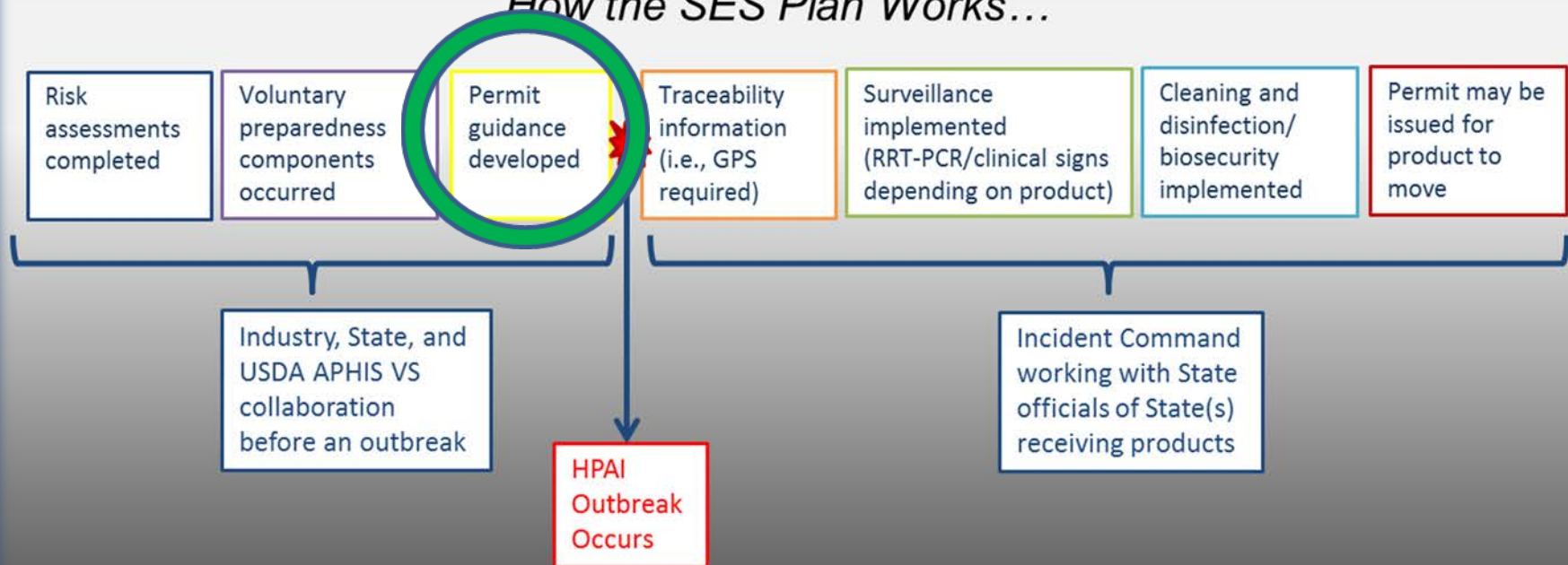


# Proactive Risk Assessments

- Specific to diseases and commodities
- Take into account:
  - Everyday industry practices
    - Standard operating procedures
    - Regulations (FDA, FSIS, APHIS)
    - Good manufacturing practices
  - Proposed additional steps during an outbreak
    - Elevated biosecurity
    - Surveillance strategy
    - Cleaning and disinfection (C&D) guidelines



## How the SES Plan Works...





# SES Sample Permit

- Based upon risk assessments, permitting guidelines were developed

*Pasteurized Liquid Egg*

**INITIAL PERMIT FOR MOVEMENT OF PASTEURIZED LIQUID EGG TO MARKET FROM AN ON-FARM PASTEURIZATION FACILITY**

PERMIT NUMBER: XX.0 DATE OF PERMIT: \_\_\_\_\_  
\*xx is premises number, initial permits will be numbered zero and subsequent permits 1, 2, 3, and so on.

Shipment is permitted from \_\_\_\_\_ (premises name and 911 address)  
to \_\_\_\_\_ (market).

◆ The cargo interior and exterior of the transport vehicle must be cleaned and disinfected. The driver should remain inside the cab of the vehicle. If the driver gets out of the vehicle, the cab interior must be cleaned and disinfected, and the driver must wear protective clothing, such as disposable boots and gloves, and remove them before getting back in the cab. The tires and wheel wells must be cleaned and disinfected when leaving premises within the Control Area.

I certify that the flock of origin of the pasteurized liquid egg has met the permit criteria as stated in the Secure Egg Supply Plan.

/

\_\_\_\_\_  
Incident Commander    Printed Name and Signature    Date (mm/dd/yyyy)

I certify that the production parameters for the flock of origin of the pasteurized liquid egg are within normal range on the date of shipment.

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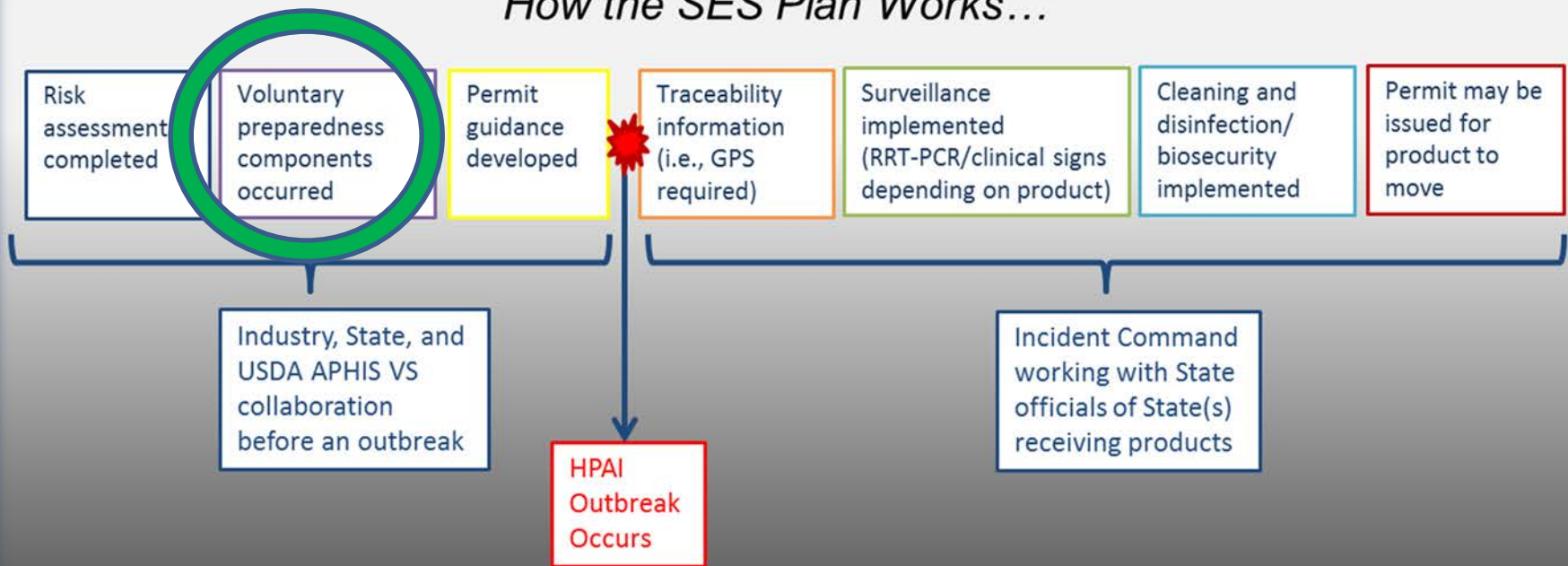
\_\_\_\_\_  
Premises Manager    Printed Name and Signature    Date of shipment (mm/dd/yyyy)

The Incident Command (IC) may issue the initial permit if the premises is compliant with the permit guidance. Subsequent permits for movement of this product may be issued by the premises manager unless a significant change in production parameters occurs, the flock is found to have a positive real-time reverse transcriptase polymerase chain reaction (RRT-PCR) result for highly pathogenic avian influenza (HPAI), or some other significant event occurs such as the onset of obvious clinical signs of HPAI or a determination is made that the flock is a Contact Premises. On an ongoing basis the IC will monitor RRT-PCR results from each flock and will review flock production parameters to confirm the flock continues to be eligible for this permit.

Draft August 2013 2-3 Form Revision Date: 08/2013



## How the SES Plan Works...

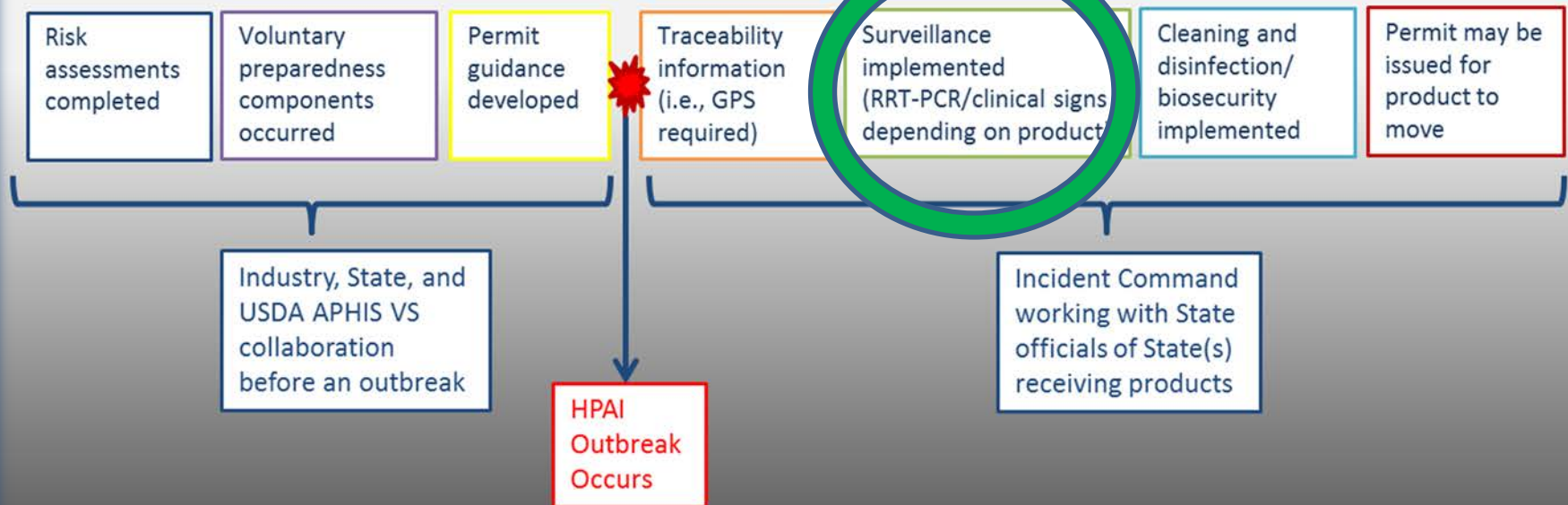


# Voluntary Preparedness Component

- Compliance with biosecurity checklist, completion of audits:
  - 45 measures that can be implemented prior to or during an outbreak that would reduce the risk of introducing HPAI virus onto production premises
- Location verification using GPS coordinates
- Epidemiological questionnaire training
  - An SES data portal is also available
- Training on RRT-PCR sample collection and submission



## How the SES Plan Works

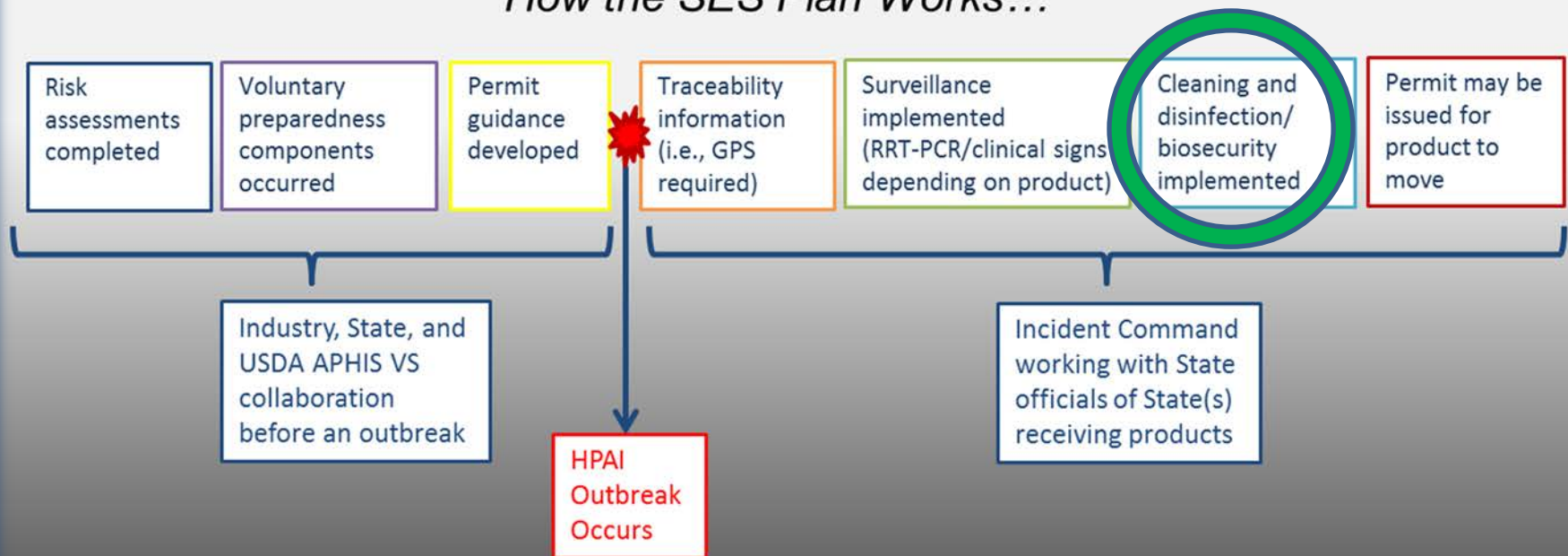


# Surveillance Requirements

- Daily flock monitoring – signs of HPAI
- Normal daily mortality rates
- RRT-PCR Testing
  - Frequency of testing based on product movement



## How the SES Plan Works...



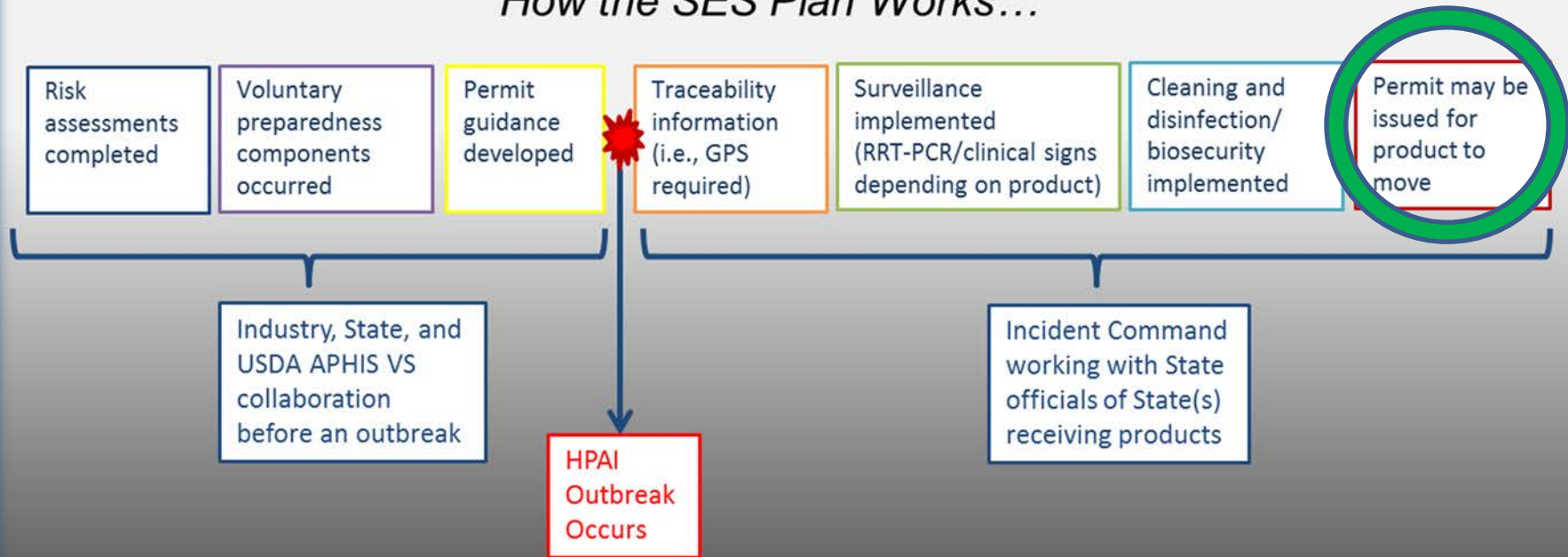
# C & D and Biosecurity

- Applies to:
  - Truck and driver
  - Product
  - Premises
- C & D guidelines
- Permitted movement checklists
  - Product-specific





## How the SES Plan Works...



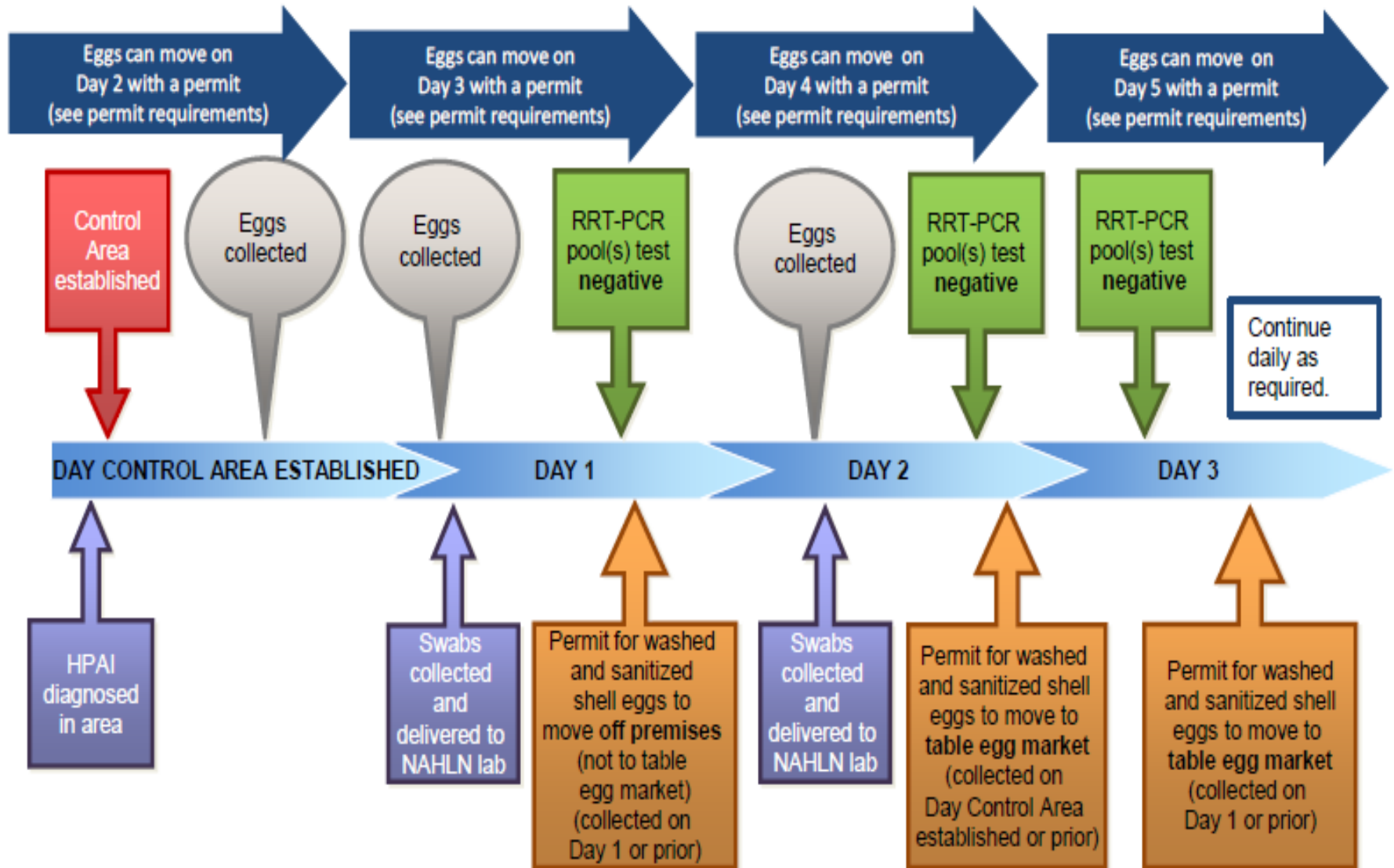


# Summary of Permit Requirements

Product	The proactive risk assessment for movement is:	And traceability information (premises ID, GPS coordinates, or other) is available:	And production parameters are normal:	And the following biosecurity measures are in place (please see the product-specific sections for the list of steps involved in each of these measures):	And the premises biosecurity is acceptable?	And the epidemiological assessment is acceptable?	And the RRT-PCR result is negative?	Action:	Permit guidance to move product:	And the second RRT-PCR result is negative?	Action:	Permit guidance to move product:
Pasteurized liquid egg	Negligible	YES	YES	1. Truck and driver biosecurity		<i>These steps are not required for this product.</i>					→	Issue PERMIT to move to market
Non-pasteurized liquid egg	Negligible	YES	YES	1. Truck and driver biosecurity	NA	NA	YES	→	Issue PERMIT to move to pasteurization	Non-pasteurized liquid egg becomes pasteurized liquid egg		
Washed and sanitized shell eggs (to premises without poultry)	Negligible	YES	YES	1. Truck and driver biosecurity 2. Product-specific biosecurity	YES	YES	YES	→	Issue PERMIT to move off premises to a storage or holding area	YES	→	Issue PERMIT to move to market for eggs collected 2 days earlier
Washed and sanitized shell eggs (to premises with poultry)	Low	YES	YES	1. Truck and driver biosecurity 2. Product-specific biosecurity	YES	YES	YES	→	Issue PERMIT to move off premises to a storage or holding area	YES	→	Issue PERMIT to move to market for eggs collected 2 days earlier



# Permitting Timeline Example



# Implementation

- Who uses the SES Plan?
  - Incident Commanders: government officials who will lead a response plan in case of an outbreak
  - Poultry Managers
- How do they use the plan?
  - Consult the “Summary of Permit Requirements” for further guidance.



# Acknowledgments

- USDA APHIS VS CEAH
- State officials
- American Egg Board
- United Egg Producers (UEP)
- Egg sector veterinarians and officials
- The University of Minnesota Center for Animal Health and Food Safety (CAHFS)
- Iowa State University Center for Food Security and Public Health (CFSPH)







## More Information

- [www.secureeggssupply.com](http://www.secureeggssupply.com)
- [www.securebroilersupply.com](http://www.securebroilersupply.com)
- [www.secureturkeysupply.com](http://www.secureturkeysupply.com)
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