

PROTECTING THE CASTLE

A DISCUSSION ON VIRULENT
NEWCASTLE DISEASE IN SOUTHERN
CALIFORNIA AND THE ROLE OF FEED
COMPANIES IN BIOSECURITY



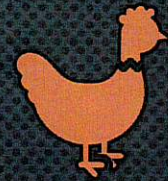
VIRULENT NEWCASTLE DISEASE VIRUS

- HIGHLY INFECTIOUS VIRUS OF BIRDS
- FOREIGN TO THE UNITED STATES
- SELECT AGENT MONITORED BY HOMELAND SECURITY
- HIGH MORBIDITY AND MORTALITY IN CHICKENS (*RESPIRATORY, NERVOUS, DIGESTIVE SYSTEMS*)
- NO CURE – VACCINE DOES NOT PREVENT INFECTION BUT CAN REDUCE VIRUS SHEDDING
- SURVIVORS BECOME CARRIERS FOR 6 + MONTHS
- MINIMAL HEALTH IMPACTS ON PEOPLE (*CONJUNCTIVITIS, FEVER IF IN CLOSE CONTACT WITH AN INFECTED BIRD*)



WHY IS IT IMPORTANT?

- MILLIONS OF BIRDS DESTROYED (12 MILLION IN 1971 & 3.2 MILLION IN 02/03)
- BILLIONS POTENTIALLY LOST (\$5 BILLION IN 2003)
- CLOSING BUSINESSES
- LOSS OF HUNDREDS OF JOBS
- HIGH CHICKEN / EGGS PRICES
- LOSS OF THOUSANDS OF PET BIRDS



ALERT



VIRULENT NEWCASTLE DISEASE

INFORMATION FOR BIRD OWNERS

Virulent Newcastle Disease (VND) has been found in Southern California. It is a contagious disease of birds, including chickens.



Photo credit: Dr. Evarado Mendes

WHAT KINDS OF BIRDS GET VND? HOW IS VND SPREAD?

All birds can be infected with VND. In most cases, VND is spread by direct contact between birds, including contact with droppings. Other ways VND is spread include contact with infected birds, contact with contaminated clothing or equipment, and contact with contaminated feed or water.



- WHY IS VND A CONCERN FOR BIRDS?**
- If a bird is infected with VND, it will show signs of illness within 2 to 10 days. Signs include depression, loss of appetite, and a drop in egg production.
 - VND can cause a purplish swelling of the head and neck, and a twisting of the neck.
 - VND can be fatal to birds, especially young birds.
 - VND can spread to other birds, including wild birds.
 - VND can spread to humans, but it does not cause illness in humans.
- What to do if you suspect your bird has VND:**
- Isolate the bird from other birds.
 - Contact your veterinarian or the State Bird Hotline (866-922-2473) for more information.
 - Report the case to the local health department.
 - Follow the instructions of the health department.
 - Share information about VND with family and friends.

www.cdafa.ca.gov/ahfms/Animal_Health/Newcastle_Disease_Info.html

RESPONSE STRATEGY THREE KEY INITIATIVES

1. OUTREACH AND EDUCATION
2. VIRUS DETECTION AND ELIMINATION
 - DIAGNOSTICS
 - CONTAINMENT – QUARANTINE & BIOSECURITY
 - EUTHANASIA AND DISPOSAL
 - FALLOW PERIOD; OWNER C&D
3. PROTECT POULTRY INDUSTRY

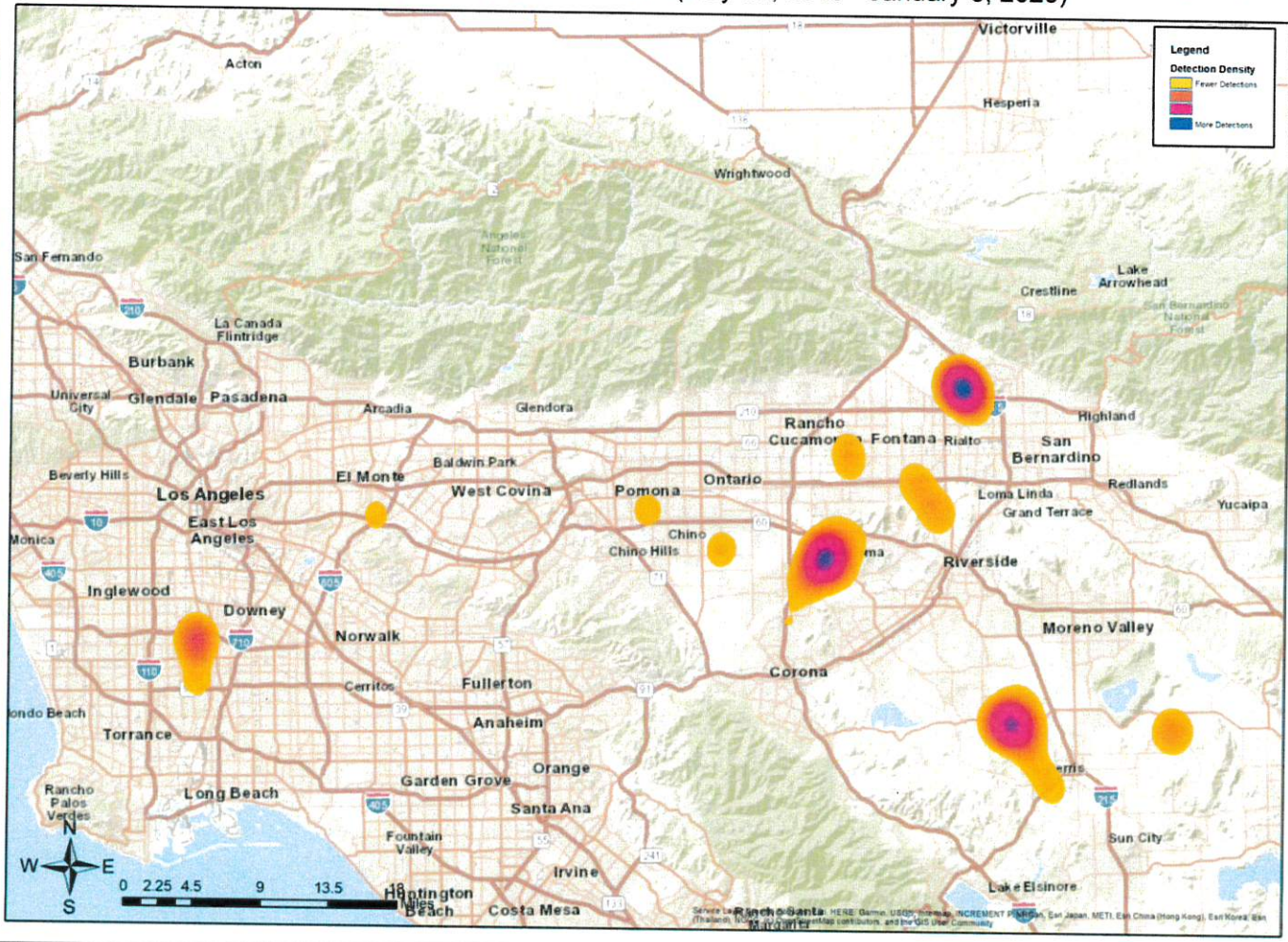




VND 2018-19

Disease Detection Overview (May 22, 2018 - January 5, 2020)

Date: 1/05/2020

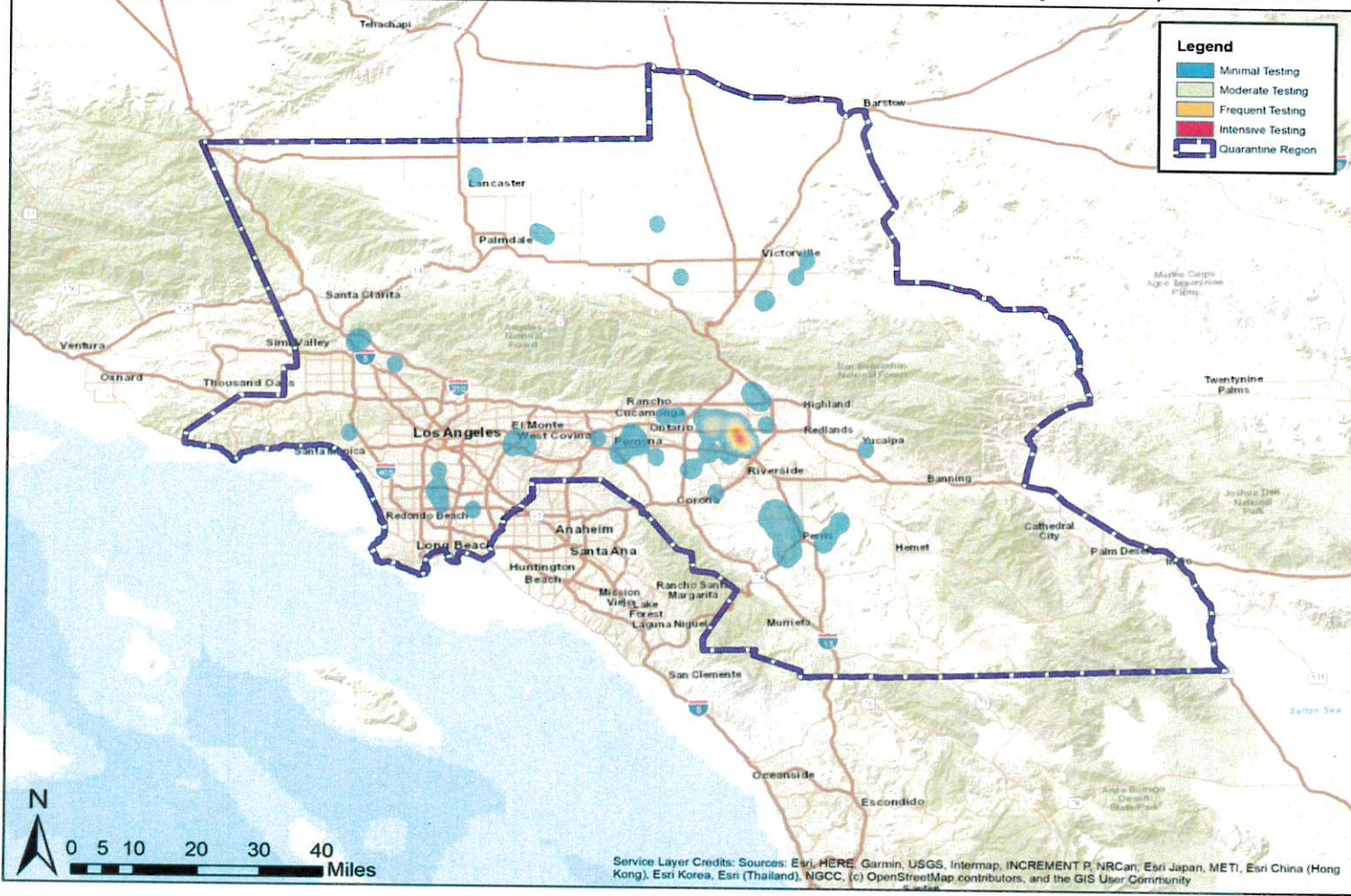




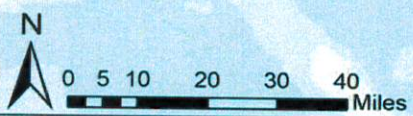
VND 2018-19

Disease Testing Overview (December 4, 2019 - January 4, 2020)

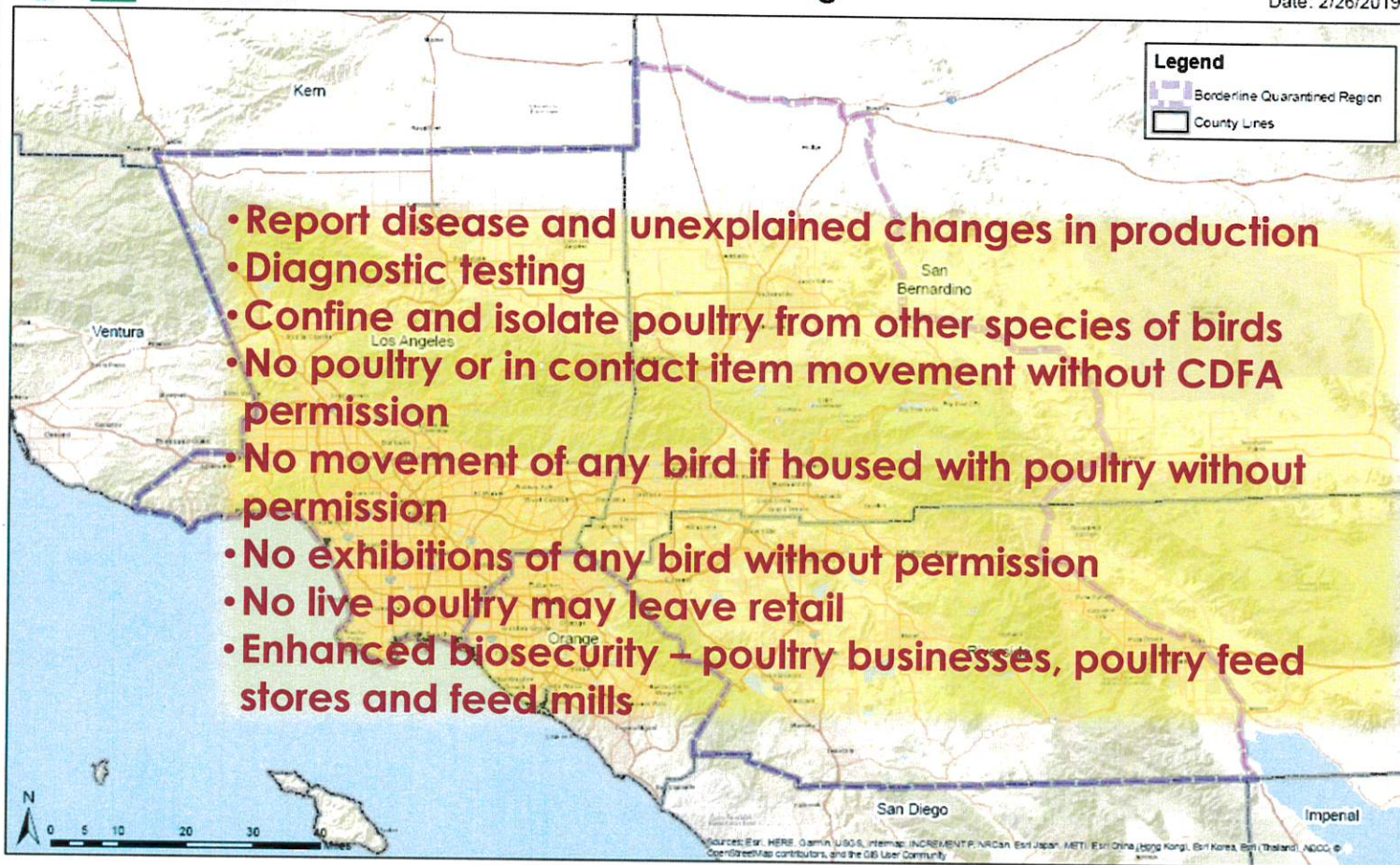
Date: 01/04/2020



OVERVIEW OF TESTING



Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community





Quarantine is still in effect and will only be released by the state veterinarian



Moving birds in all of LA County, and large areas of San Bernardino and Riverside counties is prohibited



Healthy looking birds and even vaccinated birds may carry and shed virus, spreading infection

**DON'T MOVE
YOUR BIRDS**



FEEDMILL BIOSECURITY

What is Biosecurity?

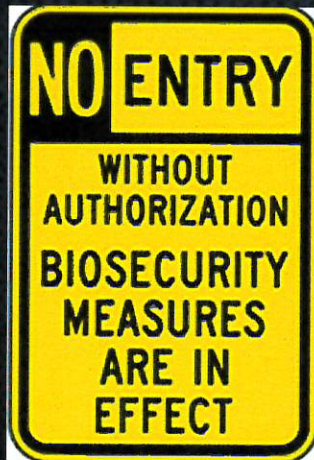
Form of Risk Management

Many Resources Available

- American Feed Industry Association Guidances
- Animal Nutrition Association of Canada: National Biosecurity Guide
- Food Safety Modernization Act
- Current Good Manufacturing Practices

http://www.cdfa.ca.gov/AHFSS/Animal_Health/BioSpecies/CommercialPoultryBiosecurity.html

BIOSECURITY CULTURE



- Management Commitment*
- Employee Commitment*
- Training, Training, Training*
- Records, monitoring, review, updates*

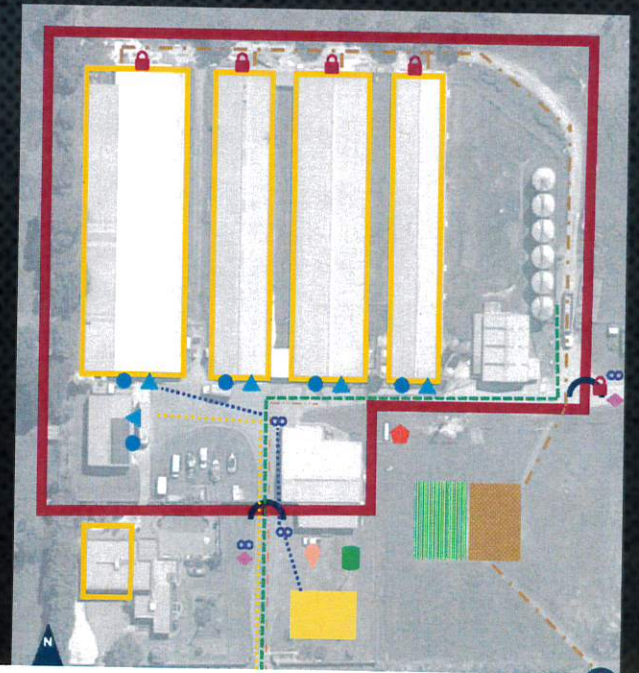


Animal Health and Food Safety Services

CALIFORNIA SECURE FOOD SUPPLY

MINIMUM REQUIREMENTS OF A SECURE FOOD SUPPLY PLAN:

- ESTABLISHMENT OF A SECURE PREMISES PERIMETER
- CLEANING AND DISINFECTION (C&D)
- MONITOR ANIMAL HEALTH
- TRAINING AND DOCUMENTATION
- DURING A DISEASE OUTBREAK INCIDENT:
 - PERMITTED MOVEMENT
 - AUDITS



FOMITES: OBJECTS THAT MECHANICALLY TRANSMIT DISEASE CAUSING ORGANISMS

People

Hands

Clothing

Footwear

Eyeglasses

Jewelry

Hats

Vehicles

Tires

Mud flaps

Undercarriage

Equipment

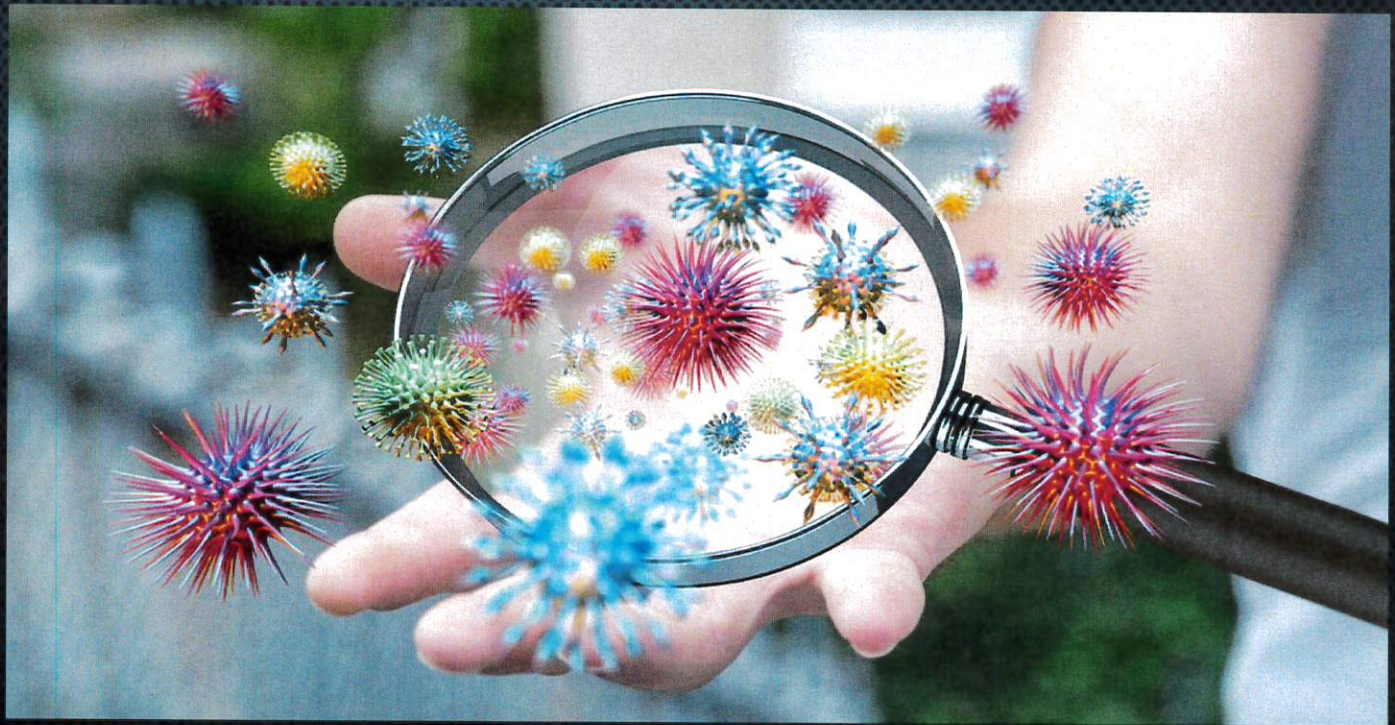
Feed Blow Pipe

Shovels

Feed

Barrels

Totes



VEHICLE CLEANING AND DISINFECTION (C&D)

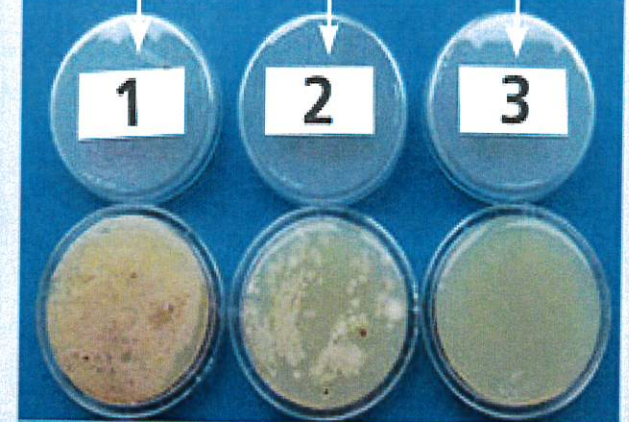
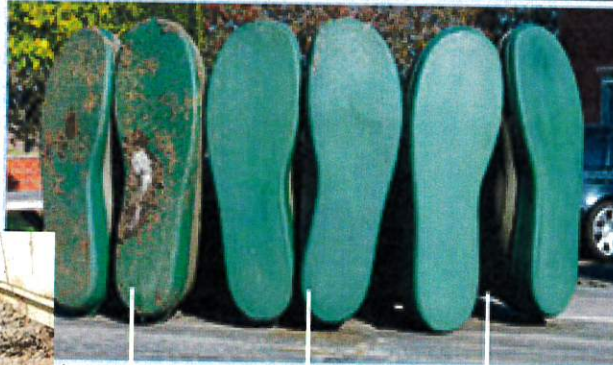


Dirty vs. Clean vs. Disinfected

1. dirty boots

2. rinsed with water

3. disinfected



Source: ILVO



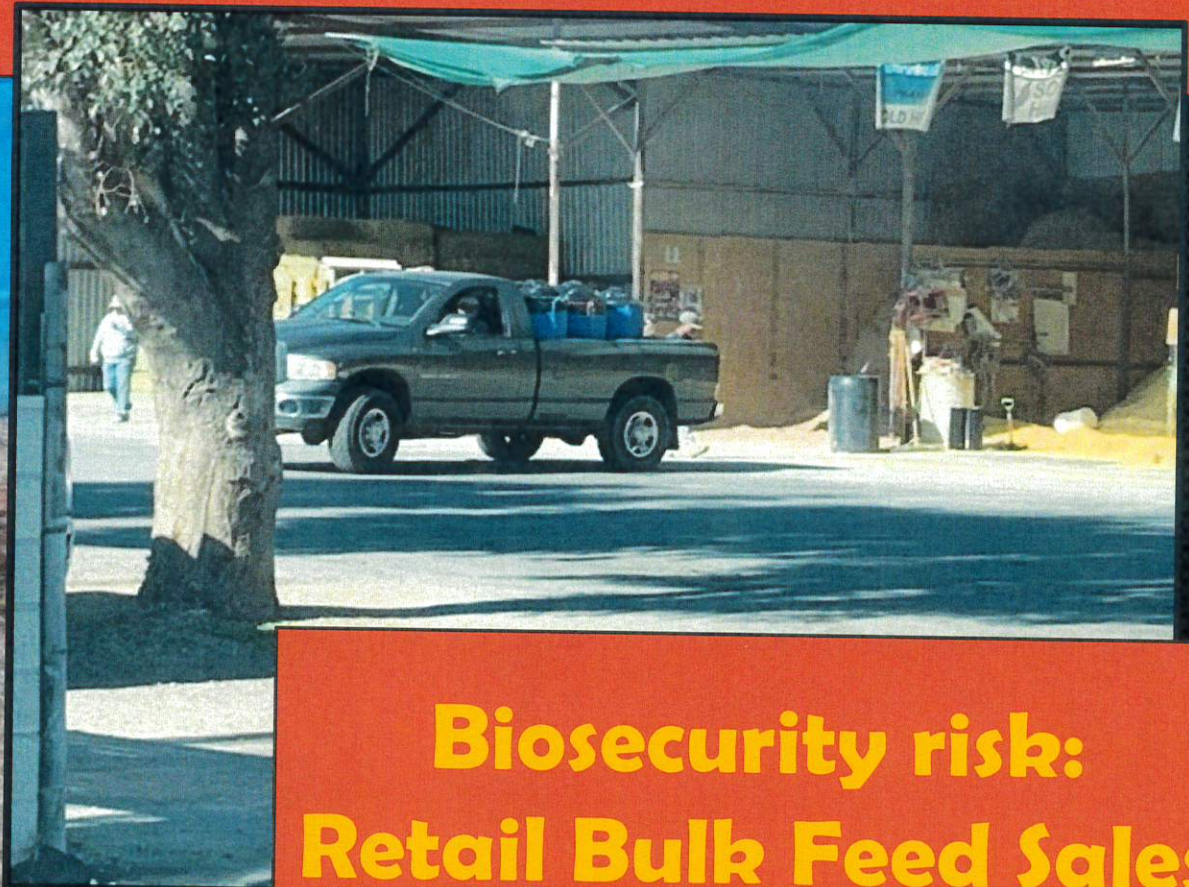
SOME CLEANING AND DISINFECTION FAILURES





PPE: PERSONAL PROTECTIVE EQUIPMENT





**Biosecurity risk:
Retail Bulk Feed Sales**

A photograph of several brown chickens standing in a field of tall grass. In the background, there is a large barn with a tall silo. The scene is lit with warm, golden light, suggesting late afternoon or early morning. The text is overlaid on the left side of the image.

USDA Certified Organic, Non-GMO Project verified, and chemical-free feeds for all types of livestock

SHOP

QUARANTINES AND MOVEMENT PERMITTING FAQ'S

- Which movements require permits?
- How are permits obtained?
- Who is responsible to obtain the permit?

WHAT MOVEMENTS REQUIRE A PERMIT?

1220 N Street
Sacramento, California 95814

State of California
Department of Food and Agriculture
Animal Health and Food Safety Services

Telephone: (916) 900-5002
Facsimile: (916) 900-5333

Questions/Preguntas
Sick Birds/Aves Enfermas

Call/ Llame
909-947-4462

NOTICE OF REQUIRED ACTION PURSUANT TO QUARANTINE

Owner: _____

Address: _____

You are hereby notified that the State Veterinarian has imposed a Quarantine pursuant to Food and Agricultural Code, Section 9562 on the following population of animals or animal product:

Description of Population of Animals or Animal Product: All birds, bird products (including eggs carcasses, manure), feed and bird equipment (including bird cages).

Location of Animals: _____ NPIN _____

Reason for Quarantine:

This Quarantine is imposed because the population of animals or animal product described above may be infected or infested, has been exposed to a condition that could transmit an illness that could kill or seriously damage other animals or humans, or may be at risk for such exposure.

Condition: Virulent Newcastle Disease (VND)

Required Action: Pursuant to Food and Agricultural Code, Section 9562 and Title 3, California Code of Regulations, Section 1301 *et seq.*, you are required to:

Hold the population of animals or animal product described above on the premises where it is now located.

Isolate the population of animals or animal product described above no later than _____ a.m. / p.m. on _____

The method of isolation shall be No movement of birds, bird products (including eggs, carcasses, manure), feed or bird equipment (including bird cages) on or off the premises without a current written CDFA permit.

Treat the population of animals or animal product described above no later than _____ a.m. / p.m. on _____

The method of treatment shall be NAME OF FARM must comply with the Biosecurity Practices and other conditions of Attachment A "Required Biosecurity Practices" and the Secure Food Supply Plan approved for NAME OF FARM.

STEPS TO OBTAIN A MOVEMENT PERMIT:

- *STEP 1: REQUEST A PERMIT*
- *STEP 2: IMT VERIFICATION OF BIOSECURITY*
- *STEP 3: IMT VERIFICATION OF MONITORING AND SURVEILLANCE*
- *STEP 4: RECEIPT OF PERMIT*
- *STEP 5: LOG PERMITTED MOVEMENTS*

STEP 1: REQUEST A PERMIT

There are 2 ways to do this:

1. Directly in the USDA Gateway permitting system online

<https://www.eauth.usda.gov/Login/login.aspx>

2. Providing the information to the IMT permitting staff

- Complete the “Secure Food Supply – Permit Request Form”
- Email the form to the permitting team at SFSPermits@cdfa.ca.gov

STEP 2: IMT VERIFICATION OF BIOSECURITY

The IMT will:

- Verify premises location, National Premises ID, and contact information
- Perform an epidemiological evaluation
- Perform a Site Audit to verify implementation of enhanced biosecurity

STEP 3: IMT VERIFICATION OF MONITORING AND SURVEILLANCE

Flock testing must be completed as required by the IMT



STEP 4: RECEIPT OF PERMIT

- approval
- emailed to you
- or
- accessible via the EMRS Customer Permit Gateway
- **A copy of the permit and its conditions must travel with the shipment**



STEP 5: LOG PERMITTED MOVEMENTS

- Permits may be issued for one-time individual movements
- or
- For a longer period of time for multiple, low risk shipments
- Each movement under a multiple movement permit must be recorded by the permit requester

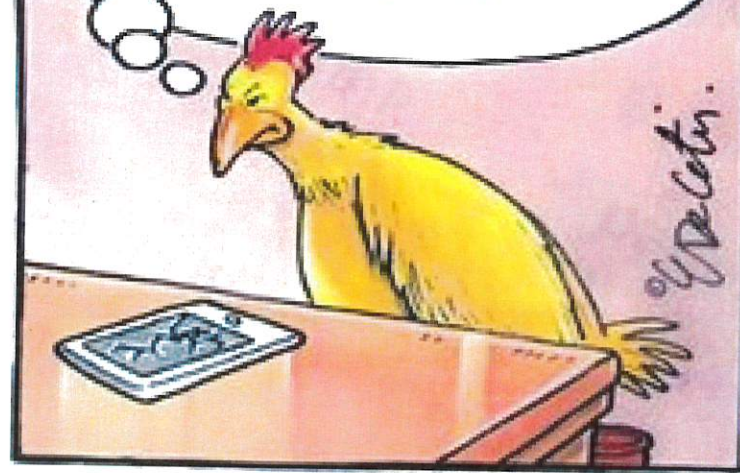
SFSPermits@cdfa.ca.gov

or

Use Gateway

Why chickens don't text...

Awww, man.
I cracked ANOTHER
screen !?!?



SAMPLE OF SPREADSHEET USED BY A FEED MILL FOR THE VND OUTBREAK

Permit Number	Permit Information	From	To	Start Date	End Date	Comments	Status	Permit Renewal
---------------	--------------------	------	----	------------	----------	----------	--------	----------------

Some Permitting TIPS:

- The mechanics are straightforward enough for the technically challenged to get used to
- EMRS staff have been very responsive to questions and difficulties
- Movements **cannot** be logged the day after a permit expires
- Log the permit requests in EMRS, first, then send a follow-up email to sfspermits@cdfa.ca.gov
- permit restrictions can be discussed with IMT if needed to modify for real-world conditions
- permit requests should be made in advance to give staff time to respond

EXAMPLE PERMIT



Permit Information Egg- Nest Run Eggs ; Free Area to Free Area ; Direct to Processor #0807	
Permit number:	PM:1111:1: 1)
Date of issuance:	1/12/2019 12:11 PM
From:	00AXBYZ; BOGG QUISITE RANCH 123 Ranch Road, Ontario, CA 91761
To:	000B7CD; BIG BIRD PROCESSOR 83764 Processor Road, Ontario, CA 91761
Dates approved:	1/14/2019 to 2/13/2019
Approver Comments:	AMMORR Permit Conditions Required Conditions Approved as Not Assumed

Conditions	
General conditions for accepting the option to move commodities (feed, animals, eggs etc.) under a Secure Food Supply Permit.	
I understand this permit may be issued prior to movement and may include 1 or more permitted movements against this permit for specified date range.	
I agree to follow all conditions specified in the secure food supply plan or by State Animal Health Offices for the commodity I am moving including:	
1) All vehicles and equipment will be cleaned and disinfected (C&D) in a manner approved by State Animal Health Offices.	
2) Any required pre-movement isolation periods will be followed.	
3) Truck drivers/loaders/handlers have been instructed in proper biosecurity and are following recommended practices at all times, including:	
a) Proper use of Personal Protective Equipment (PPE)	
b) Following C&D protocols required at the delivery destination	
c) Performing vehicle C&D before and after the permitted delivery	
4) If testing required it will be completed prior to any movement and certified by company veterinarians and listed on the movement report/entry.	
5) The permitted delivery must be the last or only stop on the delivery route.	
6) All movements under this permit must be reported/entered prior to the movement or at the time of the movement via a state approved method.	
7) All movements will cease if any clinical signs are noted on either the origin or destination premises.	
If during auditing any of these conditions are not being adhered to I understand my privilege to move commodities under this permit will be revoked until time when I can demonstrate adherence to the conditions of the secure food supply plan for the commodity covered.	
Testing Required?	Yes; Negative BI-Weekly Tests

Authorized by Annette Jones DVM State Veterinarian	Date 1/12/2019
--	-------------------

email to:



Permit for Control Area Movements - Multiple

I understand that this permit is issued to cover the movement of:

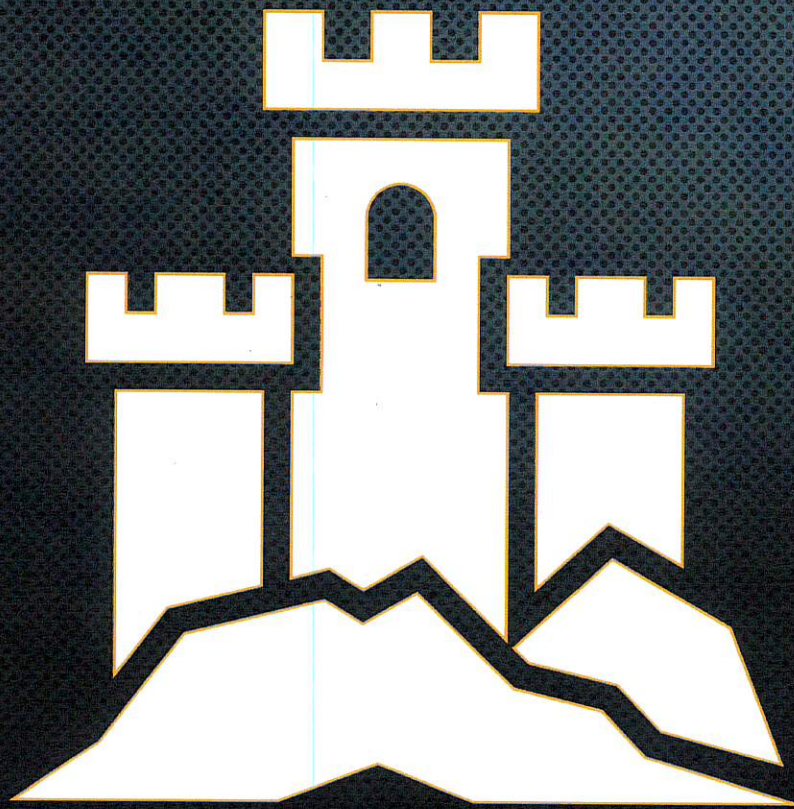
- dead birds eggs (washed, sanitized) feed
 manure replacement birds/pullets equipment
 spent hens other unwashed eggs litter

for the date(s) stated on the permit.

I agree to follow all of the enhanced biosecurity conditions specified by the IMT and/or in the Secure Food Supply Plan for the commodity I am moving, including:

- Both premises must have an activated enhanced biosecurity plan.
- All conveyances will be cleaned and disinfected as specified by the IMT or as described in the SFS Biosecurity Plan/Enhanced Biosecurity Plan. The truck must be cleaned and disinfected before entering and after leaving both premises. The truck should also be cleaned and disinfected (including the inside) after delivering processed eggs to the egg cooler.
- Truck drivers/loaders/handlers have been instructed in proper biosecurity and are following recommended practices at all times.
- Eggs can only be moved on paper flats. No flats can leave the processor, until further notice from the IMT. Paper flats moving from the processor to a landfill require a permit, and no unprocessed eggs from any ranch can leave the processor.
- All movements under this permit must be reported/entered prior to the movement or at the time of the movement via a state approved method.
- All movements will cease if any clinical signs of disease are noted on the ranch supplying the eggs.
- The ranch is on a twice weekly surveillance testing schedule.

If an audit identifies that any of these conditions is not being met, I understand that my privilege to move the commodity under this permit will be revoked until I can demonstrate adherence to the conditions described in this permit.



DOING ALL
WE CAN TO
PROTECT THE
CASTLE

QUESTIONS?

ACKNOWLEDGEMENTS:

- LISA QUIROZ
- DR. REBECCA CAMPAGNA
- DR. ALISHA OLMSTEAD
- DR. ANDREA MIKOLON
- MARK JACOBS
- DR. ALEXI HAACK
- JOHN BECHARD
- DR. JENNIFER SIEMBIEDA

