Voluntown/Sterling Transfer Station Commission Special Meeting

AGENDA

Ekonk Community Grange Hall, 723 Ekonk Hill Road, Sterling

April 3, 2025

7:00 PM

Page

I. Approval of Minutes

a. Minutes of the September 25, 2024 and December 4, 2024 meeting of the Voluntown/Sterling Transfer Station Commission — 2 - 4
Voluntown/Sterling Transfer Station Commission - Special MeetingDec 04 2024 - Minutes - Pdf
Voluntown/Sterling Transfer Station Commission - Sep 25 2024 - Minutes - Pdf

II. Citizens Comments

III. Correspondence

IV. Expense Report

a. Report — 5 - 7
balance sheet 2282025
P&L 02282025

V. New Business

a. Fixed Asset Limitation — 8
treasurer email

b. Budget 25-26 — 9 - 10
VS Budget 2025-26 proposed

c. Avian Flu Emergency Response Proposed Composting Site — 11 - 154
Avian Flu State Response Proposed Plan
Responses-to-questions-for-DoAg-DEEP-for-poultry-composting-4.29.23

d. Appointment of the Auditor

VI. Adjournment

The next scheduled meeting will be held on June 25, 2025.

MINUTES
Voluntown/Sterling Transfer Station Commission Special Meeting

December 4, 2024 - 7:30 PM

Ekonk Community Grange Hall, 723 Ekonk Hill Road, Sterling

The Voluntown/Sterling Transfer Station Commission special meeting was held in person on December 4, 2024. The Chairman called the meeting to order at 7:30 PM.

Members Present	Steve Stephanski Jr, Geoff Cooper, and Lincoln Cooper
Members Absent	Gil Grimm, John Gileau, Melinda Bryan, Tracey Hanson, and Ernie Lewis
Town Officials	Julie Zelinsky, Finance Director/Selectman's Assistant

I. New Business

a. Voluntown/Sterling Financial Statements Draft

A motion was made by Steve Stephanski Jr/Lincoln Cooper to approve the VS Transfer Station draft audit as presented. Quorum Met 3-0.

II. Executive Session

a. New Hire - Substitute

The commission went into executive session at 7:35pm and came out of executive session at 7:45pm

A motion was made by Steve Stephanski Jr/Lincoln Cooper to approve hiring David Loranger and John Corey as substitutes for the V/S Transfer Station. Quorum Met 3-0.

III. Adjournment

A motion was made by Lincoln Cooper/ to adjourn the meeting. The meeting adjourned at 7:58pm. Quorum Met 3-0.

Approved by:

Tracey Hanson

_____

Tracey Hanson, First Selectman

MINUTES
Voluntown/Sterling Transfer Station Commission Meeting

September 25, 2024 - 7:00 PM

Ekonk Community Grange Hall, 723 Ekonk Hill Road, Sterling

The Voluntown/Sterling Transfer Station Commission was held in person on September 25, 2024. The Chairman called the meeting to order at 7:00 PM.

Members Present	John Gileau, Melinda Bryan, Steve Stephanski Jr, Geoff Cooper, Ernie Lewis, and Lincoln Cooper
Members Absent	Gil Grimm and Tracey Hanson
Town Officials	Julie Zelinsky, Finance Director/Selectman's Assistant

I. Approval of Minutes

a. Minutes of the June 26, 2024 meeting of the Voluntown/Sterling Transfer Station Commission

A motion was made by Geoff Cooper/Melinda Bryan to approve the minutes of the regular meeting held on June 26, 2024. Motion carried 6-0.

II. Citizens Comments

None

III. Additions to Agenda

a. Extra help for October

A motion was made by Ernie Lewis/John Gileau to Add additional Help for October Motion carried 6-0.

IV. Correspondence

None

V. Expense Report

a. Report

Ms. Zelinsky reviewed to expenditure report with the Commission.

VI. New Business

a. Snow Plow Bid results

A motion was made by John Gileau/Melinda Bryan to accept the bid as submitted by AMSealers. Motion carried 6-0.

b. Transfer Station Assistant - Substitute - Job Description

The Commission decided that Mr. Trahan will do the interviews and send his recommendation to the board on who should be hired as the Transfer Station

Substitute. A special meeting will be held to approve the new hire.

c. Internet

The Transfer Station has added internet. The commission discussed adding credit cards as an acceptable form of payment. It was decided that Mr. Trahan will report back on the number of requests to accept credits cards.

d. Schedule of Meetings 2025

A motion was made by Steve Stephanski Jr/Ernie Lewis to approve the schedule of meetings for 2025. Motion carried 6-0.

e. Extra Help for October

A motion was made by Ernie Lewis/John Gileau to approve Beth Taylor ans extra help for the month of October. Motion carried 6-0.

VII. Adjournment

A motion was made by Steve Stephanski Jr/John Gileau to adjourn the meeting. The meeting adjourned at 7:30pm. Motion carried 6-0.

10:41 AM

Voluntown/Sterling Transfer Station
Balance Sheet
Accrual Basis — As of March 19, 2025

	Mar 19, 25
ASSETS	
Current Assets	
Checking/Savings	
10500 · Centreville	-7,377.64
10400 · STIFF	107,177.20
10100 · CHECKING	8,655.14
Total Checking/Savings	108,454.70
Total Current Assets	108,454.70
TOTAL ASSETS	**108,454.70**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
20100 · Accounts Payable Accrual	-4,861.74
Total Accounts Payable	-4,861.74
Other Current Liabilities	
22000 · Payroll Liabilities	
22300 · Payroll Adjustments	-2,970.30
Total 22000 · Payroll Liabilities	-2,970.30
Total Other Current Liabilities	-2,970.30
Total Current Liabilities	-7,832.04
Long Term Liabilities	
27000 · Due to Voluntown/Sterling	
27100 · Sterling	43,095.90
27200 · Voluntown	32,752.51
27000 · Due to Voluntown/Sterling - Other	-37,554.00
Total 27000 · Due to Voluntown/Sterling	38,294.41
Total Long Term Liabilities	38,294.41
Total Liabilities	30,462.37
Equity	
31110 · Retained Earnings	0.23
Net Income	77,992.10
Total Equity	77,992.33
TOTAL LIABILITIES & EQUITY	**108,454.70**

10:44 AM

Voluntown/Sterling Transfer Station
Profit & Loss Budget vs. Actual
Accrual Basis — July 2024 through February 2025

	Jul '24 - Feb 25	Budget	$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
40100 · Appropriations				
40110 · Voluntown Appropriations	70,032.00	69,189.98	842.02	101.2%
40120 · Sterling Appropriations	104,366.06	99,566.06	4,800.00	104.8%
Total 40100 · Appropriations	174,398.06	168,756.04	5,642.02	103.3%
41000 · Charges for Services				
41100 · Permits & Fees				
41112 · 2 - Second Permit	400.00	500.00	-100.00	80.0%
41123 · 3 - Permit	32,470.00	34,500.00	-2,030.00	94.1%
Total 41100 · Permits & Fees	32,870.00	35,000.00	-2,130.00	93.9%
41200 · Recyclables	5,767.00	8,500.00	-2,733.00	67.8%
41300 · Disposable Bags				
41301 · 1 - Large Bags	27,500.00	37,000.00	-9,500.00	74.3%
41304 · 4 - Small Bags	8,540.00	13,000.00	-4,460.00	65.7%
41313 · 13 - One Small Bag	0.00	7.50	-7.50	0.0%
41314 · 14 - One Large Bag	16.00	20.00	-4.00	80.0%
Total 41300 · Disposable Bags	36,056.00	50,027.50	-13,971.50	72.1%
41400 · Bulky Waste				
41409 · 9 - Small Pickups	1,725.00	2,500.00	-775.00	69.0%
41410 · 10 - Full Size Pickups	2,115.00	1,500.00	615.00	141.0%
41411 · 11 - Stoves	25.00	40.00	-15.00	62.5%
41412 · 12 - Washers & Dryers	65.00	40.00	25.00	162.5%
41415 · 15 - Sofas & Chairs	4,010.00	4,500.00	-490.00	89.1%
41416 · 16 - Trailers	755.00	800.00	-45.00	94.4%
Total 41400 · Bulky Waste	8,695.00	9,380.00	-685.00	92.7%
41500 · 5 - Tires	424.00	1,000.00	-576.00	42.4%
41800 · 8 - CFCs	610.00	500.00	110.00	122.0%
41900 · Miscellaneous Income				
41901 · Over/Short	62.50			
41900 · Miscellaneous Income - Other	0.00	0.00	0.00	0.0%
Total 41900 · Miscellaneous Income	62.50	0.00	62.50	100.0%
Total 41000 · Charges for Services	84,484.50	104,407.50	-19,923.00	80.9%
46000 · Interest Income	2,260.69	2,500.00	-239.31	90.4%
Total Income	261,143.25	275,663.54	-14,520.29	94.7%
Gross Profit	261,143.25	275,663.54	-14,520.29	94.7%
Expense				
61100 · Bag Purchase	2,386.50	10,000.00	-7,613.50	23.9%
62000 · Bookkeeping	4,574.70	6,996.60	-2,421.90	65.4%
66000 · 457B- T/S Contribution	4,741.90	6,595.41	-1,853.51	71.9%
67300 · Payroll Expense	1,014.33	1,500.00	-485.67	67.6%
67270 · Professional Fees				
67280 · Auditor	11,025.00	11,000.00	25.00	100.2%
Total 67270 · Professional Fees	11,025.00	11,000.00	25.00	100.2%
62500 · Bulky Waste/Hauling	33,182.51	58,000.00	-24,817.49	57.2%
63500 · Employee's				
63560 · Transfer Station - SJT	41,944.51	65,954.13	-24,009.62	63.6%
63580 · Transfer Station Laborer- AC	11,830.72	19,135.20	-7,304.48	61.8%
63520 · Transfer Station Laborer - ALL	12,364.92	18,951.21	-6,586.29	65.2%
65390 · Transfer Station Laborer - Sub	589.44	1,500.00	-910.56	39.3%
63540 · Transfer Station Laborer - RDM	0.00	0.00	0.00	0.0%
Total 63500 · Employee's	66,729.59	105,540.54	-38,810.95	63.2%

10:44 AM

Voluntown/Sterling Transfer Station
Profit & Loss Budget vs. Actual
Accrual Basis — July 2024 through February 2025

	Jul '24 - Feb 25	Budget	$ Over Budget	% of Budget
64500 · Hazardous Waste Day	1,959.23	2,000.00	-40.77	98.0%
65000 · Insurance				
65200 · Bonds	134.00	134.00	0.00	100.0%
65300 · Worker's Compensation	4,089.41	4,700.00	-610.59	87.0%
65100 · Stipend	0.00	1,500.00	-1,500.00	0.0%
Total 65000 · Insurance	4,223.41	6,334.00	-2,110.59	66.7%
66500 · Miscellaneous Expense	640.00	500.00	140.00	128.0%
67000 · Monitoring	0.00	602.00	-602.00	0.0%
67100 · MSW Disposal	29,079.04	38,000.00	-8,920.96	76.5%
67400 · P.O. Box/Postage	72.00	202.00	-130.00	35.6%
68300 · State Permits	0.00	800.00	-800.00	0.0%
68000 · Repairs & Maintenance	2,250.58	2,000.00	250.58	112.5%
68100 · Security	0.00	300.00	-300.00	0.0%
68550 · Snow Plow Removal	4,500.00	6,000.00	-1,500.00	75.0%
68400 · Sticker purchase	0.00	525.00	-525.00	0.0%
68200 · Social Security	5,906.21	8,617.99	-2,711.78	68.5%
68500 · Subcontracted Services	1,086.27	500.00	586.27	217.3%
68600 · Supplies	0.00	350.00	-350.00	0.0%
68700 · Tires	110.00	1,200.00	-1,090.00	9.2%
68800 · Uniforms	0.00	300.00	-300.00	0.0%
69100 · Utilities				
69110 · Diesel Fuel	791.94	900.00	-108.06	88.0%
69120 · Electric	1,323.51	2,200.00	-876.49	60.2%
69130 · Propane	332.32	500.00	-167.68	66.5%
69140 · Telephone	1,096.92	3,000.00	-1,903.08	36.6%
Total 69100 · Utilities	3,544.69	6,600.00	-3,055.31	53.7%
69500 · Waste Oil	931.18	1,200.00	-268.82	77.6%
Total Expense	177,957.14	275,663.54	-97,706.40	64.6%
Net Ordinary Income	83,186.11	0.00	83,186.11	100.0%
Net Income	**83,186.11**	**0.00**	**83,186.11**	**100.0%**

Agenda Item #V.a.

Outlook

Transfer Station Fixed Asset Limit

From Anthony Madeira <amadeira@voluntown.gov>
Date Thu 1/9/2025 2:57 PM
To Julie Zelinsky <jzelinsky@voluntown.gov>

Julie,

Would you please have the Transfer Station change their fixed asset limitation from $5K to $10K. This will make things a little easier as the $10K is the same amount as the Town's fixed asset limitation,

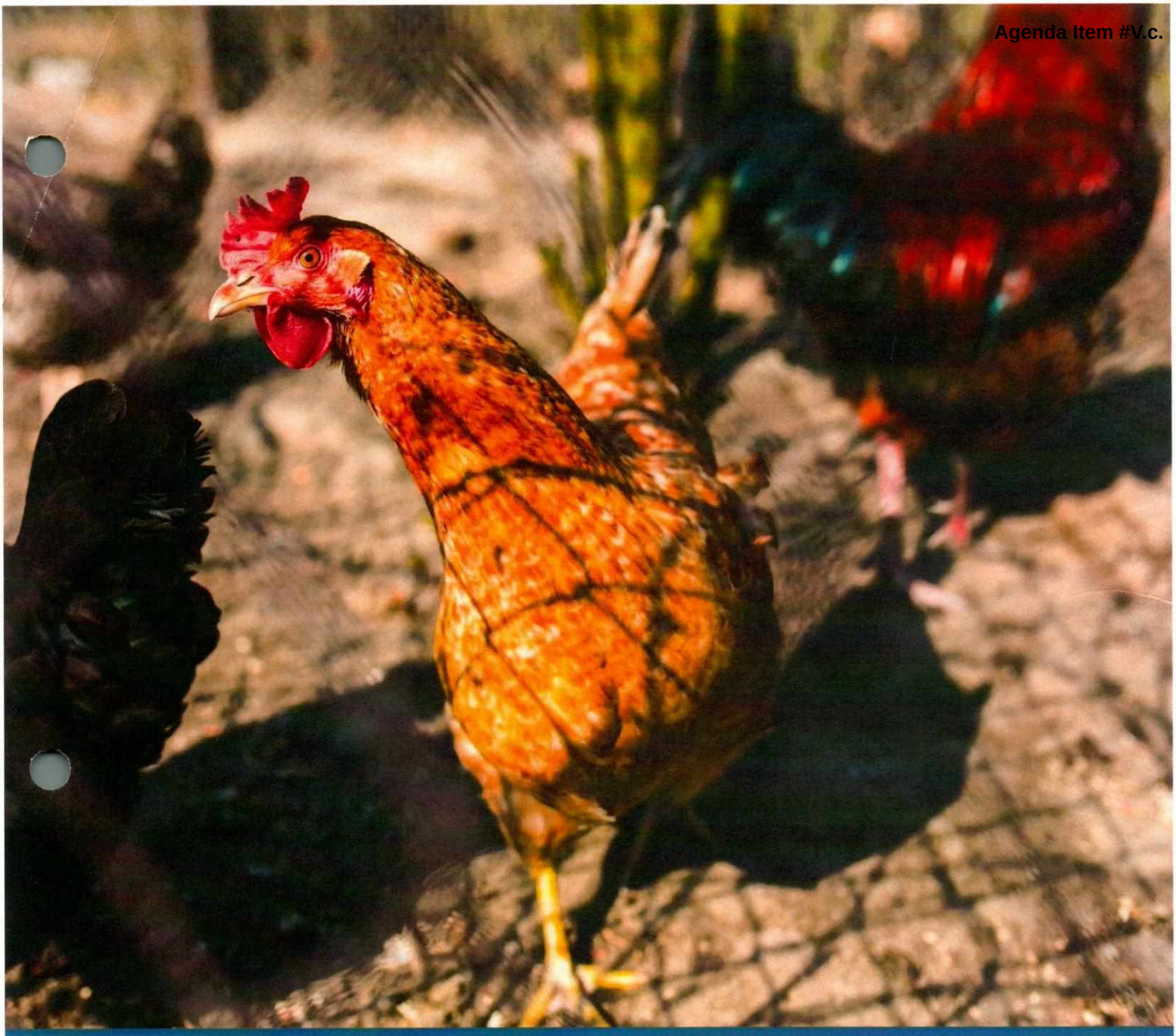
Thanks,
Tony Madeira, CPFO
Treasurer
Town of Voluntown
115 Main St
PO Box 96
Voluntown, CT 06384

Voluntown/Sterling Transfer Station
Budget
Fiscal Year 2025-2026

	A	K	M	N	P	Q	S
1		Actual	Actual	Actual	Actual	Budget	Budget
2	**INCOME**	**2020-2021**	**2021-2022**	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
3					29-May		
4	Second Permit	$350.00	$650.00	$500.00	$460.00	$500.00	$500.00
5	Permit	$33,960.00	$32,840.00	$34,120.00	$35,160.00	$34,500.00	$36,000.00
6	Recyclables	$7,421.92	$13,607.00	$8,450.60	$5,981.98	$8,500.00	$9,500.00
7	Large Bags	$26,850.00	$41,635.00	$36,610.00	$40,602.00	$37,000.00	$40,000.00
8	Small Bags	$23,372.50	$8,827.50	$12,982.00	$13,844.00	$13,000.00	$13,000.00
9	One Small Bag	$3.00	$16.50	$0.00	$3.00	$7.50	$7.50
10	One Large Bag	$24.00	$76.00	$18.00	$56.00	$20.00	$20.00
11	Small Pickups	$2,115.00	$1,920.00	$2,855.00	$2,800.00	$2,500.00	$2,500.00
12	Full Size Pickups	$1,070.00	$1,385.00	$1,650.00	$3,850.00	$1,500.00	$3,500.00
13	Stoves	$25.00	$45.00	$35.00	$85.00	$40.00	$40.00
14	Washers & Dryers	$90.00	$20.00	$45.00	$75.00	$40.00	$40.00
15	Sofas & Chairs	$4,465.00	$4,210.00	$4,880.00	$4,935.00	$4,500.00	$5,500.00
16	Trailers	$525.00	$325.00	$1,000.00	$900.00	$800.00	$800.00
17	Tires	$780.00	$634.00	$684.00	$677.00	$1,000.00	$1,000.00
20	CFC's	$758.00	$660.00	$500.00	$588.00	$500.00	$800.00
21	Miscellaneous Income	$2.98	$840.99	$2,855.44	$13,297.92	$2,500.00	$0.00
22	Interest Income	$0.00	$0.00	$0.00	$0.00	$0.00	$3,500.00
23	NSF check fees	$0.50	$50.50	$0.00	$0.00	$0.00	$0.00
24							
25	**TOTAL INCOME**	**$101,812.90**	**$107,742.49**	**$107,185.04**	**$123,314.90**	**$106,907.50**	**$116,707.50**
26							
27							
28	**EXPENSE**						
29	Bag Purchase	$0.00	$7,152.00	$8,985.00	$11,519.20	$10,000.00	$10,000.00
30	Bookkeeping	$6,334.74	$6,100.12	$6,500.00	$6,727.50	$6,996.60	$7,206.50
31	457B - Town Contribution	$5,478.47	$5,724.98	$6,026.71	$6,199.10	$6,595.41	$8,002.60
32	Payroll Expense	$2,536.20	$2,666.07	$2,818.86	$1,289.51	$1,500.00	$1,885.00
33	Auditor	$5,600.00	$5,175.00	$10,000.00	$10,500.00	$11,000.00	$11,500.00
34	Bulky Waste/Hauling	$52,301.71	$46,429.30	$56,542.07	$57,027.96	$58,000.00	$58,000.00
35	CFC Removal/Electronics	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
36	Employee's:						
37	Transfer Station Operator	$60,982.08	$59,778.42	$60,017.23	$64,094.45	$65,954.13	$67,932.75
38	Transfer Station Assistant	$13,520.54	$14,098.00	$17,506.89	$17,036.65	$19,135.20	$19,709.26
39	Transfer Station Assistant	$16,996.32	$17,110.53	$16,959.37	$19,418.65	$18,951.21	$19,709.26
40	Transfer Station Assistant	$4,167.68	$2,019.49	$615.96	$0.00	$1,500.00	$2,000.00
41	Equipment Lease/Rental/Purchase	$10,250.00	$4,800.00	$0.00	$55,350.00	$0.00	$0.00
42	Hazardous Waste Day	$0.00	$0.00	$0.00	$3,146.91	$2,000.00	$2,000.00
43	Insurance:						
44	Bonds	$117.00	$117.00	$134.00	$0.00	$134.00	$134.00
45	Workmen's Comp.	$5,547.00	$5,114.00	$4,787.00	$4,650.00	$4,700.00	$4,500.00
46	Stipend	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$2,000.00
47	Miscellaneous Expense	$170.00	$3,525.78	$1,845.31	$701.25	$500.00	$500.00
48	Monitoring	$0.00	$314.25	$0.00	$0.00	$602.00	$602.00
49	MSW Disposal	$32,926.37	$32,775.72	$36,007.32	$40,478.89	$38,000.00	$43,000.00
50	NSF Checks	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
51	Postage	$166.00	$348.50	$192.00	$70.00	$202.00	$202.00
52	State Permits	$880.00	$800.00	$800.00	$800.00	$800.00	$800.00
53	Repairs and Maintenance	$806.59	$772.08	$1,607.42	$796.43	$2,000.00	$2,500.00
54	Security	$300.00	$300.00	$300.00	$458.25	$300.00	$300.00
55	Snow Plowing	$0.00	$0.00	$2,400.00	$3,700.00	$6,000.00	$6,000.00
56	Sticker Purchase	$501.00	$473.00	$496.00	$498.00	$525.00	$525.00
57	Social Security	$7,362.76	$7,228.06	$7,679.44	$8,242.81	$8,617.99	$9,250.00
58	Subcontracted Services	$390.72	$667.60	$547.52	$290.91	$500.00	$0.00
59	Supplies	$152.61	$225.30	$96.65	$342.86	$350.00	$350.00
60	Tires	$1,736.56	$2,054.06	$958.50	$1,644.50	$1,200.00	$1,200.00
61	Uniforms	$0.00	$0.00	$0.00	$0.00	$300.00	$300.00
62	Utilities:						
63	Diesel Fuel	$354.38	$1,427.35	$0.00	$931.20	$900.00	$900.00
64	Electric	$1,425.62	$1,770.31	$2,074.24	$1,841.86	$2,200.00	$2,200.00

Voluntown/Sterling Transfer Station
Budget
Fiscal Year 2025-2026

	A	K	M	N	P	Q	S
65	Propane	$564.73	$259.30	$248.04	$286.06	$500.00	$500.00
66	Telephone	$1,225.01	$1,349.25	$1,520.21	$1,746.15	$3,000.00	$1,500.00
67	Water	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
68	Waste Oil	$1,276.00	$1,226.75	$1,196.00	$1,300.86	$1,200.00	$1,350.00
69	Bank - Service Charge Adjustment						
70	**TOTAL EXPENSE**	**$235,570.09**	**$233,302.22**	**$250,361.74**	**$322,589.96**	**$275,663.54**	**$286,558.36**
71							
72							
73	TOTAL EXPENSE		$233,302.22	$250,361.74	$267,239.96	$275,663.54	$286,558.36
74	TOTAL INCOME		$107,742.49	$107,185.04	$113,514.90	$106,907.50	$116,707.50
75							
76	**TOTAL NEEDED FROM TOWNS**		**$125,559.73**	**$143,176.70**	**$153,725.06**	**$168,756.04**	**$169,850.86**
77							
78	Sterling Appropriation (59%)		$74,080.24	$84,474.25		$99,566.06	$100,212.01
79	Voluntown Appropriation (41%)		$51,479.49	$58,702.45		$69,189.98	$69,638.85



State of Connecticut

Avian Influenza Monitoring and Response Plan (AIMRP)

An ESF 11 Annex to the State Response Framework

May 2017

Approval

The State of Connecticut Avian Influenza Monitoring and Response Plan (AIMRP) has been developed in accordance with State and Federal guidance. Version 2.0, released as of May 2017, is an updated, re-organized version of the 2010 Avian Influenza Response Plan and should be read in conjunction with the State Response Framework (SRF) and other appropriate state and federal emergency management and response plans.

This plan was developed by the Connecticut Department of Agriculture with assistance from the Connecticut Department of Emergency Services and Public Protection, Division of Emergency Management and Homeland Security, along with various State, Local and Federal Partners on the HPAI Avian Influenza Working Group.

Steven K. Reviczky, Commissioner
Department of Agriculture

DATE: 5/15/17

Dora B. Schriro, Commissioner
Department of Emergency Services and Public Protection

DATE: 5/31/17

Bruce A. Sherman, DVM, MPH
Bureau of Inspection and Regulation
Department of Agriculture

DATE: 5/9/17

William J. Hackett, Acting Deputy Commissioner/State Emergency Management Director
Division of Emergency Management and Homeland Security
Department of Emergency Services and Public Protection

DATE: 5/31/17

Mary Jane Lis, MS, DVM, PhD
State Veterinarian
Department of Agriculture

DATE: 05-05-2017

Executive Summary

Since mid-December 2014, there have been several ongoing highly pathogenic avian influenza (HPAI) incidents along the Pacific, Central and Mississippi Flyways. Cases in wild birds, backyard flocks and commercial poultry have been reported in at least twenty-one states along these flyways. The US Department of Agriculture (USDA) is working closely with other Federal departments and State officials across the country on rigorous surveillance, reporting and control efforts in response to this Avian Influenza (AI) incident. At the time of this writing, AI has not been detected in the State of Connecticut; however, the Connecticut Department of Agriculture, in collaboration with the Department of Emergency Services and Public Protection/Division of Emergency Management and Homeland Security, convened a Highly Pathogenic Avian Influenza (HPAI) Workgroup to review and update the State's current Avian Influenza Monitoring and Response Plan (AIMRP). Successful eradication of avian influenza is contingent upon the collaboration of many state, local and federal agencies, and private sector entities.

Avian influenza has the potential to result in significant economic losses for the poultry industry in the State of Connecticut in the event of a localized or regionalized incident. Avian Influenza (AI), commonly referred to as the bird flu, is a viral infection of birds including chickens, turkeys, guinea fowl, and other avian species. Wild waterfowl and shore birds are considered the natural reservoir for AI viruses.

- AI is caused by a group of viruses known as type A influenzas.
- AI viruses are classified as either highly pathogenic AI (HPAI) or low pathogenic AI (LPAI), based on the genetic features of the virus and the severity of disease in poultry.
- While most AI viruses are LPAI and usually result in mild or subclinical infections, HPAI viruses are associated with very high morbidity and mortality rates in poultry, up to 90 to 100 percent.

The Connecticut Department of Agriculture (DoAg) cooperates with USDA surveillance and response plan requirements as outlined in the National Poultry Improvement Plan (NPIP) and the Live Bird Marketing System (LBMS) program. A component of the NPIP is the ongoing surveillance in commercial poultry flocks to detect Low Pathogenic Avian Influenza (LPAI). This same surveillance testing also detects Highly Pathogenic Avian Influenza (HPAI).

- If LPAI is detected in a poultry flock, measures are taken to prevent the spread of the disease in the poultry population, such as quarantine and depopulation or controlled marketing to eliminate the virus from the population. These strains of the virus cause no known serious threat to human health.

- If HPAI is confirmed, specific response plans and procedures currently in place are designed to contain and eradicate the outbreak or incident. According to the Centers for Disease Control and Prevention (CDC), the risk to people from the current HPAI viruses in wild birds, backyard flocks, and commercial poultry, is considered low. These strain of the virus do not normally threaten human health and commonly circulate among wild birds.

In the event of an incident of either LPAI or HPAI, the State's AIMRP would be implemented in conjunction with the State Response Framework (SRF). As noted in the SRF, the State of Connecticut has adopted the National Incident Management System (NIMS) and an Incident Command System (ICS) organizational approach to manage all hazards, including avian influenza incidents. In addition to technical support and assistance from USDA, the Connecticut Department of Agriculture will draw on a number of federal, state, and local resources and industry stakeholders to prevent, prepare, respond to and recover from an avian influenza incident. (**See Attachment 1: Important Defintions and Acronyms** for further clarification of terms and acronyms)

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Section 1. Avian Influenza Plan Narrative

A. Purpose and Scope

1. Purpose

The purpose the Connecticut Avian Influenza Monitoring and Response Plan (CT AIMRP) is to establish procedures to prevent, prepare, respond to and recover from a potential or actual outbreak or incident of Avian Influenza in poultry in the State of Connecticut. The AIMRP is intended to establish and maintain ongoing communication and coordination within and between the commercial poultry and egg industry and local, state, and federal government agencies concerning the avian influenza threat.

By exercising the measures currently in place and the procedures established in CT AIMRP, it is the intent of the State to detect, control, and eliminate the threat of or an actual outbreak or incident of avian influenza within Connecticut. In adopting this plan, the State is attempting to mitigate the social and economic impacts a state-wide outbreak or incident might cause, as well as reduce the risk of transmission to the human population.

The CT AIMRP meets the National Poultry Improvement Plan (NPIP) initial State response and containment planning standards as found in 9CFR 56.1 for the management and response to a Low Pathogenic Avian Influenza (LPAI) incident.

In the event of an HPAI incident, the CT AIMRP will be implemented along with appropriate federal guidance and response plans including the USDA *Highly Pathogenic Avian Influenza (HPAI) Response Plan: The Red Book (draft Aug 2015).* The Red Book:

- Provides strategic guidance for USDA's Animal and Plant Health Inspection Service (APHIS) and responders at all levels in the event of an HPAI incident,
- Provides current policy information and a strategic framework for the control and eradication of HPAI, should an outbreak or incident occur in the United States.
- offers guidance on critical response activities and tools, such as disposal, appraisal and compensation, and quarantine and movement control,
- provides links to current HPAI standard operating procedures (SOPs), National Animal Health Emergency Management System (NAHEMS) Guidelines, and existing APHIS memoranda, and
- complements, not replaces, existing State, local, Tribal, and industry plans.

2. Scope of Operation

The Connecticut Avian Influenza Response Plan (CT AIMRP) was developed by the Connecticut Department of Agriculture (DoAg) with support from the Department of Emergency Services and Public Protection/Division of Emergency Management and Homeland Security (DESPP/DEMHS), the Department of Public Health (DPH), the Department Energy and Environmental Protection (DEEP), the University of Connecticut (UCONN) and other support agencies and industry stakeholders. The CT Department of Agriculture is the lead State agency for domestic animal health emergencies affecting the State.

This plan provides guidance to state and local government agencies, other support agencies/organizations, and the agriculture industry. Operations discussed in this document are aimed at detecting, containing, and eliminating avian influenza in poultry and in protecting human health.

The procedures established in implementing the CT AIMRP shall not be construed to limit the statutory or regulatory authority of the Connecticut Department of Agriculture (CT DoAg), the Governor, or other

appropriate state agencies or officials to take actions, issue orders or impose requirements that are not specified in or that vary from the Plan. The DoAg may not implement this plan or to impose standards or protocols set forth in this plan if it determines other protocols or standards are more appropriate in a given situation. Strategies and tactics may be revised with the benefit of incident specific information including, but not limited to, virus strain, pathogenicity, morbidity and mortality, movement of birds and products, and additional epidemiological information obtained as a result of avian influenza investigation.

3. Goals and Objectives

The State Response Framework (SRF) identifies the State Essential Functions that must be continued under all circumstances to enable the State to carry out its critical government functions and services. These critical state government functions save lives; protect the safety and security of the public; and protect property, critical infrastructure and the environment. Consistent with the SRF and the state essential functions, the CT AIMRP was developed and will be implemented based on the following four goals and objectives:

- Prevention - prevent the introduction and/or spread of Avian Influenza in the State.
- Preparedness - prepare for rapid and coordinated response to Avian Influenza in the State.
- Response - respond to the presence of Avian Influenza, through diagnostic testing, quarantine, and depopulation as necessary to minimize the spread of disease, the loss of animals, and disruption in the economy.
- Recovery – recover from the economic impact of Avian Influenza on Connecticut's poultry and allied industries.

These goals and objectives are in concert with USDA Animal and Plant Health Inspection Service (APHIS) goals for an avian influenza (AI) incident response which are:

- detect, control, and contain HPAI in poultry as quickly as possible;
- eradicate HPAI virus using strategies to protect public health and the environment, and stabilize animal agriculture, the food supply, and the economy; and
- provide science- and risk-based approaches and systems to facilitate continuity of business for non-infected animals and non-contaminated animal products.

Achieving these goals will allow individual poultry facilities, States, Tribal Nations, regions, and industries to resume normal production as rapidly as possible. The objective is to allow the United States to regain disease-free status without the response effort causing more disruption and damage than the disease itself.

B. Authority

1. Statutes and Regulations

The authority to respond to avian disease is given in Connecticut General Statute (C.G.S) Section 22-324, "Prevention of avian disease. Orders. Regulations re: avian disease and sanitary handling of eggs." The statute states that the Commissioner of Agriculture "may issue such order as he deems necessary to prevent the introduction or spread of [avian disease] in the state". **See Attachment 2-Regulations of Connecticut State Agencies)**

Further authority is addressed in C.G.S. Section 22-286. The Commissioner of Agriculture may accept assistance from the federal government "financial or otherwise, for the condemnation of diseased animals, for remunerating the owners thereof and for carrying out the provisions of this chapter as may be available from time to time." Upon request by the Commissioner of Agriculture, the federal government, "shall have the right

of inspection, quarantine and condemnation of animals affected with any contagious, infectious or communicable disease or suspected to be affected with, or that have been exposed to, any such disease, and may enter any ground or premises for these purposes." Further, the Commissioner "may call upon law enforcement officials including but not limited to, state police and municipal police officers to assist them...and law enforcement officials shall render such assistance when so called upon."

Further statutory authority includes but may not be limited to:

Connecticut General Statutes:

- C.G.S. § 22-4c(5) Power of the Commissioner to enter onto property
- C.G.S. § 22-4d Cease and desist orders
- C.G.S. § 22-26f (d) State Veterinarian's Power to Issue Orders and Protect the Public
- C.G.S. § 22-278 Orders and Regulations for control of livestock diseases
- C.G.S. § 22-279-279a Quarantine of animals including poultry
- C.G.S. § 22-285 Emergency Appropriations
- C.G.S. § 22-324 Prevention of Avian Disease
- C.G.S. § 22-324a Sanitary disposal facilities for dead poultry
- C.G.S. § 22-325 Importation Regulation
- C.G.S. § 22-326c Compensation for destroyed poultry

Regulations of Connecticut State Agencies
RCSA § 22-324-1 through 11: Authorize the Department of Agriculture to take certain actions to control the spread of Highly Pathogenic Avian Influenza as listed below.

- § 22-324-2: Intrastate movement of infected or exposed live poultry or materials.
- § 22-324-3: Contaminated means of conveyance, premises, containers, and other accessories; not to be used for the movement of poultry until cleaned and disinfected.
- § 22-324 -4: Quarantined Areas
- § 22-324-5: Prohibited Articles
- § 22-324-6: Restricted Articles
- § 22-324-7: Permits for movement of restricted articles
- § 22-324-8: Movement by USDA or CT DoAg for diagnostic or experimental purposes; other movements
- § 22-324-9: Inspection and Seizures
- § 22-324-10: Disposal
- § 22-324-11: Cleaning and Disinfecting Requirements

Code of Federal Regulations:
United States Department of Agriculture

- USDA Animal and Plant Health Inspection Service (APHIS) TITLE 9 Animals and Animal Products (9CFR53.2)

C. Situation and Assumptions

1. Situation

a. Poultry in Connecticut

Highly pathogenic avian influenza (HPAI) was diagnosed in the northwestern United States in late 2014. It has been steadily moving eastward following the flight patterns of migratory waterfowl. Migratory waterfowl are the main reservoirs for the disease. The disease causes high morbidity and mortality in domestic poultry (chickens and turkeys), but as of December 2015, has not shown any capacity to infect people. In 2014-2015, approximately 50 million chickens and turkeys have died from the virus or from measures to control its spread. In addition to the direct losses of poultry, many countries have placed bans or restrictions on imports of poultry and poultry products from the United States. The cost of this incident is in the billions of dollars.

In Connecticut, the poultry population is estimated to be just over 4.9 million birds. There are two Commercial production facilities in Connecticut that have a poultry population over 1 million and there are an additional 4 locations with between 200,000-800,000 poultry each. There are at least 15 commercial operations with flocks of anywhere from 500-30,000 poultry each. Connecticut is also home to an internationally recognized company producing specific pathogen-free avian products used in the development and manufacture of vaccines and in medical research. Approximately 250,000 dozen table eggs a day are produced in Connecticut. Poultry contributes more than 224 million dollars a year in table eggs sales alone to State's economy **(See Attachment 3-Economic Impact report from CT Department of Economic and Community Development.)**

In addition to the large commercial operations, there are approximately 500 or more so-called "backyard" flocks, which include farms with fewer than 500 birds and residences with poultry being raised for personal use, fairs, shows, and exhibition.

Avian influenza spreads quickly by bird-to-bird contact.[1] Avian influenza virus can travel on manure, egg flats, crates, other farming materials or equipment, and people who have picked up the virus on their clothing, shoes, or hands.[2] Commercial production facilities are at the highest risk for disease, due to the large numbers of birds in confined areas and the movement of potentially contaminated vehicles and materials among farms. While standard biosecurity efforts practiced by the poultry industry may have been sufficient in the past, evidence of farm-to-farm spread of the HPAI virus strain circulating in the Midwest shows that stricter biosecurity is needed.[3] Backyard flocks and small farms can also be infected, through contact with wild birds, contaminated vehicles, equipment or people.

b. Avian Influenza Strains

Highly Pathogenic Avian Influenza (HPAI) vs Low Pathogenic Avian Influenza Viruses (LPAI)

Avian Influenza (AI) viruses are classified by a combination of two groups of proteins: the hemagglutinin or H proteins, of which there are 16 (H1-H16), and neuraminidase or N proteins, of which there are 9 (N1-N9).

AI viruses are also divided into two groups based on their ability to produce disease in poultry: Low Pathogenic Avian Influenza (LPAI) and Highly Pathogenic Avian Influenza (HPAI).

HPAI virus is any influenza virus that kills at least 75 percent of four to six week old chickens within ten days following intravenous inoculation of 0.2 ml of a 1:10 dilution of infectious allantoic fluid; or any H5 or H7 influenza virus that has an amino acid sequence at the hemagglutination cleavage site compatible with HPAI, or any influenza virus that grows in cell culture in the absence of trypsin. This is consistent with the World Organisation for Animal Health's Office of International Epizootics (OIE) definition of HPAI and the definition included in 9 CFR § 53.1.

[1] (United States Department of Agriculture, Biosecurity Guide for Poultry and Bird Owners, 2014)
[2] (United States Department of Agriculture, Biosecurity Guide for Poultry and Bird Owners, 2014)
[3] (United States Department of Agriculture, Fall 2015 HPAI Preparedness and Response Plan, 2015)

LPAI virus is any AI virus that does not meet the criteria for high pathogenicity. LPAI occurs naturally in wild birds and can spread to domestic birds where it may cause minor symptoms or no sign of infection. Low pathogenic strains of the disease are common throughout the world. Due to the fact that LPAI viruses can evolve into HPAI viruses, incidents of H5 and H7 LPAI are closely monitored by animal health officials.

Distinguishing Between Strains of H5[4]

The discussion herein describes the mixing of strains from across the world's flyways to form the HPAI (H5) that was confirmed in the Midwestern United States during the spring of 2015.

The HPAI H5N8 virus originated in Asia and spread rapidly along wild bird migratory pathways during 2014, including the Pacific flyway. In the Pacific flyway, the H5N8 virus mixed with North American avian influenza viruses, creating new mixed-origin viruses.
These mixed-origin viruses contain the Asian-origin H5 part of the virus, which is highly pathogenic to poultry. The N parts of these viruses came from native North American avian influenza viruses found in wild birds.

USDA has identified Eurasian H5N8 HPAI and mixed-origin viruses, H5N2 and a novel H5N1, in the Pacific Flyway. On January 16, 2015, USDA's National Veterinary Services Laboratories (NVSL) confirmed a finding of a novel avian influenza virus in a wild green winged teal (a wild duck) in Washington State (new H5N1). The USDA has also reported that the HPAI H5N2 virus strain was confirmed in several states along three of the four North American Flyways: Pacific, Central and Mississippi.

The novel HPAI H5N1 virus is NOT the same virus as the H5N1 virus found in Asia, Europe and Africa that has caused some human illness. This HPAI H5N1 strain is a new mixed-origin virus that combines the H5 genes from the Asian HPAI H5N1 virus with N genes from native North American avian influenza viruses found in wild birds. This particular strain had not been identified in an animal or human host before.

With several different viruses circulating in wild birds, it is not unexpected that a new mixed-origin virus was identified. Viruses continually mutate and form new combinations with genetic material from similar viruses. It is not unexpected, nor is it cause for alarm. It is, however, a main reason why it is necessary to continue surveillance efforts for avian influenza in migratory birds.

c. Avian Influenza in the United States[5]

Low pathogenic avian influenza viruses are commonly detected in wild waterfowl but rarely found in domestic poultry flocks. These strains of the virus do not normally threaten human health.

Beginning in mid-December 2014 through spring of 2015, there were several highly pathogenic avian influenza (HPAI) H5 incidents along the Pacific, Central and Mississippi Flyways. Cases in wild birds, captive wild birds, backyard poultry or commercial poultry have been reported in Arkansas, California, Iowa, Idaho, Kansas, Minnesota, Missouri, Montana, North Dakota, Nevada, Oregon, Utah, South Dakota, Washington, Wisconsin and Wyoming. The HPAI strains detected in these flyways were H5N2, H5N8 and H5N1, but primarily H5N2 in turkey flocks.

The USDA has experience responding to highly pathogenic avian influenza in U.S. poultry. Before these more recent outbreaks, there were only three highly pathogenic AI outbreaks in commercial poultry in U.S. history – in 1924, 1983 and 2004. No significant human illness resulted from these outbreaks.

- The 1924 H7 HPAI outbreak was detected in and contained to East Coast live bird markets.

[4] (United States Department of Agriculture O. o., 2015)
[5] (United States Department of Agriculture, 2015)

- The 1983-84 H5N2 HPAI bird outbreaks resulted in the destruction of approximately 17 million chickens, turkeys, and guinea fowl in the northeastern United States to contain and eradicate the disease.
- In 2004, USDA confirmed an H5N2 HPAI outbreak in chickens in the southern United States. The disease was limited to one flock and quickly eradicated through close coordination and cooperation between USDA, state, local, and industry leaders.

2. Planning Assumptions

- The detection of Avian Influenza anywhere in Connecticut will require a coordinated response by State, Federal and local officials as well as the poultry industry.
- The Connecticut Department of Agriculture (DoAg) conducts an on-going AI surveillance program in cooperation with USDA, APHIS, VS.
- Reducing the risk of introduction and/or spread of AI in the State is a cooperative effort among a number of entities that include CT DoAG and other State agencies, the Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL), USDA, poultry specialists, the state poultry industry, and the Connecticut Poultry Association (CPA).
- Though HPAI is highly contagious in poultry, the risk of human infection is low according to Centers for Disease Control officials. To date, the HPAI strains circulating in the U.S. have not been found to cause illness in people but continual monitoring is essential to assure that public health is not threatended.
- Properly handled and cooked poultry and poultry products, such as eggs and meat, are safe to eat.
- Reducing the risk of AI infection is accomplished through a combination of AI surveillance, biosecurity, and assuring compliance with importation requirements.
- Departments and agencies will coordinate and take action within their individual statutory authorities. Where applicable this will include joining a Unified Command with state and federal agencies, as well as appropriate local and private sector partners to manage response activities.
- The State Emergency Operations Center (SEOC) acts as a multi-agency coordination (MAC) center and may be activated in response to an incident of avian influenza affecting one or more communities in the State of Connecticut.
- Under Governor Malloy's Executive Order No. 34 (**See Attachment 3**), State agencies must follow the National Incident Management System (NIMS) in their planning and response. Under NIMS, response to an animal health emergency will be conducted using the Incident Command System to be led by a Unified Command structure involving the Department of Agriculture, State Veterinarian, and probably the United States Department of Agriculture (USDA) Surveillance, Preparedness and Response Services (SPRS) District 1 Assistant Director for New England.
- Rapid response to an agricultural emergency, such as an AI incident, will be necessary to contain and eliminate the disease. This will require interaction between local, state and federal agencies and personnel.
- DoAg has statutes and regulations which it enforces regarding the importation of live poultry and poultry products to reduce the risk of introduction of poultry diseases into the state.
- AI is classified as a reportable poultry disease (to the State Veterinarian) for which there are established protocols for reporting and investigating the disease.

- The DoAg may be first alerted to a potential AI incident in domestic poultry by reports of high bird morbidity and mortality from poultry producers, private veterinarians and the CVMDL.
- High morbidity and mortality observed in domestic poultry by state and USDA/APHIS/VS animal health technicians while conducting routine inspections and AI surveillance testing will be reported to the state veterinarian.
- DEEP Wildlife Division and USDA Wildlife Services will share information with DoAg regarding wild bird AI surveillance testing results.
- Animal Health Officials in other states will share information regarding domestic poultry AI incidents in their respective states either directly with DoAg or through USDA/APHIS/VS.
- The USDA Surveillance, Preparedness and Response Services (SPRS) District 1 Assistant Director For New England is the state's federal counterpart to the State Veterinarian. Coordination with USDA through the SPRS District 1 Asst. Director may be necessary during an animal disease emergency for guidance, expertise, and if needed, for national resources.
- The response functions needed for an animal health emergency will vary depending on the factors involved, but may include: multi-agency coordination and planning, resource management, communications and public information, preservation of worker/volunteer health and safety, and disease management activities such as quarantine establishment and enforcement, implementation of strict biosecurity protocols, traffic control, surveillance, appraisal of animal values, animal depopulation, mortality management and carcass disposal, indemnity payments, vaccination, decontamination, cleaning and disinfection.
- Positive detection of certain AI virus strains or the occurrence of an AI incident elsewhere in the United States or in countries bordering the United States may prompt state officials to employ additional precautions to prevent or mitigate a local occurrence.
- The identification of of AI in domestic poultry and/or wild birds within the United States would affect Connecticut. This could result in the creation and enforcement of movement controls of live poultry, poultry products, equipment, conveyances and people.
- Quarantine areas may be required where suspected or confirmed cases of AI may have originated. These areas may be identified as Control Areas, being made up of an Infected Zone and Buffer Zone. Special operational procedures (e.g., movement restrictions, disinfection and decontamination, surveillance, record keeping) may be required and specific protocols implemented according to the designation of a particular zone.
- Premises affected by disease within the Control Area will be identified, according to specific criteria, as Infected Premises, Suspect Premises, or Contact Premises. Premises within the Control Area not known to be affected will be identified as At-Risk Premises or Monitored Premises.
- Large numbers of domestic poultry and possibly wildlife may need to be confined or destroyed and access to large areas of farm land may need to be controlled to prevent the spread of an AI after it has been confirmed.
- Depopulation of animals will be conducted in the most humane, expeditious manner possible to stop the spread of the disease, limit the number of animals affected, and protect public health.

- Carcass disposal methods and sites will need to be rapidly identified, and will be determined by the State Veterinarian, in coordination with the USDA SPRS District 1 Assistant Director For New England and the CT Department of Energy and Environmental Protection (DEEP).
- If an AI incident is detected in Connecticut, DEEP will issue emergency authorizations as necessary and secondarily may waive certain environmental regulatory restrictions to facilitate the timely and efficient disposal of both domestic poultry and wildlife mortalities, poultry products, equipment, conveyances and supplies
- Animal disease emergencies, such as an AI incident, may lead to significant economic impacts requiring long term federal and state assistance programs for recovery.
- Owners suffering the loss of poultry and other property in a poultry health emergency as well as persons responding to the situation may require psychological counseling and support.
- Numerous local, state and federal agencies will play a role in response to and the mitigation of an agricultural event. Operations regarding remediation and recovery have the potential to require a massive amount of resources, due to the potential magnitude of birds and facilities involved.
- Trade, professional and marketing organizations/associations may play a role. These associations and their local and national counterparts have the ability to communicate rapidly with individual members, providing two-way communication regarding pre- planning through emergency response and recovery.
- Control of vectors, including wild birds, other wildlife and rodents may be necessary to control further spread of a disease.
- Eradication of the causative agent will require proper sanitary and disposal procedures for animal carcasses. Suspect infected locations and transport vehicles and other conveyances may need to be cleaned and disinfected. Enhanced biosecurity protocols may need to be implemented.

3. Concerns for Human Infection

Per the World Health Organization and APHIS Veterinary Services documentation, avian influenza viruses do not usually infect humans, referred to as "zoonotic." However the potential exists for human infection by some strains of the disease and this has been observed in Asian and North African strains since the late 1990s. At the time of this publication, none of the avian influenza strains detected in the Unites States have shown to be zoonotic. In the event that a zoonotic subtype is identified in Connecticut, DoAg will work closely with the Department of Public Health (DPH) and the USDA to protect public health and the health of response personnel while containing and eliminating the disease in poultry as rapidly as possible.

D. Roles and Responsibilities Summary

1. State Government/Unified Command

Specific agency roles and responsibilities for an Avian Influenza incident in State of Connecticut are found in Section II.

During a highly pathogenic Avian Influenza incident, the State will implement policies and procedures identified in the State Response Framework (SRF) including following the National Incident Management System (NIMS) model of the Governor's Unified Command (UC). Successful eradication of avian influenza is contingent upon the collaboration of many state, local and federal agencies, the public, and private sector entities. Utilizing UC will ensure efficient coordination, planning, and communications and the successful meeting of objectives. The Governor' UC coordinates state resources and provides the strategic guidance for response to all types of incidents through UC at the State Emergency Operations Center (SEOC). DoAg may also establish an incident command center within its office building to facilitate and coordinate response activities.

- The Department of Emergency Services and Public Protection/Division of Emergency Management and Homeland Security will coordinate and support incident management, lead Connecticut's multi-agency coordination (MAC) system, and act as the MAC Group Coordinator.

- The Commissioner of Agriculture, Director of the Bureau of Regulation and Inspection, the State Veterinarian, in collaboration with the USDA Surveillance, Preparedness and Response Services (SPRS) Assistant Director for New England will provide direction and leadership to the extent of each authority as key players in the Unified Command structure and MAC system.

- Agencies with jurisdictional authority or functional responsibility of any or all aspects of response to Avian Influenza will participate in the UC structure and in establishing overall strategies. Agencies involved but lacking jurisdictional responsibility will function in a supporting role.

2. Regional Support

Connecticut's municipalities and two tribal nations are divided into five emergency preparedness planning regions. The five DEMHS Regional Offices provide administrative support and planning assistance to local governments within their jurisdictions. During emergencies, the Regional Offices serve as resource coordinators and liaisons between towns and the SEOC and therefore may assist in the coordination of regional assets in support of Avian Influenza response efforts. The Department of Public Health utilizes the same 5 planning regions and has a coordinator assigned to assist the local health departments within those regions.

3. Local Government

As prescribed in NIMS, all incidents begin and end locally; however, the detection of Avian Influenza anywhere in the Connecticut will require an immediate coordinated response led by State and Federal entities. Local government may be requested to assist with information dissemination, traffic and access control, and with assisting in the location of backyard and hobby farmers. Any local response must be coordinated through the State.

4. Federal Government – US Department of Agriculture

USDA is the Federal agency with primary responsibility and authority for animal disease control and will interface with Federal, State, Tribal, local and industry partners in HPAI eradication and control efforts. In addition, it operates the National Veterinary Services Laboratories (NVSL) and administers a National Wildlife Disease Surveillance and Emergency Response Program that provides assistance for the targeted surveillance of diseases in wildlife, including avian influenza.

As the primary Federal agency for incident management during a foreign animal disease (FAD) such as a highly pathogenic avian influenza (HPAI) incident or outbreak, USDA, APHIS, VA upon request of CT DoAg:

- coordinates incident management teams,
- manages incident response,
- assists with management of public messages, and
- takes measures to control and eradicate HPAI.

5. Private Sector

Producers are responsible for biosecurity on their premises. Biosecurity is a cornerstone of livestock and poultry disease prevention and control. To assist poultry producers in implementing effective biosecurity plans, the USDA Animal and Plant Health Inspection Service (APHIS) developed with State, academic, and industry experts input, a biosecurity checklist and outreach materials.[6] In addition to coordinating their site-specific biosecurity plan with the DoAg, producers should maintain open communication and report higher than normal morbidity and/or mortality.

1. Non-Governmental and Private Sector Organizations (NGO)

Poultry trade, professional and marketing organizations/associations are another critical sector in the area of messaging. Local, regional and national organizations and associations having an interest in the poultry industry and its related goods, can support the AIMRP through coordination with DoAg to provide consistent, fact-based messaging to their members as information develops. Doing so effectively may be critical to results in the event of an animal disease emergency since these entities have the ability to provide direct messaging to their members regarding prevention, preparedness, response, and recovery efforts.

E. General Operational Overview

1. Prevention

Reducing the risk of the introduction and/or spread of avian influenza in the State is a cooperative effort and is dependent upon interaction among the CT Department of Agriculture (DoAg), USDA, APHIS, VS, the Connecticut Veterinary Diagnostic Laboratory, USDA National Veterinary Service Laboratory (NVSL), the UConn Cooperative Extension System and the State's poultry industry.

Prevention is maximized through a combination of education of poultry producers, biosecurity, importation requirements, and surveillance testing. Statewide education initiatives include mailings and outreach to poultry producers to provide updates on poultry programs and biosecurity recommendations. The Department of Agriculture participates regularly in stakeholder group meetings. The DoAg distributes materials to publicize poultry regulations and disease surveillance programs.

DoAg and USDA animal health technicians conduct surveillance testing and biosecurity training as needed for live bird market owners and employees and for distributors sending birds into the live bird market system.

2. Preparation

[6] (United States Department of Agriculture, Fall 2015 HPAI Preparedness and Response Plan, 2015)

Preparing for AI in the State requires development of response plans and partnerships among agencies, organizations, and individuals, as well as training in Incident Management, Personal Protective Equipment (PPE), recognition of disease, and response. Preparation also requires rapid and accurate diagnostic capabilities at the Connecticut Veterinary Medical Diagnostic Laboratory and the National Veterinary Services Laboratory and capabilities/plans for rapid communication among partners.

As required in the National Poultry Improvement Plan (NPIP), the CT DoAg established a standing emergency disease management committee in 2010 comprised of industry and government representatives. Additionally, as a daily agency function and responsibility, the DoAg has continued to monitor, assess, and discuss response protocol in preparation for an emergency animal disease within its technical staff. As part of this effort, CT DoAg closely monitored the situation, observations, and lessons learned from the confirmed cases of HPAI in the Midwest during 2015.

To prepare for a possible HPAI incident affecting the State, the CT DoAg, in collaboration with DESPP/DEMHS, convened a Highly Pathogenic Avian Influenza (HPAI) Workgroup in August of 2015 to review and update the State's current Avian Influenza Monitoring and Response Plan (AIMRP) building upon the efforts and expertise of the Connecticut standing emergency disease management committee mentioned above. A response to an incident of HPAI may require additional support and resources: therefore, the HPAI Workgroup had representatives from numerous state agencies including DESPP/DEMHS, DESPP/CSP, DEEP, DPH, DOL, DOT, Military Department, as well as other State, local, non-governmental organizations and industry stakeholders The HPAI workgroup may perform some or all of the functions of the DoAg standing emergency disease management committee.

3. Response

Response to an incident of AI in the State involves rapid and accurate communications with partners and stakeholders as well as rapid and accurate diagnosis, containment, and elimination of the virus. When the Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL) or any other laboratory identifies a suspious AI test result from a Connecticut domestic or wild bird, it must report the finding to the State Veterinarian. The State Veterinarian will inform the Regulation and Inspection Bureau Director, the Commissioner of Agriculture and the USDA APHIS VS Assistant District Director for New England that a suspious AI sample is being forwarded by CVMDL to the National Veterinary Services Laboratories (NVSL) in Ames, Iowa for confirmation and further identification. Depending on the type of AI virus identified, the State Veterinarian then determines the initial response and notification. HPAI and certain strains of LPAI will trigger notification as described in **Figure 1.0 Avian Influenza Presumptive Positive Reporting Contacts.**

If the CT DoAg determines that the outbreak is going to require assistance from other agencies, or if it is determined that the incident involves HPAI and/or zoonotic AI, the DESPP/DEMHS will be notified and the levels of response for a highly contagious disease may be implemented, including the implementation of the response portion of the State Avian Influenza Monitoring and Response Plan (AIMRP). DoAg, upon consultation with USDA, will also notify DEMHS and DAS of whether there is a need to hire a state debris management contractor to conduct and manage response activities under direction of appropriate state agencies, depending on the scale and nature of the incident(s). Additionally, DEEP may be notified if deemed necessary to identify carcass disposal options and prepare any necessary authorization or waivers to allow appropriate disposal to occur.

4. Recovery

Specific recovery actions necessary following an AI incident will depend upon the extent of the incident, the AI strain involved, and other factors. Basic recovery initiatives may include the following:

- Partnerships with other agencies and organizations: The DoAG coordinates with other key agencies and organizations throughout all components of planning for an Avian Influenza incident, including prevention, preparation, response, and recovery.
- Plan review and revision: The AI MRP is reviewed and revised as needed, as protocols are updated, and as new information becomes available.
- Indemnification: Indemnification (payment for loss of flock) is also included in the response section because it must be considered before depopulation occurs. Indemnity funds will be vital to allow Connecticut's poultry industry to recover from an AI incident.
- Restocking: Restocking will be allowed per the conditions set forth in the flock plan **(See Attachment 5- Sample Flock Plan)** developed with each producer. Quarantines will be released upon successful compliance with the flock plan.

F. Logistics Support and Resource Requirements

The Resource Management Support Annex to the State Response Framework (SRF) describes CT's resource management system for managing resources and logistics before, during and after emergency events which affect the State. The Resource Management Support Annex contains the policies, procedures and general guidance documents that are used to carry out resource management in the State.

Specific logistical support and resource requirements necessary for the response to an Avian Influenza incident in the State is included in the attachments/appendicies that deal with response procedures such as surveillance, testing, quarantine, and depopulation.

G. Plan Maintenance

REVISIONS AND/OR ADDITIONS		
Revision or Addition Summary	Page(s) #	Date
The CT AI Response Plan was renamed the Avian Influenza Monitoring and Response Plan (AIMRP) and revised to incorporate additional prevention, preparation, response and recovery activities necessary to deal with a potential threat of highly pathogenic avian influenza while maintaining the NPIP requirements for low pathogenic AI.	Universal	December 2015

H. References

National Poultry Improvement Plan
http://www.poultryimprovement.org/default.cfm

National Poultry Improvement Plan – Program Standards
http://www.poultryimprovement.org/documents/ProgramStandardsAugust2014.pdf

Guidance from the United States Department of Agriculture (USDA)
Animal and Plant Health Inspection Service (APHIS)
FAD PReP Materials and References (Last Modified: Dec 14, 2015)

HPAI Response & Policy Information: 2014-2015 Outbreak

HPAI Response Plan
- HPAI Response Plan: The Red Book (DRAFT August 2015)
  - Red Book Powerpoint
- HPAI Response Goals (November 18, 2015)

Initial Response
- Stamping-Out & Depopulation Policy (Sept 18, 2015)
- Ventilation Shutdown Evidence & Policy (Sept 18, 2015)
- Appraisal and Indemnity Procedures (Sept 18, 2015)
  - Training Powerpoint
- New State Checklist (Oct 19, 2015)
- Financing the Response: State/Tribal Information (Oct 20, 2015)

Note: the reference material listed in this section is being updated as necessary and can be accessed by clicking on the link. If you are reading this plan in hard copy you will have to log into a computer and access the USDA website at: https://www.aphis.usda.gov/

Critical Response Activities
- Surveillance of Backyard Flocks Around Infected Premises (Sept 14, 2015)
  - Training Powerpoint
- Surveillance Sampling for Commercial Premises in Control Area (Aug 21, 2015)
  - Training Powerpoint
- HPAI Zones and Premises (Aug 19, 2015)
  - Training Powerpoint
- Movement Control (Sept 21, 2015)
- Testing Requirements for Movement from the Control Area (Sept 14, 2015)
  - Training Powerpoint
- Contact Premises (Sept 21, 2015)
  - Training Powerpoint
- HPAI in the Live Bird Marketing System (Sept 15, 2015)
- Mortality Composting Protocol for AI Infected Flocks (Sept 24, 2015)
- Cleaning & Disinfection Basics: Virus Elimination (Dec 8, 2015)
  - Training Powerpoint

Recovery and Restocking
- Control Area Release (Sept 18, 2015)
  - Training Powerpoint
- Timeline, Eligibility, and Approval for Restocking (Sept 21, 2015)
  - Training Powerpoint
- Post C&D Environmental Sampling Guide (Aug 19, 2015)
  - Training Powerpoint

Health & Safety Information

- Quick Response Card
- PPE Recommendations for HPAI Responders (Sept 3, 2015)

For More Information on HPAI & Response

- General Resources and Information (Aug 19, 2015)
- H5/H7 Avian Influenza Case Definition (Dec 4, 2015)
- Use of the Antigen Capture Immunoassay (Sept 10, 2015)

Visualizing the 2014-2015 Outbreak

- All HPAI Detections Dec 2014-Present (GIF)
- HPAI Detections in Poultry Dec 2014-Aug 2015 (GIF)
- Number of HPAI Detections by County Dec 2014-Aug 2015 (GIF)
- Control Area Releases for the 2014-2015 Outbreak (by County) (GIF)
- Epidemiological Curve for 2014-2015 Outbreak (GIF)

Summary Powerpoints

- HPAI Outbreak: Permits and Movements

Links to Biosecurity Resources

- Poultry Biosecurity Training Materials (http://www.poultrybiosecurity.org)
- Powerpoint of the Poultry Grower Webinar Series: Biosecurity Can Keep AI Out of Your Poultry House (by Iowa State University)

FAD PReP Overview

- Introduction to FAD PReP (Nov 2013)
  - FAD PReP Presentation (Oct 2015)
- FAD Investigation Report CY2014 (Feb 2015)
- Useful Weblinks
- FAD Training Videos

FAD PReP Strategic Plans - Concept of Operations

- APHIS Foreign Animal Disease Framework: Roles and Coordination (FAD PReP Manual 1-0) (February 2014)
  - FAD Framework: Roles and Coordination Presentation (Jan 2014)
- APHIS Foreign Animal Disease Framework: Response Strategies (FAD PReP Manual 2-0) (October 2015)
  - FAD Framework: Response Strategies Presentation (October 2015)
- Incident Coordination Group Plan (FAD PReP Manual 3-0) DRAFT (June 2014)
- Foreign Animal Disease (FAD) investigation Manual (FAD PReP Manual 4-0) (December 2014)
- A Partial List of FAD Stakeholders (FAD PReP Manual 5-0) (Dec 2015)

FAD PReP Disease Response Documents:

- **Disease Response Plans**
  Response plans are intended to provide disease-specific information about response strategies. They offer guidance to all stakeholders on capabilities and critical activities that would be required to respond to an FAD outbreak. The above link will take you to the Red Books for FMD, HPAI, CSF, and ND.
- **Disease Response Strategies**
  Disease Response Strategies describe the diagnoses, treatments and/or vaccines, and control and

eradication plans for specific diseases that are a threat to the United States.

FAD PReP Strategy Documents

- Overarching strategies to deal with FADs, such as the phases and types of an FMD outbreak.

Continuity of Business / Secure Food Supply Plans

The Secure Food Supply Plans are commodity-specific plans that use science- and risk-based information to facilitate market continuity for specific products in an outbreak. The above link will take you to information on the Secure Egg, Milk, Pork, and Broiler Supply Plans.

National Animal Health Emergency Management System

NAHEMS materials go into detail on many critical preparedness and response activities and provide veterinary authority for responders, planners, and policy-makers. The links below direct to the original NAHEMS Guidelines as well as short "Tactical Topics" information sheets and educational presentations that complement the NAHEMS body of knowledge.

- NAHEMS Guidelines
- NAHEMS Tactical Topics
- NAHEMS Educational and Training Materials

Industry Manuals

These manuals describe the complexity of industry to emergency planners and responders and provide industry a window into emergency response.

Standard Operating Procedures (SOPs)

FAD PReP SOPs provide details for conducting critical activities, such as communication and and biosecurity, that are essential to effective preparedness and response to an FAD outbreak. These SOPs provide operational details that are not discussed in depth in strategy documents or disease-specific response plans.

FAD PReP Ready Reference Guides

Many of the detailed documents and materials listed on this page are accompanied by a Ready Reference Guide (RRG); these guides offer quick and accessible information for training and educational purposes. Some of the RRGs available by clicking above are disease-specific, pertaining to FMD, CSF, HPAI, or ND, while others offer general guidance on aspects of FAD PReP.

APHIS and VS Emergency Management Resources

APHIS Directives and Veterinary Services (VS) Guidance Documents provide important emergency management policy. These documents provide guidance on topics ranging from emergency mobilization, to FAD investigations, to protecting personnel from HPAI.

Outbreak Response Tools

Click on the link above for a variety of outbreak tools including the Emergency Management Tools, Appraisal and Compensation, Disinfectants, Communications and Messaging, Carcass Management, and more, including DEEP's composting guidance document.

State/Tribal Resources and Additional Information

This link includes information and plans from State and Tribal sources (such as those from NASAHO and NASPHV), economic impact reports, and animal disease information.

Section II. Plan Implementation

A. Levels of Activation

The Department of Agriculture (DoAg), in coordination with the Department of Emergency Services and Public Protection/Division of Emergency Management and Homeland Security (DESPP/DEMHS) and other partner agencies, has developed five levels of activation for coordination of multiple agencies in the event of an avian disease emergency requiring assistance and/or input from other agencies in the State, local governments, Federal Agencies, tribal nations, the poultry industry, and private entities. The level of involvement from other agencies or entities is dependent upon the strain and pathogenicity of the AI virus involved.

The AIMRP is primarily structured to address five scenarios involving the possible threat or actual introduction of a highly pathogenic avian disease in the State of Connecticut. The AIMRP also addresses the threat or incident of low pathogen avian disease. The DoAg has the authority to implement each threat level scenario as presented in this document or to take actions, issue orders or impose requirements that are not specified in or that vary from the AIMRP if it determines other protocols or standards are more appropriate in a given situation.

LEVEL 1 – POSSIBLE SUSPECT

AI is **suspected** in a CT flock.

- ☐ Flock is inspected; recent poultry movements are determined; traces are initiated.
- ☐ DoAg staff collect specimens and submit to CVMDL for analysis.
- ☐ Premise is quarantined, enhanced biosecurity measures implemented on quarantined premise.
- ☐ Determine if LPAI, HPAI or Zoonotic AI has been reported elsewhere in the US.
- ☐ DoAg quarantines flock(s) under investigation. DoAg notifies USDA, DESPP/DEMHS, DPH and may notify State Veterinarians in surrounding states.

LEVEL 2 – SUSPECT

CVMDL reports suspicious AI result to State Veterinarian and submits specimens to NVSL for confirmation and further identification.
Level 1 action steps implemented when initial report of AI suspect comes directly from CVMDL.

Level 2A - H5 or H7 Strain	Level 2B - All Other AI Strains[7]
☐ State Veterinarian notifies Commissioner and USDA. ☐ For situational awareness DoAg notifies Governor's Office and DEMHS. If H5 or H7 strain has been detected elsewhere in the US, additional notifications will be made to other state agencies and partners as identified in this plan.	☐ State Veterinarian notifies Commissioner and USDA.

LEVEL 3 – LPAI H5 or H7 CONFIRMED

The National Veterinary Services Laboratories (NVSL) has confirmed a diagnosis of Low Pathogenic H7 or H5 Avian Influenza in Connecticut.

- ☐ DoAg notifies Governor's Office, DEMHS, DPH, DEEP and other state agencies and partners as identified in this plan.
- ☐ State Veterinarian notifies other State Veterinarians as appropriate.
- ☐ DoAg may request DEMHS to coordinate other state agencies in assisting with appropriate response ctivities.
  Note: Not all LPAI incidents will require full implementation of the CT AIMRP.
- ☐ All entities involved prepare for or institute enhanced biosecurity measures.
- ☐ DoAg requests USDA assistance as needed
- ☐ DoAg will request DEMHS to coordinate with DAS, Debris Management Contract activation dependent on the scale of the incident and other factors.
- ☐

[7] Response to all other confirmed AI strains (excluding H5 and H7) will be managed solely by DoAg.

LEVEL 4 – HPAI H5 or H7
The National Veterinary Services Laboratories (NVSL) has confirmed a diagnosis of Highly Pathogenic H7 or H5 Avian Influenza in Connecticut. ☐ DoAg notifies Governor's Office, DEMHS, DPH, DEEP and other state agencies and partners as identified in this plan. ☐ State Veterinarian notifies other State Veterinarians as appropriate. ☐ DoAg consults with DEMHS to determine appropriate State response. ☐ All entities involved prepare for or institute enhanced biosecurity measures. ☐ DoAg requests USDA assistance as needed
LEVEL 5 – ZOONOTIC HPAI or LPAI H5 or H7 AI CONFIRMED
The National Veterinary Services Laboratories (NVSL) has confirmed a strain of Avian Influenza, isolated from poultry in CT that is a genetic match to a zoonotic strain. ☐ DoAg notifies Governor's Office, DEMHS, and DPH. ☐ DoAg will implement CT AIMRP at level 3 or level 4 as appropriate. ☐ DPH will implement an appropriate public health response

B. Responsibilities

The responsibilities identified below are appropriate for response to a **LEVEL 3** or **HIGHER AVIAN INFLUENZA INCIDENT**. All or a portion of the identified responsibilities may apply to each level of activation. The CEO, Agency Head or their assigned representative is responsible for seeing that required tasks are completed. This is not an all-inclusive list of responsibilities. Depending upon the level of activation and the situation, additional input may be required.

1. State Agencies

In addition to roles and responsibilities of State agencies described in the State Response Framework (SRF), a response to HPAI may require additional tasks. State agencies and departments not specifically assigned missions in the CT AIMRP will be expected to respond to emergencies within their respective capabilities as directed by the Governor or requested by DESPP/DEMHS Deputy Commissioner or DEMHS/State Emergency Management Director.

a. Department of Agriculture (DoAg)

The Commissioner of Agriculture is responsible for overall direction and control of emergency operations in the event of a HPAI incident and implementation of the emergency response plan.

- Notify and communicate with any or all of the following:
  - Office of the Governor
    - United States Department of Agriculture (USDA)
    - Department of Emergency Services and Public Protection (DESPP)
    - Division of Emergency Management and Homeland Security (DEMHS)
    - Connectict State Police (CSP)
    - Commission on Fire Prevention and Control (CFPC)
    - Department of Public Health (DPH)
    - Department of Energy and Environmental Protection (DEEP)
    - Department of Administrative Services (DAS)
    - Attorney General's Office, AG assigned to DAS
    - University of Connecticut (UConn) Cooperative Extension
    - Department of Economic and Community Development (DECD)
    - Department of Labor (DOL)/ConnOSHA

  - Department of Transportation (DOT)
  - Military Department/CT National Guard
  - State Veterinarians in surrounding States
  - Industry groups
- Request assistance from USDA
- Initiate epidemiologic investigation
- Pursuant to CGS 28-9, determine the need for waiver modification of statutes, regulations or other rules and make recommendations regarding same to DEMHS and the Office of the Governor.
- May request, through DEMHS, that the Governor's Office declare a state of emergency
- Establish Quarantine zones and enhance biosecurity
- Modify quarantine zones as test results become available
- Deploy field staff to monitor quarantine
- May request State and/or local law enforcement to assist in monitoring quarantine zones
- Request State EOC activation
  - Participate in the Governor's Unified Command
  - Establish Command Center at DoAg facility, with presence at the State EOC
- Issue mandatory biosecurity measures for all poultry farms within the state
- Enforce movement control (embargo)
- Prohibit any public sales of poultry or poultry shows
- Conduct testing within surveillance zone
- Implement protocols for depopulation and carcass disposal, manure disposal and disposal of products and contaminated articles
- Implement protocols for cleaning and disinfection (RCSA 22-324-3-11)
- Document depopulation for indemnification claims
- Conduct environmental surveillance testing
- May request additional staffing assistance through ate EOC (for example, from CTNG)
- May request the Department of Transportation (DOT) provide equipment for disposal
- Request DEEP to conduct surveillance of wild life population within the quarantine area, identify disposal sites, and issue permits for disposal
- Coordinate with the Governor's Office and other agency Public Information Officers (PIOs) on media releases
- Request Office of Policy and Management (OPM) and Department of Administrative Services (DAS) to authorize indemnity payments if applicable
- Support the use of vaccination for non-infected poultry
- Issue Quarantine Release
- Continue to monitor poultry in and near infected areas once the crisis has passed

b. Connecticut Department of Emergency Services and Public Protection (DESPP)

Division of Emergency Management and Homeland Security (DEMHS)

- Activate the State Emergency Operations Center (SEOC) at the Governor's direction and establish Unified Command utilizing the principles of the National Incident Management System (NIMS)
- Implement the State Response Framework (SRF)
- Coordinate requests for support by municipalities through the DEMHS Regional Offices and state agencies through the SEOC
- Provide use of EOC communications capabilities for response teams by assisting to creat links between the State EOC, State Agencies, Regional Offices, local governments, field teams, poultry industry within the State, surrounding States and Federal agencies

- Provide GIS/mapping support

Division of Connecticut State Police (CSP)

- Assist with access control
- Assist with movement control of animal and products
- Provide security for the Veterinary Stockpile
- Coordinate with local law enforcement
- Assist with security on poultry farms quarantined by DoAg

Commission of Fire Prevention and Control (CFPC)

- Assist with the coordination and implementation of the Statewide Fire Rescue Response Plan, as appropriate.

c. University of Connecticut (UCONN)
Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL)

- Participate in Governor's Unified Command as requested.
- Conduct laboratory tests to detect the presence of Avian Influenza
- Report all test results to the State Veterinarian
- Forward samples to NVSL for further testing
- Provide support and advice in the diagnosis of animal diseases as related to the emergency Cooperative Extension Service
- Assist in distributing information and education to the general public and the poultry industry
- Assist in the determination of true and fair market value of poultry, property and products

d. Department of Public Health (DPH)

- Designate Unified Command Safety Officer
- Provide recommendations for response workers protection
- Monitor health of response workers, including farm workers
- Assist with the receipt and distribution of Veterinary Stockpile utilizing the State's Medical Countermeasures (MCM) Program
- Provide information to Unified Command related to public risk
- Provide information to local health officials

e. Department of Administrative Services (DAS)

- Provide financial support during the emergency including hiring the debris management contractor if necessary to conduct response activities
- Expedite the procurement of necessary supplies
- Assist with indemnification payment process
- Assign Finance Section Chief to State EOC

f. Department of Energy and Environmental Protection (DEEP)

- Assist and advise the Department of Agriculture through the provision of specifications for the management of Restricted Articles in accordance with the General Statutes and the Regulations of Connecticut State Agencies pertaining to the management of solid waste.
- Provide the necessary authorizations, including but not limited to solid waste and water discharges,for the management of bird carcasses and products through off-farm composting and waste- to- energy conversion at certain resource recovery facilities.

- Work closely with field operations to evaluate and ensure compliance with approved disposal procedures and assist debris management contractor with activities including but not limited to, procuring carbon sources for composting, providing data and information on wood waste facilities in the state, coordinating with DoAg and other partners as needed on assessment and mitigation of environmental impacts of disposal, cleaning and disinfecting operations, and vector control.
- Assist Unified Command if requested on any environmental impact assesments regarding certain disposal procedures if needed during an incident.
- Support the containment of avian flu through wild bird surveillance programs and other methods deemed necessary. (funding discussion should occur prior to implementation and may rely on both federal and state funds)
- Pursuant to CGS 28-9, determine the need for waiver modification of statutes, regulations or other rules and make recommendations regarding same to DEMHS and the Office of the Governor.

g. Attorney General (AG)

- Provide legal advice to the Commissioner of Agriculture on matters including quarantine, embargo, seizure and destruction of property and indemnification
- Work with relevant agency attorneys to provide legal advice in the preparation of emergency legislation and regulations to control and eliminate Avian Influenza.
- Work with relevant agency attorneys to provide legal advice to client agencies involved in the operation.
- Upon request by client agencies, institute appropriate legal action for violations of statutes, regulations, and orders.
- Coordinate with Governor's legal counsel and other state agencies' legal counsel on legal issues.

h. Military Department /Connecticut National Guard (CTNG)

The Connecticut National Guard's responsibilities include, but are not limited to the following:

- Assist the Governor as required

i. Department of Transportation (DOT)

DOT is responsible for but not limited to performing the following:

- Providing Equipment – trucks, signage, etc..

j. Office of the State Comptroller (OSC)

Providing administrative support through priority processing of all transactions related to Avian Influenza response, including any issues related to CORE-CT.

k. Office of Policy And Management (OPM)

- OPM's responsibilities include, but are not limited to, providing administrative support and potential funding of emergency operations through processing of requests for personnel, etc.

l. Department of Economic And Community Development (DECD)

- Providing economic impact information
- Recovery

m. Department of Mental Health And Addiction Services (DMHAS)

- Activating the CT Disaster Behavioral Health Response Network teams to offer/provide mental health assistance to farmers, responders and the poultry industry

n. Department of Labor (DOL)

- Provide technical assistance for responder health and safety issues

- Provide technical assistance and/or support for designated Safety Officer(s)
- Provide support for PPE fit-testing and training

o. Connecticut Disaster Behavioral Health Response Network (DBHRN)

The Connecticut Departments of Mental Health and Addiction Services (DMHAS) and Children and Families (DCF), working with the University of Connecticut Health Center at the Center for Trauma Response, Recovery, and Preparedness (CTRP), have developed an organized network of behavioral health providers to respond to the mental health needs of Connecticut residents following major disasters (e.g., bioterrorism, manmade or natural disasters). The goal of the regional behavioral health response teams is to provide an organized response to victims, family members, survivors, or communities affected by disasters.

In the event of an AI incident, DBHRN members could be deployed to ensure mental health assistance is available for farmers struggling under enormous stress and emotional turmoil and others who may need assistance due to the incident. Under state law and current practice, the state Division of Emergency Management and Homeland Security (DEMHS) activates the teams in response to federal or state-declared emergencies when contacted by DMHAS/DCF upon the request of a municipality. In an emergency in which a disaster is not declared, local municipalities or emergency response systems may request assistance in order to meet the behavioral health needs of communities in local crises.

2. Federal Agencies

The CT DoAg may request assistance from federal agencies with the following responsibilities. The list provided below is not to be assumed all-inclusive of requests that may be made by the DoAg, DESPP/DEMHS, or the Governor.

a. US Department of Agriculture (USDA)

USDA, APHIS, Veterinary Services

- Assist with diagnosis and provide confirmation of a positive diagnosis of Avian Influenza.
- Provide veterinary and veterinary technician support
- Provide technical and epidemiological expertise and laboratory diagnostic support for poultry disease.
- Participate in surveillance of infected premises
- Participate in implementation and enforcement of embargos
- Perform depopulation and disinfection under a Federal Eradication Plan
- Assist the Department of Agriculture with depopulation, cleaning, and disinfection.
- Monitor poultry slaughterhouses and movement of products over state lines
- Participate in flock appraisals and indemnify flock owners in accordance with Federal standards
- Assist the Department of Agriculture to determine if vaccine should be used to control the incident
- If necessary, depending on the incident (s), provide technical expertise to support and oversee composting activities conducted by its or a state debris management contractor in a manner consistent with the Guidelines for Off-Site Composting of AI Carcasses. A Debris Managemnet contractor may not be necessary, this is dependent upon the scale of the event.

USDA, Farm Service Agency

- Coordinate USDA agencies to assist in recovery and coordination of other activities as required.

USDA, National Veterinary Services Laboratory (NVSL)

The NVSL is the official reference laboratory for foreign animal disease diagnostic testing and study in the United States. The NVSL performs animal disease testing in support of USDA-APHIS programs designed to protect the health of U.S. poultry and livestock. The NVSL provides *all* confirmatory testing for HPAI on all specimens, including those found presumptively positive at a National Animal Health Laboratory Network (NAHLN) laboratory or other USDA-approved laboratory.

b. US Department Of Homeland Security/Federal Emergency Management Agency (FEMA)

- Identify federal resources to assist during emergency and recovery

3. Municipalities

Appropriate municipal agencies and officials may be needed to assist in response activities including but not limited to:

- Helping to identify premises
- Supporting quarantine and movement control
- Coordinating local resources
- Traffic and access control
- Information dissemination

c. Local Response Teams

Certain volunteer groups such Community Emergency Response Teams (CERT), including a CT State Animal Response Team (SART), may be requested to assist. Requests are made through the appropriate DEMHS Regional Office.

4. Non-Governmental and Private Organizations

a. Connecticut Poultry Association

- Provide members with information
- Assist in the determination of appraisal values with the Department of Agriculture.

b. Connecticut Veterinary Medical Association

- Provide members with information
- Provide the Department of Agriculture with a list of qualified, volunteer veterinarians and technicians.

c. Connecticut Farm Bureau Association

- Provide information to members

d. Poultry Producers, Supplier, Dealers, Breeder, and Hobbyists

- Follow all protocols established by CT DoAg, CT DPH and USDA.
- Plan for the protection of employees, infrastructure and facilities.
- Plan for the protection of information and the continuity of business operations.
- Plan for the response to and recovery from incidents that impact their infrastructure and facilities.
- Collaborate with emergency management personnel before an incident occurs to ascertain what assistance may be necessary and how they can help.
- Develop and exercise emergency plans before an incident occurs.
- Establish mutual aid and assistance agreements (where appropriate) to provide specific response capabilities.

- Assist in the eradication process as requested

e. United Way 211

DESPP/DEMHS has a Memorandum of Agreement with United Way of Connecticut 211 to be the statewide telephone point of access for residents to get information about emergencies or disasters impacting the State of Connecticut. In the event of an AI incident the State may utilize 211 to disseminate important information to the public on AI.

C. Direction and Control

The overall coordination of the State's response to a situation for which the State Emergency Operations Center (SEOC) is fully activated resides within the Governor's Unified Command. An incident of HPAI may require the activation of the SEOC and the establishment of Unified Command since the incident may require integration and sustained coordination among and across multiple state agencies. State agencies and the State Emergency Operations Center (SEOC) utilize the principles of the National Incident Management System (NIMS) when coordinating or involved in a state-level response to or supporting recovery in an incident.

A. Concepts of Operations

1. Prevention Activities

Prevent the introduction and/or spread of Avian Influenza in the State.

a. Surveillance

The World Organisation for Animal Health's Office of International Epizootics (OIE) has developed a list of transmissible diseases that have the potential for very serious and rapid spread irrespective of national borders. These diseases have serious socio-economic and potentially public health consequences that are of major importance in the international trade of animals and animal products. H5 and H7 subtypes of AI are included on this list. In Connecticut, all Avian Influenza viruses are reportable to the State Veterinarian.

Reducing the risk of introduction and/or spread of AI in the State is a cooperative effort and is dependent upon interaction among DoAg, Department of Energy and Environmental Protection, DPH, other State agencies, The Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL), the United States Department of Agriculture (USDA), poultry specialists, the state poultry industry, and private organizations. Prevention is maximized through a combination of surveillance, Biosecurity, and importation requirements.

The Connecticut CT DoAg has established surveillance procedures for monitoring the Avian Influenza threat to the state. **See Attachemnt 13: Procedures 2- Surveillance.**

Additionally, the Connecticut Department of Energy and Environmental Protection (DEEP) is responsible for the following agency support functions which directly relate to avian influenza surveillance:

- Manages the wildlife resources of the state to provide stable, healthy populations of diverse wildlife species, including endangered and threatened species, in numbers compatible with both habitat carrying capacity and existing land use practices;
- Coordinates the research and management of wildlife with other state and federal agencies;
- Assists municipalities in assessing and addressing problems caused by wildlife;
- Assists the public with wildlife-related problems;
- Manages wildlife habitat on state forests and wildlife management areas.

Surveillance of wild birds as an early detection measure is best accomplished by focusing on significant mortality events in waterfowl or shorebird populations - as opposed to individual birds people may come upon or find on their property. At this time, the Connecticut Department of Energy and Environmental Protection (DEEP) uses both passive and active monitoring for its avian influenza surveillance. Active monitoring is focusing on waterfowl, in particular puddle ducks. Passive monitoring focuses on mortality events. DEEP has a dead bird reporting website that is monitored twice a week for suspected avian influenza or other disease incidents. For example, Canada geese seem to be very susceptible to this current H5N2 strain.

Geese, however, succumb to a number of different causes on a regular basis. Each incident that is reported to DEEP is evaluated to test those birds that seem most likely to have died due to disease rather than another cause. Current knowledge of the effect of the AI disease on wild birds other than geese indicates that incidents detected in wild water bird populations will likely involve the death of a large number of these species.

In the meanwhile, the DEEP Wildlife Management team continues to provide year-round tagging of wild birds. As part of this program, AI susceptible wild birds are tested, based on available federal funding, at the time that they are caught and tagged. This program may provide additional opportunity for early detection of avian influenza in non-domesticated populations and thus help limit the spread of the disease in domesticated flocks through an early, coordinated response.

b. Biosecurity

Biosecurity protocols minimize the risk of introduction and spread of disease, and can vary greatly according to the operation. *Biosecurity* is a broad term to mean anything done to keep diseases out, from the structure of the building (*structural biosecurity*) to on-farm procedures (*operational biosecurity*), such as providing boot-washing stations at the entrance to barns and limiting visitor traffic. While standard biosecurity efforts practiced by the poultry industry may have been sufficient in the past, evidence of farm-to-farm spread of the HPAI virus strain circulating in the Midwest shows that stricter biosecurity is needed.[8]
Biosecurity approaches fall into two categories. *Structural biosecurity* is built into the physical construction and maintenance of a facility. *Operational biosecurity* includes standard operating procedures (SOPs) and compliance with SOPs that minimize the chance of virus entering the poultry house.[9]

Consistent biosecurity practices are the best way to prevent diseases such as AI and exotic Newcastle disease (END). The following steps can help you keep your birds healthy:

- **Keep your distance** - restrict access to your property and your birds, allow only people who take care of your birds to come into contact with them, game birds and migratory waterfowl should not have contact with your flock because they can carry germs and diseases.
- **Keep it clean** - since germs can be picked up on shoes and clothing, moved from one area to another, and can potentially make your birds sick, you need to protect your birds' home by keeping it clean; keep cages clean and change food and water daily; clean and disinfect equipment that comes in contact with your birds or their droppings.
- **Don't haul disease home** - car and truck tires, poultry cages, and equipment can all harbor "germs"; if you travel to a location where other birds are present, or even to the feed store, be sure to clean and disinfect these items before you return to your property; separate birds that have been to shows or are new to the flock from the general population.
- **Don't borrow disease from your neighbor** - avoid sharing birds, lawn and garden equipment, tools, or poultry supplies with your neighbors or other bird owners; disinfect all items before they reach your

[8] (United States Department of Agriculture, Fall 2015 HPAI Preparedness and Response Plan, 2015)
[9] (United States Department of Agriculture, Biosecurity Guide for Poultry and Bird Owners, 2014)

property and again prior to returning them; never share items such as wooden pallets or cardboard egg cartons because they are porous and cannot be adequately cleaned and disinfected.

- **Know the warning signs of infectious bird diseases** - early detection of signs is very important to prevent the spread of disease.
- **Report sick birds** - do not wait to report unusual signs of disease or unexpected deaths among your birds.[10]

In a H5 or H7 Avian Influenza event, DoAg recommends the reevaluation and enhancement of everyday biosecurity protocols to ensure the virus is contained and eliminated. **See Attachement 13: Procedures 3 - Biosecurity Measures and Responder Worker Safety.**

- Commercial poultry operations follow enhanced biosecurity procedures for all persons, vehicles and equipment on or entering the premises to reduce the risk of disease introduction.
-
- DoAg personnel follow established protective protocols when conducting poultry farm inspections and disease surveillance testing.
- DoAg enforces statutory and regulatory poultry health importation requirements (Connecticut General Statute § 22-325 - Regulation of Importation) to minimize the risk of disease introduction.

Sec. 22-325. Importation regulated. Each person, firm or corporation transporting into this state any live poultry shall cause the same to be accompanied by an official health certificate from the state of exportation and a permit issued by the Commissioner of Agriculture in such form as he prescribes, provided each such permit shall state the number of live poultry included in each shipment or consignment. The owner, consignee or person having the custody of any such poultry coming into this state shall, within forty-eight hours after the arrival of such poultry at its destination, give notice in writing to the commissioner or his authorized agent of the arrival of such poultry, which notice shall include the date of such arrival and the number of poultry therein. Each shipment or consignment of live poultry brought or knowingly allowed to come into the state shall be held in quarantine at its destination unless otherwise ordered by the commissioner, until he causes such examinations and tests to be made as he determines and until he causes such poultry to be released or disposed of as herein provided. The expense of quarantine and of examinations and tests shall be paid by the owner, consignee or person having the custody of such poultry before the same is released. The commissioner may cause any of such poultry, found upon examination or test to be diseased, to be killed, and no such poultry so killed shall be sold for food except under the direction of the commissioner. No such poultry imported into this state shall be sold or offered for sale or be permitted to mingle with other poultry until the commissioner has issued a certificate authorizing the release of such poultry. All baby chicks and chicken hatching eggs transported into the state shall be accompanied by a health certificate which certificate shall certify that such chicks or eggs are from a pullorum free flock. All psittacine birds, except budgerigars, imported into Connecticut to be offered for sale in Connecticut shall remain in quarantine pursuant to this section for a period of not less than seven days.

- DoAg and USDA monitor the Live Bird Market (LBM) system for the presence of AI.

- DoAg monitors and implements the requirements for flock participation in the National Poultry Improvement Plan (NPIP).

c. Diagnostics

[10] (United States Department of Agriculture, Biosecurity Guide for Poultry and Bird Owners, 2014)

Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL)

The Department of Agriculture utilizes the services of Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL) as the primary poultry diagnostic laboratory. Presumptive positive samples are sent to National Veterinary Services Laboratory (NVSL) for further testing and confirmation. The CVMDL uses diagnostic procedures as prescribed by the United States Department of Agriculture and the NVSL. Proficiency tests offered by NVSL are taken annually to assure laboratory capabilities. A quality assurance program is in place and the CVMDL is fully accredited by the American Association of Veterinary Laboratory Diagnosticians.

See Attachment 13: Procedures 6 - CVMDL- Established Diagnostic Testing and Reporting Procedures

Contacts: Dr. Joan Smyth, Director and Dr. Sandra Bushmich, Section Head
Connecticut Veterinary Medical Diagnostic Laboratory
Department of Pathobiology and Veterinary Science
61 North Eagleville Rd., U-3089
Storrs, CT 06269-3089
Email: CVMDL@uconn.edu
(860) 486-4000

Laboratory Capacity:

- Avian Influenza testing capacities for Serology and Virus Isolation

With current staffing and equipment:

Test Name	Frequency	Sample capacity	Days of week performed
AI AGID	Daily	80	Mon-Thurs
	Weekly	320	
	Monthly	1280	
Virus Isolation in eggs	Daily	N/A	Thursday setup with harvest the following Tuesday
	Weekly	6*	
	Monthly	24	

*NOTE: one premises of 6 samples or two premises of 3 samples each.

With 1 additional trained staff member and 1 additional 37C incubator for Virus Isolation egg incubation:

Test Name	Frequency	Sample capacity	Days of week performed
AI AGID	Daily	200	Mon-Thurs
	Weekly	800	
	Monthly	3200	
Virus Isolation in eggs	Daily	N/A	Thursday setup with harvest the following Tuesday
	Weekly	12**	
	Monthly	48	

**NOTE: two premises of up to 6 samples each, or three premises of 4 samples each, or four premises' of 3 samples each.

- Avian Influenza testing capacities for Molecular Diagnostics

With current staffing and equipment:

Test Name	Frequency	Sample Capacity	Days of week performed

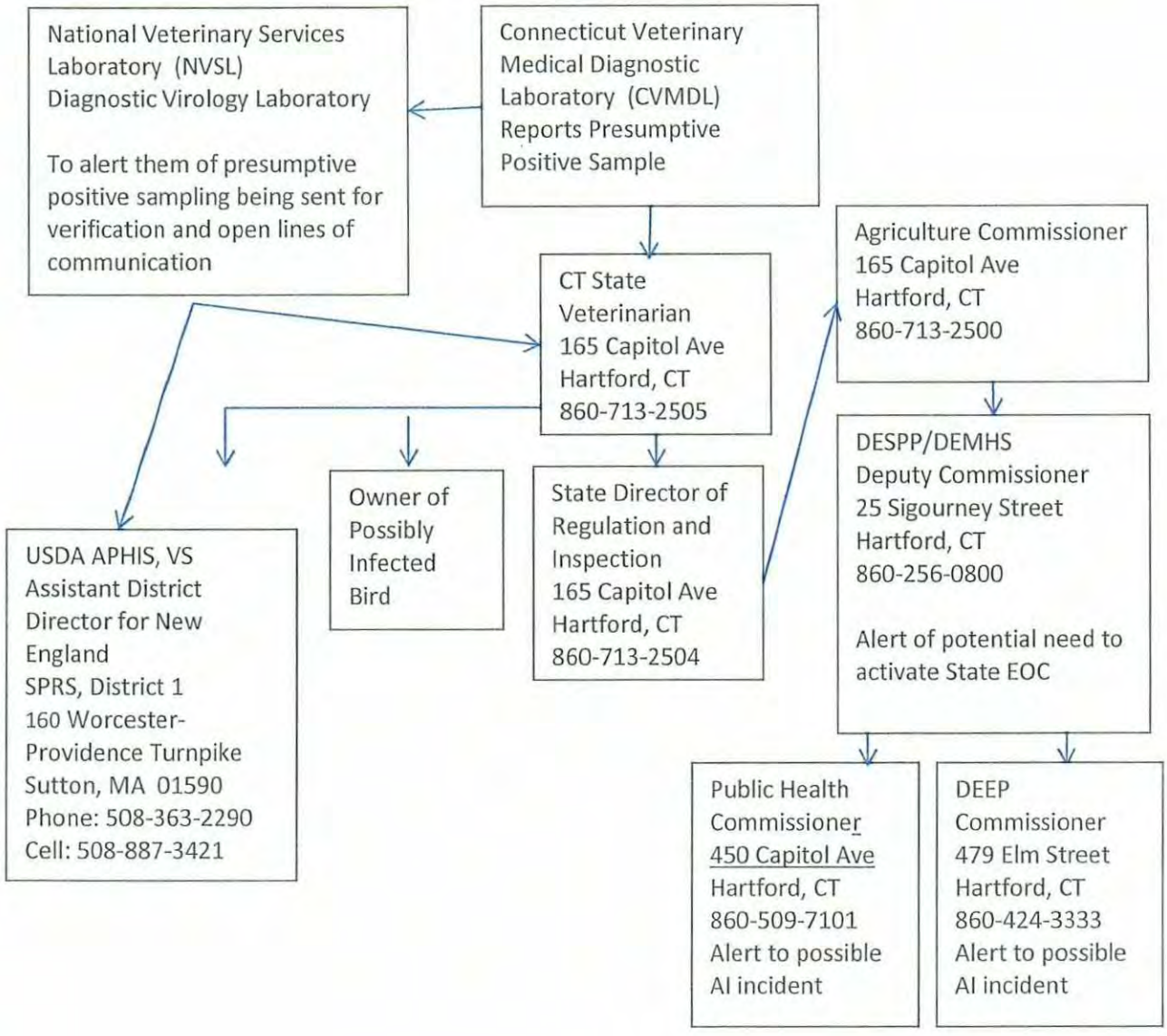
Real-Time RT-PCR	Daily	312	Mon-Fri
	Weekly	1560	
	Monthly	6760	

With 1 additional FT Tech and 1 additional ABI 7500

Test Name	Frequency	Sample Capacity	Days of week performed
Real-Time RT-PCR	Daily	468	Mon-Fri
	Weekly	2340	
	Monthly	10140	

Required Reporting:

Avian Influenza Presumptive Positive Reporting Contacts
Figure 1.0



(See Attachement 6- Emergency Orders)

d. Public and Industry Education

DoAg, USDA, and the University of Connecticut (UConn) cooperate in conducting outreach activities, and circulating educational materials provided by the USDA. These materials are available at http://www.aphis.usda.gov/vs/birdbiosecurity/ and many are available in English and Spanish.

Outreach efforts consist of distribution of the USDA materials through mailings to the superintendents of all Connecticut state fairs, known backyard poultry owners, feed stores, and veterinarians. Field personnel visit and hand out the same information to game bird breeders, hunting and fishing clubs, poultry fanciers, exhibitors, as well as the commercial egg layer and broiler industry. Surveillance testing includes conveyance of program materials, contact information, and an explanation of biosecurity.

Meetings are conducted involving veterinarians, fair officials, public health personnel, and Connecticut agricultural teachers. Hands on training and informational seminars are held in cooperation with the University of Connecticut targeting CVMDL staff, livestock staff, industry leaders and animal control officers.

The University of Connecticut Co-operative Extension and Department of Pathobiology and Veterinary Science also participate in extensive outreach efforts. These consist of monthly poultry health updates at Connecticut Poultry Association meetings, creation and distribution of Avian Influenza fact sheets, and conducting training seminars for animal health staff and technicians.

Visits to the live bird market and livestock auction include surveillance testing and distribution of USDA produced "Biosecurity for the Birds" program materials as well as verbal direction on the State and Federal programs and the benefits of participation. Internet information on Avian Influenza is posted on the Connecticut Department of Agriculture's website with links to USDA "Biosecurity for the Birds" program, as well as procedures for reporting sick birds and relevant contact information.

The ESF 15 External Affairs/Emergency Communiations function will be coordinated by the CTDoAG Public Informaiton Office (PIO) and the Office of the Governor PIO, in collaboration with appropriate other agency PIOs.

2. Preparation Activiites

Prepare for rapid and coordinated response to Avian Influenza in the State.

a. Standing Emergency Disease Management Committee

Convene the standing emergency disease management committee on a regular basis to review and revise the CT AIMRP. **See Attachment 7-Committees** for the list of committees and members.

b. **State Highly Pathogenic Avian Influenza Working Group**

Convene the Highly Pathogenic Avian Influenza (HPAI) Workgroup to review and update the State's current Avian Influenza Response Plan (AIMRP). **See Attachment 7- Committees** for the list of committees and members.

Establish subgroups to address specific elements of the AIMRP. State agencies are assigned to the most appropriate subgroup(s) with the CT DoAg providing guidance to all subgroups. The HPAI Workgroup is made up of the following subgroups:

- **Planning** - Collecting information, researching new guidance and collaborating with all the appropriate subgroups to draft the AIMRP for approval by the HPAI.
- **Resource Management** - Supply and equipment procurement; accounts payable and record keeping.
- **Public Information** - Messaging pre, during & post incident, including outreach to diverse communities.
- **Public Health/Safety** - General recommendations for poultry owners , and the general public.
- **Operational Safety** – Operational safety plans, SOPs, responder PPE training and monitoring, and decon.
- **Legal Matters**: pre-incident/during/post-incident; agency statutory authorities, orders, emergency regulations, declarations, etc.
- **Depopulation** - planning and procedures, equip/supplies (site specific)
- **Mortality Disposal** -Commercial flock, Hobby flock, wildlife; movement permitting
- **Premise decon, recovery, repopulate**
- **Overall State Recovery** – Economic; Behavioral Health

c. **Training**

To ensure situational awareness and compliance with policies and procedures, a tabletop exercise should occur to exercise, test and discuss the contents of this plan as needed. Members from State, Local, Federal and NGOs (e.g., industry experts, debris experts, mental health experts) should be in attendance at this exercise. Additionally, training courses may be offered if the need arises.

The Departmentof Energy and Enviromental Protection offers debris management training

d. MOUs with Diagnostic Lab

The CT DoAg has a Memorandum of Understanding (MOU) with Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL) for their services.

The MOU is based on the following template:

Memorandum of Understanding (MOU)
Sample/Authorized Laboratories

Adopted from the National Poultry Improvement Plan (NPIP) Model Plan

Memorandum of Understanding (MOU) for Testing and Reporting Criteria and Approved Testing Methods for Authorized Laboratories

_____*name of laboratory and location*_____ covering the cooperative work of the National Poultry Improvement Plan (NPIP), agrees to comply with the requirements of participating poultry in the State of Connecticut and keep necessary records required by the NPIP and to make such records accessible to official representatives of the official state agency upon request, and that the above laboratory will report all official tests completed in the laboratory on official USDA, APHIS, NPIP or equivalent forms to the State Veterinarian of the Connecticut Department of Agriculture. This MOU shall be in full force and effect for a period of one year beginning _____ and ending _____ and from year to year thereafter upon submission of a signed MOU to be appended to this original agreement.

_____ _____
(DATE) Laboratory Director

_____ _____
(DATE) NPIP State Contact Rep.

e. Use of DPH's Medical Countermeasures (MCM) Program Process

The Connecticut Department of Public Health (CT DPH) may utilize the state's Medical Countermeasures (MCM) Program, formerly the Strategic National Stockpile (SNS) Program, to support the National Veterinary Stockpile (NVS) response operation. The CT DPH may use a modified version of its Receipt, Stage and Store (RSS) Warehouse operations to receive, manage, deliver and distribute NVS assets.

f. Communications

Because not everyone involved in response to an event will have access to the same modes of communication, multiple technologies will be used and may include but not be limited to:

- Cellphone
- Satellite phones may be supplied by the DPH

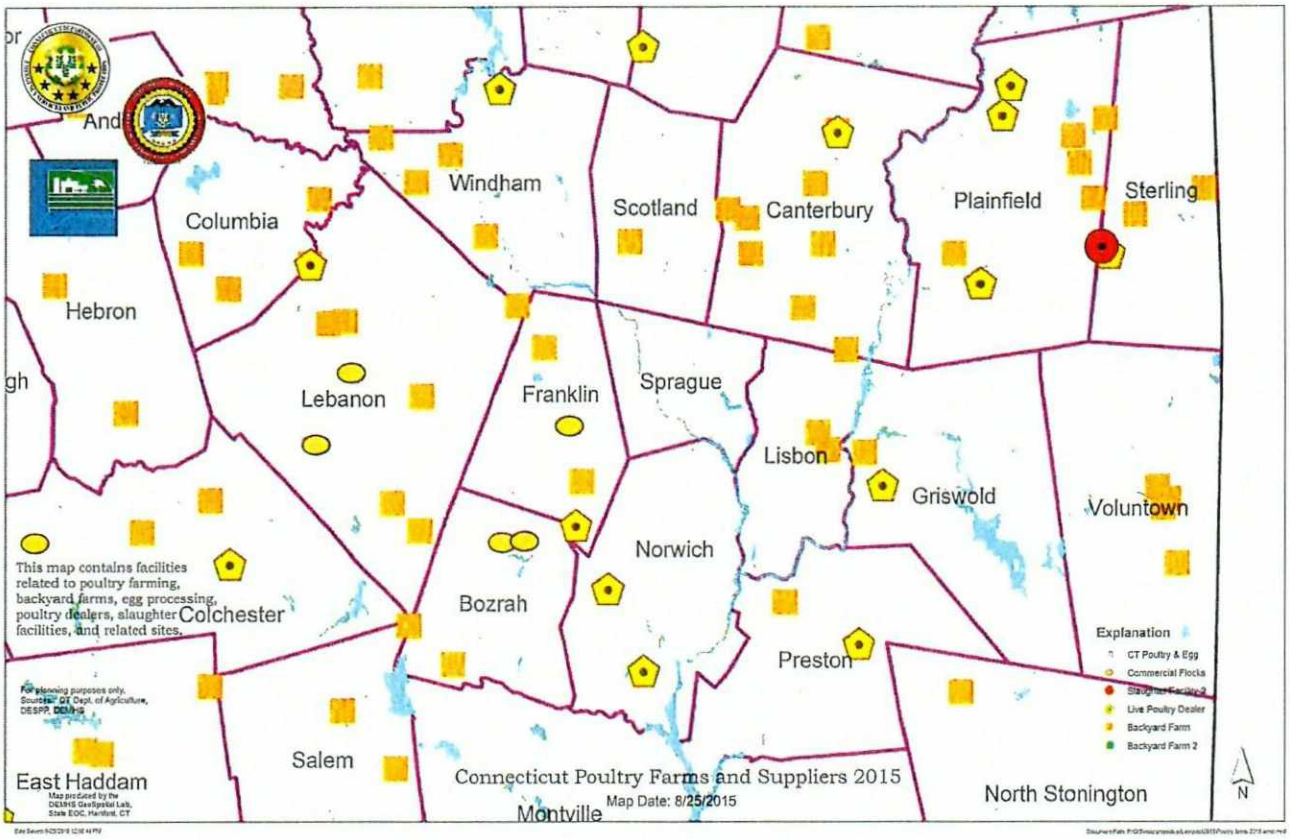
- DEMHS Emergency Operations Center communications capabilities
- Landline, including Fax capabilities.

DEMHS EOC has direct high band frequency radio contact capabilities with DEMHS Regional Offices which, in turn, have direct communications with officials of involved municipalities.

g. GIS/Mapping

GIS is used to plot the locations of poultry and egg producers from the backyard flocks (1 to 500 poultry) and commercial flocks (up to 30,000) to major producers (200,000 to 1,000,000 each). The working map will help decision makers visualize the proximity of locations to each other, and enable planning zones (Infected, Buffer, Control and Surveillance) to be drawn as necessary. Whether a farm or producer is deemed "infected," for example, may have an impact on nearby farms. Potential sites for depopulation and disposal are also being plotted. DESPP/DEMHS may assist DoAg in the preparation of such GIS mapping.

Sample



3. Response Activities

The CT DoAg and its partners will respond to the presence of Avian Influenza, through testing, quarantine, and depopulation as necessary to minimize the spread of disease, the loss of animals, and disruption in the economy.

Response activities associated with HPAI include:

- Initial handling and Investigation – suspected cases of AI;
- Quarantine – restrict movement of poultry and anything that touches a poultry farm into and out of a control area;
- Eradicate – humanely euthanize/depopulate affected flock(s);
- Disposal – properly
- Monitor – test wild and domestic birds in and around the quarantine area;
- Disinfect – kill the virus in the affected flock locations; and
- Test – confirm that the poultry farm is AI virus-free

See Attachment 13: Procedures 1- HPAI Repsonse Timeline for First 72 hours.

a. Initial Handling and Investigation of Suspected Cases of AI

1) Reporting

- In Connecticut, all Avian Influenza viruses are reportable to the State Veterinarian, including wild bird surveillance.
- When a flock is showing clinical signs suggestive of AI, it is the responsibility of the poultry company to notify the State Veterinarian. The State Veterinarian will ensure the collection of appropriate samples by either company personnel and/or Inspectors from the CT DoAg. Appropriate samples are serum for AGID and tracheal swabs for RT-PCR and virus isolation. The Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL) will analyze samples and presumptive positive samples will be sent to National Veterinary Services Laboratory for further testing and confirmation.
- The CVMDL will immediately notify the NVSL and the State Veterinarian of presumptive positive test results.
- The State Veterinarian (SV) will immediately notify the Commissioner of the CT DoAg, USDA-APHIS, the CT DoAg Director of Inspection and Regulation, the owner of the presumptive positive bird, and the Connecticut Poultry Association (CPA). The SV will call for an immediate meeting of the Standing Emergency Poultry Disease Management Committee.
- A State quarantine may be placed on suspicious flocks prior to receiving test results at the discretion of the State Veterinarian. Flocks with positive serology or positive antigen detection will be quarantined until the results are confirmed and subtype determined by NVSL. **See Attachment 8- Quarantine Order.**
- As soon as a case is confirmed by the NVSL, the CT DoAG will be requested by USDA/APHIS to provide the information required in VS Memorandum 565.16 Protocol for response, Communication, and Investigation of Notifiable Avian Influenza (NAI) in Domestic Poultry. **See Attachment 9- Situation Report Template and Attachment 10 - Information Rythm.**

2) Epidemiology/Tracing

Epidemiological investigation is an integral part of any response. The ability to rapidly identify an infected flock, trace its origin and movements, and identify contact animals is vital to an effective response to contain and eradicate the disease. Once a presumptive or confirmed case has been initiated, the epidemiology investigator(s) from the CT DoAg will initiate in-depth trace-back and trace-forward

procedures. Industry personnel and growers will be asked to assist investigators in tracing animal movements in and out of the positive premises during the previous 21 days. Personnel and vehicle movement information will also be requested at this time. Quarantines may be instituted at the trace-back or forward sites at the State Veterinarian's discretion.

- DoAg staff, in cooperation with USDA, will investigate the characteristics of the disease, identify risk factors, determine control measures, and monitor the effectiveness of implemented control measures. The standard surveillance plan may be modified for each situation.
- DoAg staff, in cooperation with USDA, will conduct rapid trace back and trace forward investigations to identify the origin of disease and identify all infected and exposed flocks. Tracing will include all movements to and from premises under investigation, including, movement of susceptible and non-susceptible animals, products, equipment, vehicles, and people.
- Maps of the infected premises and surrounding areas will be developed with the cooperation of the DEMHS Geospatial Lab.
- Wildlife and other vectors, both mechanical and biological, will be considered in the investigation.
- Non-commercial poultry to include but not limited to live bird markets and their suppliers, backyard poultry, and auction-type sales may be included in H5/H7 LPAI incident investigations and response activities as described in this plan as appropriate to epidemiological links to the index case and any contacted premises.

b. Quarantine

State (Commissioner of Agriculture and the State Veterinarian) and Federal regulatory officials have authority to impose quarantines or hold orders. Generally, State quarantines are imposed on individual flocks and premises when AI is suspected. State quarantines are used to control intrastate movements. Federal quarantines are used to stop interstate movement of poultry. Both Federal and State quarantines may be used simultaneously.

In all cases, the initial response to the identification of AI in the State of Connecticut is quarantine and movement control. This may be followed by depopulation and disposal of infected and exposed poultry, and disposal of contaminated products and materials. The initial quarantine zones will include a 2-mile "**infected zone**", and a 5-mile "**surveillance zone**" surrounding the infected premise(s). The size of these zones may be altered to allow reasonable geographical boundaries. The size of the zones is also subject to change as determined by the CT DoAg in cooperation with USDA to allow rapid and efficient containment and elimination of the virus.

One entrance/exit will be established for each quarantined property and signage will be posted.
In the event of quarantine zone violations (movement of poultry, prohibited poultry products, and/or improperly disinfected poultry equipment), local or state law enforcement officers may be called upon to enforce the quarantine zone and/or premises quarantine.

c. **Control and Eradication of HPAI, END, H5/H7 LPAI & other LPAI subtypes**

1) **HPAI and exotic Newcastle disease (END)**

- The farm will be quarantined and strict biosecurity measures will be implemented.
- HPAI and END are **OIE list A** emergency animal diseases and therefore infected farm(s) will be depopulated.
- Appraisal of the flock is to occur prior to depopulation.
- Surveillance of all farms surrounding an infected premise within the quarantine zone and any contact or suspect premises outside the quarantine zone. Agar Gel Immunodiffusion (AGID) and RRT-PCR for H5 or H7 AI and END will be used in the first week of surveillance. Tracheal swabs from dead birds will be tested weekly using RRT-PCR.
- Controlled ring vaccination of flocks surrounding an infected premise may be used if there is evidence that the disease is spreading and cannot be controlled and eradicated by quarantine, biosecurity and depopulation.
- Quarantine will be lifted after the last previously infected flock is depopulated and the house is cleaned and disinfected and the disinfected house is tested negative of the virus.

2) **H5 /H7 LPAI**

- The farm will be quarantined and strict biosecurity measures will be implemented.
- Poultry that are infected or exposed to H5/H7 LPAI may be required to be destroyed at the discretion of the CT DoAG and APHIS (9 CFR 56.5). If the birds have to be moved out of the farm for disposal, the depopulation may take place as much as two to four weeks after the initial incident in order to reduce the amount of virus being shed by the infected birds that could contaminate the roadways/surroundings when the infected flock will be depopulated. Infected birds usually stop shedding the virus four weeks after infection. Appraisal of the flock is to occur prior to depopulation. If indemnity is requested a compliance agreement between the claimant, the CT DoAG and APHIS should be in place. **See Attachment 11- Compliance Agreements.**

- Controlled vaccination of commercial layers, layer breeders, broiler breeders, and turkey breeders in conjunction with strict biosecurity, active surveillance, sequential depopulation and repopulation plan may be used as a method to eradicate the disease upon the approval of the State Veterinarian and the USDA/APHIS.
    - Replacement pullets will be vaccinated twice at least three weeks prior to placement to an infected or positive premise/farm. Previously infected layers/breeders will be vaccinated once either via subcutaneous or intramuscular injection. Pullets that will be older than six weeks at the start of vaccination will be vaccinated once.
    - Eighty to one hundred sentinel birds will be co-mingled with vaccinated flocks to monitor virus recirculation and infection.
    - Sentinel birds will be bled every other week for HI test and dead birds from the infected farm will be swab every week for RRT-PCR test. Any dead sentinel will be sent to the State University Diagnostic laboratory for postmortem testing.
    - Vaccine will be under the control and permitted for use by the Department of Agriculture of the State. The vaccine is strictly limited to flocks on the positive premises and to replacement pullets prior to placement on the positive premises.
    - The affected farm producer must submit a signed flock plan (sequential depopulation and repopulation) that will be reviewed and co-signed by the CT DoAg and APHIS. **See Attachment 5- Flock Plan.**
    - The vaccination program will be stopped if there are significant trade bans imposed on the United States, or there is genetic evidence that the H5 or H7 LPAI has mutated to HPAI, and/or there is an indication after six months that the vaccine will not eradicate the infection.
    - Surveillance of all farms surrounding an infected premise within the quarantine zone and any contact or suspect premises outside the quarantine zone. AGID and RRT-PCR for H5 or H7 AI will be used in the first week of surveillance. Tracheal swabs from dead birds will be tested weekly using RRT-PCR. Flu Detect Synbiotic, Directigen or Binax could also be use in the surveillance of AI.

- Surveillance will continue weekly until the infected flock has been free of active infection for at least 30 days or until all surrounding and contact flocks/farms have been sufficiently tested and found free of active infection for a period of at least 30 days.
- Quarantine will be lifted after the last previously infected flock is depopulated and the house is cleaned and disinfected and is cultured negative of the virus.

3) LPAI other than H5 or H7 subtypes

- The flock/farm will be quarantined and strict biosecurity measures will be implemented.
- Spent laying hen, layer breeders, broiler breeder, turkey breeder, broilers and turkey meat flocks found to be serologically positive to LPAI but without the ability to infect sentinel birds or evidence of virus shedding may be moved to approved slaughter. Sequential depopulation by slaughter may

occur once sentinel birds and viral testing indicate the flock/farm to be without active infection for a period of at least three weeks.

- Controlled vaccination of commercial layers, layer breeders, broiler breeders, turkey breeders and turkey meat flocks in conjunction with strict biosecurity and active surveillance may be used as a method to eradicate the disease upon the approval of the State Veterinarian and the USDA. Vaccination protocol will be the same as the vaccination protocol of H5 or H7 LPAI.
- Surveillance of all farms surrounding an infected premise within the quarantine zone and any contact or suspect premises outside the quarantine zone. AGID and RRT-PCR for H5 or H7 AI will be used in the first week of surveillance. Tracheal swabs from dead birds will be tested weekly using RRT-PCR. Flu Detect Synbiotic, Directigen or Binax could also be use in the surveillance of AI.
- Surveillance will continue weekly until the infected flock has been free of active infection for at least 30 days or until all surrounding and contact flocks/farms have been sufficiently tested and found free of active infection for a period of at least 30 days.
- Quarantine will be lifted three weeks after the last previously infected flock is depopulated and the house is cleaned and disinfected and is cultured negative of the virus.

d. Movement Controls.

1) **Purpose:** The purpose of movement control is to help eliminate the spread of Avian Influenza by controlling all movement of birds (commercial poultry, pet, game fowl, game birds, backyard, etc.), poultry products, equipment, and people within the Quarantine Zones. The State may restrict movement of poultry and other birds into Connecticut and within Connecticut from farm to farm or to public venues. Federal quarantines can be used to stop interstate movement of poultry. Both Federal and State quarantines may be used simultaneously. Connecticut State Regulations for the control of movement of poultry can be found in § 22-324 -4: Quarantined Areas

2) **Quarantine Zone Enforcement.** Law enforcement officials (or designated and duly authorized premises guards) will have the responsibility for enforcing movement controls.

   - **Premises Guards.** Premises guards will be maintained 24 hours 7 days a week (24/7) on Infected and Contact Premises. Guards can be reduced to daylight hours only, on either Infected or Contact Premises after depopulation and burial of birds.
     - **C&D (Cleaned and disinfected).** Guards can be removed after C&D of facilities on an Infected Premises.
     - **Premises Reclassification.** Guards can be removed from Contact Premises when classification is downgraded to Restricted Premises.
   - **Mobile Patrols.** The DoAG may request that DESPP/CSP assists in providing security to Inspectors of the State DoAG within the Quarantines Zones to perform random inspections of poultry and poultry service vehicles. Mobile patrols will contact the State EOC if activated or the DoAG with questions regarding disposition of suspect cargoes. Patrols may be discontinued 30 days after C&D of last Infected Premises in the Infected Zone.

3) **Poultry Premise Movement Restrictions.**
   - Access to premises in the Quarantine Zone should be limited to response personnel. If delivery and farm service persons and vehicles **require** entry to the poultry premises, assigned response personnel will monitor biosecurity compliance.
   - Poultry premises within the Quarantine Zone shall forbid entrance to the premises, by:
     - Service personnel,
     - Vaccination crews (except as authorized by the State Veterinarian) and

- Any other individuals that would move from farm to farm, including but not limited to, utility company personnel, all mail delivery companies including (e.g. FedEx, UPS, USPS). Alternate arrangements will need to be made for meter reading by utility companies (e.g. estimated usage method) and mail/package delivery.

4) **Owner/Grower Movement Restrictions.**
   - Discourage other owner/growers from visiting premises.
   - Avoid visiting premises where birds may be housed.

5) **Litter Movement Restrictions.** Suspend all cleanout and spreading of litter, except by permit only, and encourage composting of all litter (in house, if possible). Composting should utilize carbon sources on farm (round bale, etc.). Litter is a Prohibited Item under Regulations of Connecticut State Agencies Section 22-324-5 and can only be moved intrastate after having been heated throughout to a temperature of at least 160 (71 C) or as specifically provided for by the Commissioner of Agriculture under Section 22-324-8.

6) **Movement for Routine Flock Procedures.** Routine procedures including vaccination (except as authorized by the State Veterinarian) are to be discouraged within the Quarantine Zone in order to limit traffic on and off the farms.

7) **Quarantine Zone Movement Restrictions.**
   - Into Quarantine Zone
     - No new birds allowed into Quarantine Zone, except by permit.
   - **Within Quarantine Zone**
     - **Feed Transportation (Feed Trucks).** Feed trucks should be dedicated to the Quarantine Zone. They should have a permit and be cleaned and disinfected (C&D'd) both ways. The driver is to have no direct contact with poultry. If there is no feed mill within the Quarantine Zone, feed should transferred at the edge of the zone to the dedicated trucks.
     - **Bird Transportation.** Transportation trucks will be issued a permit to carry birds straight to slaughter and will be C&D'd both ways.
       - **Slaughter.** All birds going to slaughter will have to be inspected within 24 hours of movement, and have to be permitted.
       - **Catch Crew.** Increase biosecurity procedures for all catch crews and their activities.
       - **Processing.** If a slaughter facility is located in the Quarantine Zone, all birds going to the slaughter facility from outside the area will be permitted in, and all transportation vehicles will have to undergo C&D prior to being permitted out of the Quarantine Zone.
     - **Egg Transportation.**
       - **Table Eggs.** Table eggs will have to be:
         - Permitted within the Quarantine Zone,
         - Required to have clean new containers and/or flats,
         - The eggs sanitized, and
         - All transportation vehicles will have to be C&D'd both ways.
       - **Hatching Eggs.** Hatching eggs will not be permitted for delivery within the Quarantine Zone.
   - **Movement Restrictions Out from Quarantine Zone.**
     - **Out from Infected Zone.**
       - **No Animals or Products.** No animals or animal products can leave the Infected Zone without permit from the State Veterinarian or USDA.

- **Manure.** Poultry manure are first stacked in the farm and covered with a tarp and are tested virus negative before they can be spread in the fields.
- **Vehicles, Equipment, and People with Strict Biosecurity.** Vehicles, equipment, and people may leave the Infected Zone if strict biosecurity procedures are observed. These procedures should include, but may not be limited to, the following:

  - **Clean & Disinfect (C&D)**
  - **Shower out**
  - **Human-to-animal contact policies are dependent upon the disease agent**
  - **Out from Surveillance Zone**
    - **Non-susceptible Species & Poultry with Appropriate Biosecurity.** Non-susceptible livestock and poultry can move out of the Surveillance Zone only with the appropriate biosecurity procedures, such as C&D of vehicles.
  - **Egg Transportation (Table Eggs and Hatching Eggs). Table and Hatching Eggs will have to be;**
    - Permitted out,
    - Required to have clean new containers and/or flats,
    - The eggs sanitized, and
    - All transportation vehicles will have to be C&D'd both ways.

- **Free Zone Movement Restrictions.**
  - There are no movement or export restrictions.

e. Surveillance and Testing

- Surveillance testing of flocks within the initial **2-mile infected zone** will be conducted within 48 hours. Blood samples and tracheal and/or cloacal swabs for virus detection testing (PCR/virus isolation) will be collected and submitted to CVMDL and/or NVSL as appropriate.

- Surveillance testing of flocks within the initial **5-mile surveillance zone** will be conducted within 72 hours. Blood samples and tracheal and/or cloacal swabs for virus detection testing (PCR/virus isolation) will be collected and submitted to CVMDL and/or NVSL as appropriate.

- DEEP and USDA Wildlife Services may be called on to provide surveillance of the wild bird populations within the infected quarantine zone.

- Poultry mortality surveillance by DoAg and/or USDA may also be used to monitor AI spread and containment within the quarantine zones. This surveillance will follow **See Attachement 13: Procedures 4- New England Farm Protocol for Dead Bird AI Surveillance.**

f. Biosecurity

All persons are to comply with the biosecurity guidelines at all times regardless of AI status.
DoAg, USDA, and other authorized personnel will follow enhanced biosecurity protocols within quarantine zones and when entering and leaving a poultry premises to reduce the risk of spreading disease.

Cleaning and disinfection of contaminated articles shall be done in accordance with RCSA § 22-324 – 11. **See Attachment 2- Regulations of Connecticut State Agencies,** Title 22. Agriculture. Domestic Animals

g. Personnel Security

All personnel responding to, containing, and eradicating AI will be provided with proper personal protective equipment (PPE) and will be trained in the proper use of the equipment. **See Attachment 13: Procedures 3-Biosecurity Measures and Response Worker Safety.**

In the event of a zoonotic AI incident, only responders who have been trained in advanced PPE will be allowed to enter the area. Appropriate PPE and training will be provided to those who need it. DPH will advise on issues of personnel safety. DPH personnel may serve as safety officers. CONN-OSHA may provide technical assistance to those designated as safety officers.

h. Mass Depopulation and Euthanasia

Mass depopulation and euthanasia are not synonymous, and USDA APHIS recognizes a clear distinction. Euthanasia involves transitioning an animal to death as painlessly and stress-free as possible. Mass depopulation is a method by which large numbers of animals must be destroyed quickly and efficiently with as much consideration given to the welfare of animals as practicable, given extenuating circumstances.

Mass depopulation is employed in an HPAI response to prevent or mitigate the spread of HPAI through elimination of infected or potentially infected poultry. Due to the risk of virus amplification in infected poultry, poultry that meet the HPAI presumptive positive case definition will be depopulated as soon as possible, with the depopulation goal of 24-hours or less. Poultry on Contact Premises or those meeting the suspect case definition may also be depopulated as soon as possible, if such depopulation is determined necessary by DoAg and APHIS officials. Environmental contamination becomes a significant challenge when depopulation is delayed, and can result in further HPAI transmission. The final determination to depopulate the entire Infected Premises or specific houses on Infected Premises or to depopulate Contact Premises will be made by DoAg and APHIS.

In the case of LPAI, depopulation may proceed more slowly. Eradication of LPAI from a particular flock will proceed in accordance with a flock plan developed by APHIS and the State Department of Agriculture, with input from the flock owner and other affected parties.

In any event, euthanasia or mass depopulation should be provided to affected poultry as safely, quickly, efficiently, and humanely as possible. In addition, the emotional and psychological impact on animal owners, caretakers, their families, and other personnel should be carefully considered and minimized.

APHIS Depopulation Methods (*Per HPAI Outbreak 2014-2015 Stamping-Out & Depopulation Policy* September 18, 2015)

> *In almost all cases, water based foam, carbon dioxide, or alternative methods will be the depopulation methods available to rapidly "stamp-out" the HPAI virus in poultry. Each premises will be evaluated individually, considering epidemiological information, housing and environmental conditions, currently available resources and personnel, and other relevant factors.*

However, if standard methods cannot achieve the 24-hour goal, the APHIS National Incident Coordinator will approve—on a case-by-case basis—the use of ventilation shutdown for depopulation. This method is considered by some to be less humane than other methods, but it can spare the lives of potentially thousands of other birds by halting the infection as soon as it is detected. Ventilation shutdown requires no specialized equipment or personnel. It would be implemented only upon recommendation by Federal and State officials and the producer, with concurrence by the National Incident Coordinator that all other options have been considered and that no other method will achieve the 24-hour depopulation goal.

Euthanasia/mass depopulation will be conducted on site to minimize the risk of spreading disease. The most appropriate method of euthanasia for each location will be determined by the State Veterinarian with consideration of the following factors:

- Safety of personnel
- Risk of spreading disease
- Age/size of the birds
- Environment and confinement capabilities
- Requirement and availability of specialized equipment/training
- Environmental impact

Preferably, depopulated flocks should be composted on the farm to the maximum degree possible. This may be combined with off-site composting. In a worst case scenario or at the direction of the USDA, carcasses resulting from depopulation as well as infected materials and restricted articles may have to be brought to other off-site locations such as resource recovery facilities , rendering plant etc. In other words, depopulated flocks that cannot be composted on-farm should be disposed by off-farm composting and waste to energy conversion at selected resource recovery facilities.

i. Controlled Marketing (LPAI only)

At the discretion of the State Veterinarian and the USDA, poultry that are infected, exposed to or negative for **H5/H7 LPAI** may be allowed to move for controlled marketing with the below requirements. LPAI infection in poultry is typically not fatal; the infection will eventually cease and the flock will then test virus negative for LPAI. Following strict biosecurity measures and required testing, the infected flock and its products would not pose a risk of spreading LPAI to uninfected poultry. **This section does not apply to HPAI.**

- Strict biosecurity measures must be maintained to ensure that the AIV does not spread during the extended time that the flock needs to clear out the virus (~ 1-2 weeks). Enhanced biosecurity measures shall be used during the acute phase of the infection (virus shedding). **See Attachment 13: Procedures 5- AI Eradication Program with Emergency use of Vaccine, Sequential Depopulation and Enahnced Biosecurity.**

- Birds must not be transported to a market until 21 days after the acute phase of the infection (virus shedding) has concluded. Since the premises are still under State quarantine, permission from the State Veterinarian (permit) must be obtained prior to movement to processing.

- Birds must have sampled and tested virus negative for 3 days prior to movement.

- Eggs from positive flocks may be moved following biosecurity protocols and permitting in accordance with Section §22-324-6 (d) C.G.S.

- No indemnity will be available for flocks approved for controlled marketing.

a. Disposal of Poultry, Products, and Contaminated Articles

- Disposal will be done in a manner that will minimize the risk of spreading disease and will have minimal negative impact on the environment.

- Movement of poultry carcasses, products, or contaminated articles shall be by permit only issued by the Connecticut DoAg.

- Disposal of poultry products will be carried out as soon as possible. In-house composting, off-site composting, and combustion at certain resource recovery facilities will be used as preferred methods of carcass disposal.

- Combustion at resource recovery facilities will be done in cooperation with the CT Department of Energy and Environmental Protection (DEEP) and facility operators. Use of resource recovery facilities may be expensive, subject to operator conditions, and cumbersome, but is an effective means of disposal of infected material. **See Attachment 13: Procedures 5- AI Eradication Program with Emergency Use of Vaccine, Sequential Depopulation and Enhanced Biosecurity for a list of Resource Recovery Facilities.**

- The State of Connecticut will **facilitate disposal agreements** with appropriate facilities to receive flocks.

- When off-site composting and combustion at certain resource recovery facilities is the method for disposal, carcasses must be packed and transported in a manner that ensures load containment with no leakage or dispersion of fluids or other materials. Vehicles shall be cleaned and disinfected, as necessary. Resulting cleaning wastewaters will be appropriately managed.

- The handling of the carcasses will be kept to a minimum and should not take place in windy conditions.

- Disposal or movement of Restricted/Prohibited articles shall be in accordance with RCSA §§ 22-324 – 5 through 10 inclusive.

- On-site composting will be carried out under the supervision of, as appropriate, the farm, USDA, DoAg, DEEP, and/or designated contractor who is a Subject Matter Expert in composting of animal mortalities and in accordance with the guidelines **See Attachment 13: Procedures 7- Guidelines for In-House Composting of Carcasses.**

j. Valuation/Indemnity

Poultry products and materials that are condemned by DoAg and/or USDA and must be destroyed as part of the disease eradication effort may be eligible for a fair market value appraisal for indemnification purposes. (**See Attachment 12- Listing of Potential Funding Sources**)

- **State Compensation for Property Destroyed** - Property destroyed as the result of an incident of Avian Influenza may be compensated by the Commissioner of Agriculture in accordance with the following program established in the Connecticut General Statutes (Sec 222-326c) and implemented by Sections §§ 22-326c 1 through 2 of the Regulations of Connecticut State Agencies (RCSA).

  - **Sec. 22-326c.** (a) The owner of any property destroyed pursuant to section 22-324 may submit a claim to the Commissioner of Agriculture for compensation for such property. The commissioner may approve payment of the claim after the value of the property destroyed has been determined by the commissioner and the owner thereof. No compensation shall be paid and no premises restocked with poultry until such premises have been inspected and approved by the commissioner. No owner shall be compensated by the state if such owner is compensated at full market value from any other source for property destroyed pursuant to section 22-324. (b) The Commissioner of

Agriculture shall adopt regulations in accordance with chapter 54 establishing procedures for determining the value of property destroyed pursuant to section 22-324. Such procedures shall include provisions for arbitration and appraisal by two appraisers, one chosen by the commissioner and one chosen by the owner. (c) Any funds appropriated to the Department of Agriculture for the payment of compensation pursuant to this section shall not be expended for any other purpose.

- RCSA §§ 22-326c-1 through 2 Department of Agriculture

Sec. 22-326c-1 Appraisal: Poultry, carcasses or parts thereof, eggs, products, or articles required to be destroyed in accordance with Section 22-324-10 shall be appraised by two appraisers, one chosen by the Commissioner and one chosen by the owner. If they are unable to agree upon the value of such property, each shall choose an arbitrator, and the two arbitrators so chosen shall choose a third, and the three arbitrators so chosen or a majority of the three arbitrators so chosen shall be approved by the Commissioner. (Effective July 25, 1986)

Sec. 22-326c-2 Payment: (a) A claim for payment for destruction of poultry, carcasses or parts thereof, eggs, products, or articles must be presented to the Director of the Task Force before payment will be made. The claimant must state whether the items for which payment is requested are, or are not, subject to a mortgage, lien, or other security or beneficial interest held by any person other than the claimant. If the claimant is the owner and states that there is no mortgage, lien, or other such interest on the items, payment will be made to the owner. If the claimant states there is a mortgage, lien, or other such interest, a VS form 1-23 shall be signed by the claimant and by each person holding a mortgage, lien, or other such interest on the items, consenting to the payment of any indemnity allowed to the person specified thereon and payment will be made to such person. All payments are dependent upon the ability of funds appropriated to the Department of Agriculture for the payment of compensation pursuant to Connecticut General Statutes Section 22-326c. (b) No payment shall be made unless all conditions for release of quarantine in Section 22-324-10c and 22-324-11 and Sections 22-326c-1 and 22-326c-2 of these regulations are met. (Effective June 25, 1986)

- Federal Compensation for Property Destroyed and Costs of Cleaning and Disinfecting – H5/H7 Low Pathogenic Avian Influenza – 9 CFR Part 56

Property destroyed as the result of an incident of Low Pathogen Avian Influenza, as well as the cost of cleaning and disinfecting materials that came into contact with poultry that were infected with or exposed to LPAI, may be compensated at the rate of either 25% or 100% of eligible costs by the Administrator of the Animal and Plant Health Inspection Service (APHIS) of the United States Department of Agriculture in accordance with 9 CFR Part 56. Rate of compensation depends largely on the participation of the destroyed poultry in the National Poultry Improvement Plan (NPIP) Avian Influenza Clean or Avian Influenza Monitored Program, as well as the State's participation in the NPIP Diagnostic and Surveillance Program.

The State Department of Agriculture, by maintaining its full participation in the National Poultry Improvement Plan, may be eligible for 100% of the costs of surveillance and monitoring and 100% of the costs of vaccine administration. If the State does not maintain full participation in NPIP, the Administrator of APHIS may reduce compensation for such activities to 25%.

Indemnity under the 9 CFR Part 56 program will be reduced by the amount any recipient receives from the State Department of Agriculture in accordance with current USDA procedure and policy. However, the federal indemnity program will be the primary means of indemnity in all situations involving LPAI.

For current information and guidance please see the USDA document HPAI Outbreak 2014-2015 Financing the Response: State/Tribal Information October 20, 2015. Please note: this document may be revised as the situation develops.

k. Vaccination of Birds

Vaccination may be considered as part of the AI eradication effort. Many factors must be considered before vaccination will be implemented including availability, resources, trade and economic impact. The DoAg and USDA will determine if vaccination is an option.

The fundamental method by which eradication of an avian disease may be achieved is the immediate isolation of infected birds followed as rapidly as possible by depopulation and sanitary disposal of carcasses.

Under some circumstances it may be necessary to also use vaccination. This will be determined by the Connecticut Department of Agriculture, State Veterinarian in collaboration with the USDA, APHIS, and VS. The decision to use vaccine would be made after considering circumstances including (but not limited to), availability, resources, trade and economic impact.

If vaccination were determined to be an option, the objectives of a vaccination program would be:

1. Reduction of virus production in large populations of poultry in which depopulation is delayed by shortage of resources;
2. Establishing a barrier of immune birds to assist in area containment; and
3. Protection of particularly valuable or genetically important populations of birds.

Use of vaccination as part of the eradication strategy is dependent upon:

1. Decisions on which flocks require vaccination, and when, will be made by the State Veterinarian with input from USDA ;
2. The decision to request the use of vaccine in the state will rest with the State Veterinarian;
3. USDA approval of the use of vaccine.

l. Wildlife Management – Department of Energy and Environmental Protection

If it is suspected or determined that wildlife may play a role in the spread of disease, DEEP and USDA Wildlife Services will lead wildlife surveillance and response. Regarding surveillance of dead wild birds as an early detection measure, DEEP has maintained a passive surveillance program via a dead bird reporting website since 2005. This is monitored twice a week with a primary focus on events that involve large numbers of birds. The DEEP does not routinely test individual birds that are found dead – especially if they are backyard birds – robins, sparrows, pigeons, cardinals etc. – which are not considered to be highly susceptible to AI. DEEP remains interested in all mortality events and does follow up on those that they feel are indicative of a potential HPAI or other wildlife disease incident.

Sightings of dead wild birds can be reported via the Wild Bird Mortality Database (www.cfwwildbirdmortalityreporting.ct.gov/PublicBirdReport).

- If several birds (>5) are found dead in one location or in the same area over the course of several days, this is a situation where testing of the dead birds may be warranted. This type of die-off should be reported to the DEEP Wildlife Division at 860-424-3011.
- Individual wild backyard birds that are found dead can be reported via the Wild Bird Mortality Database and should be disposed of properly (bury or double bag and place in your garbage receptacle).

Sick or dead DOMESTIC birds – mainly poultry - should be reported to the Connecticut Department of Agriculture, State Veterinarian at 860-713-2505.

Direct contact with a dead bird should be avoided through the use of gloves or a shovel to place the bird in a plastic bag. The bag should be tied off and disposed of by burying or discarding in the trash. Hands should be washed after disposal.

4. Recovery Activities

Recovery actions necessary following an AI incident will depend upon the extent of the incident, the subtype involved, and other factors. Basic recovery initiatives involve the following:

- Partnerships with other agencies and organizations
- Plan review and revision
- Indemnification
- Restocking

Section III. Attachments

Table of Contents for Attachments:

Attachment 1: Important Definitions and Acronyms

Infected Premises (IP). A premise where infected birds are located.

Quarantine Zones: The initial quarantine zones will include a 2-mile Infected Zone (IZ) and a 5-mile Surveillance Zone (SZ) surrounding the Infected Premise (IP). The size of these zones may be altered to allow reasonable geographical boundaries. The size of the zones is also subject to change as determined by DoAg in cooperation with USDA to allow rapid and efficient containment and elimination of the virus. Quarantine Zones restrict the movement of susceptible animals or contaminated articles as well as provide decontamination procedures. Generally speaking, movement restrictions and decontamination requirements are more stringent in the IZ than they are in the SZ.

Free Zone (FZ). A Free Zone is a zone in which the absence of the disease under consideration has been demonstrated by the meeting of requirements for disease-free (or "free") status as specified in the OIE International Animal Health Code. Within a Free Zone and at its borders, appropriate official veterinary control is applied for animals and animal products as well as for the transportation of animals and animal products.

Contact Premises (CP). Premises with susceptible animals that are associated with an IP by exposure, either directly or indirectly, by being:

- Adjacent to, or
- Traces in or out of exposed:
- Birds
- People
- Product, Equipment, or Material
- Windborne fomites

Suspect Premises (SP): Premises with susceptible animals that are under investigation for a report of clinical signs with no apparent epidemiological link to an IP or CP, or premises with susceptible animals in the Infected Zone that are not classified as an IP or CP.

Restricted Premises (RP): Are the following premises for the period in which surveillance and monitoring continue:

- IPs which have been depopulated and subsequently cleaned and disinfected; *and/or,*
- CPs after 30 days from the last arrival from, or shipment to an IP, if there are no clinical signs or mortality indicative of infection.

At-Risk Premises (ARP): Premises in the Surveillance Zone that have susceptible animals, but none of them are ill.

Free Premises (FP): All Premises in the Free Zone.

Flock Plan: This is a written flock management agreement developed by APHIS and the Connecticut Department of Agriculture with input from the flock owner and other affected parties. A flock plan sets out the steps to be taken to eradicate any strain of HPAI from a positive flock, or to prevent introduction of a strain of HPAI into

another flock. A flock plan shall include, but is not necessarily limited to, poultry and poultry product movement and geographically appropriate infected and control/monitoring zones. Control measures in the flock plan should include detailed plans for safe handling of conveyances, containers, and other associated materials that could serve as fomites; disposal of flocks; cleaning and disinfection; downtime and repopulation. See Attachment S for templates.

Glossary and Acronyms

AI	Avian Influenza (AI) is a disease of viral etiology that ranges from a mild or sub clinical infection, to an acute fatal disease of chickens, turkeys, guinea fowls, and other avian species, especially migratory waterfowl
AIV	Avian Influenza Virus
AVMA	American Veterinary Medical Association
BIOSECURITY	Measures taken to minimize the risk of disease transmission
CGS	Connecticut General Statutes
CVMDL	Connecticut Veterinary Medical Diagnostic Laboratory at the University of Connecticut
DAS	Connecticut Department of Administrative Services
DEMHS	Connecticut Division of Emergency Management and Homeland Security
DEEP	Connecticut Department of Energy & Environmental Protection
DoAg	Connecticut Department of Agriculture
DOT	Connecticut Department of Transportation
DPH	Connecticut Department of Public Health
FADDL	Foreign Animal Disease Laboratory, at Plum Island
FBI	Federal Bureau of Investigation
Flock	For the purpose of these DoAg Avian Influenza protocols, a flock is defined as all poultry in a poultry house, regardless of the number of floors in that house
Fomite	An inanimate object that serves to transmit AIV such as vehicles, clothing, equipment, manure, bedding, etc.
GIS	Geographic Information System
GPS	Global Positioning System

HPAI	Highly Pathogenic Avian Influenza
IC	Incident Commander
Infected Zone	Designated area surrounding a known infected premises - usually 2 miles in radius. Within this zone movement of susceptible animals and certain articles, is restricted and is allowed by DoAg permit only
LPAI	Low Pathogenic Avian Influenza
NIMS	National Incident Management System
NPIP	National Poultry Improvement Plan
NVSL	National Veterinary Services Laboratories; Ames, Iowa operated by USDA
PCR	Polymerase Chain Reaction Test
Poultry	Any species of domestic fowl (including but not limited to chickens, turkeys, ostriches, emus, rheas, cassowaries, waterfowl, and game birds) raised for food production, breeding, show or other purposes
PPE	Personal Protective Equipment.
OIE	Office of International Epizootics
OPM	Connecticut Office of Policy and Management
Quarantine Zone	A quarantine zone is a general geographic area designated by the Department of Agriculture, may include infected and surveillance zone
Quarantined Flock	A flock that is under quarantine must meet DoAg requirements and obtain permission prior to movement of poultry from that flock
RCSA	Regulations of Connecticut State Agencies
SPF	Specific Pathogen Free
State Veterinarian	Veterinarian employed by the Department of Agriculture serving as Chief Livestock Health Official for the State
Surveillance Zone	An area designated by the Department of Agriculture surrounding the infected zone - usually approximately 5 miles in radius from an AI infected premise. Within this zone, movement of susceptible animals is restricted and is allowed by DoAg permit only.
UC	Unified Command
UConn	University of Connecticut

USDA	United States Department of Agriculture and includes APHIS/VS, Animal and Plant Health Inspection Service, Veterinary Services unless other wise specified
USDA AVIC	United States Department of Agriculture Area Veterinarian in Charge
Vector	Any living organism (humans, animals, birds, insects, and rodents) that may transmit the infectious agent.
Zoonotic Disease:	A disease that can be transmitted between animals and people.

Attachment 2: Regulations of Connecticut State Agencies

A. Department of Agriculture:

Regulations of Connecticut State Agencies
TITLE 22. Agriculture. Domestic Animals

Agency

Department of Agriculture

Subject

Control of Avian Disease

Inclusive Sections

R.C.S.A. §§ **22-324-1— 22-324-11**

CONTENTS

Control of Avian Disease

Sec. 22-324-1. Definitions

Clinical evidence. Evidence, such as decreased feed and water consumption, depression, unusual movements or position, increased mortality, hemorrhage beneath the skin on the lower legs and feet, severe decrease in egg production; post-mortum lesion; and history of the disease occurrence in the flock.

Commissioner. The Commissioner of Agriculture or his duly authorized representative.

Director of the Task Force. The Commissioner or Department of Agriculture official designated by the Commissioner to supervise and perform the disease control and eradication work of the Task Force.

Exposed poultry. Poultry which through the movement of poultry, individuals, feed, or other vectors has been determined by a Federal or State inspector to have had contact, directly or indirectly, with highly pathogenic avian influenza.

State inspector. An inspector of the Department of Agriculture, Department of Consumer Protection, or Department of Energy and Environmental Protection responsible for the performance of the function involved.

Federal inspector. An inspector of the Animal and Plant Health Inspection Service, the Agricultural Marketing Service, or the Food Safety and Inspection Service, United States Department of Agriculture, responsible for the performance of the function involved.

Highly pathogenic avian influenza. A disease of poultry caused by any influenza virus Type A that results in not less than 75 percent mortality within eight days in at least eight healthy susceptible chickens, 4-8 weeks old, inoculated by the intramuscular, intravenous, or caudal airsac route with bacteria-free infectious allantoic or cell culture fluids and using standard laboratory operating procedures to assure specificity

Infected poultry. Poultry determined by the Director of the Task Force, in such person's judgment, as being infected with highly pathogenic avian influenza on the basis of clinical evidence, epidemiological evidence,[1] or diagnostic tests.[2]

Movement. Shipped, transported, delivered or received for movement by any person.

Permit. Pursuant to this section of these regulations, an official document issued by a State or Federal inspector for movement of a restricted article.

Person. Any individual, partnership, corporation, association, joint venture or any other legal entity.
Poultry. Chickens, ducks, geese, swans, turkeys, pigeons, doves, pheasants, grouse, partridges, quail, guinea fowl, and pea fowl.

Task Force. Special force of Federal and/or State personnel designated by the Commissioner to control and eradicate highly pathogenic avian influenza.

Veterinary Services. The Veterinary Services unit of the Animal and Plant Health Inspection service, United States Department of Agriculture.

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1 Epidemiological evidence—evaluation of clinical evidence and the degree of risk posed by the potential spread of infection based on population and exposure factors.
2 Protocol for such diagnostic tests can be found in the "Recommended Uniform Diagnostic Procedures" published by the Committee of the American Association of Veterinary Laboratory Diagnosticians. Copies of the test protocols may be obtained from the Deputy Administrator, Veterinary Services, Animal and Plant Health Inspection Service, United States Department of Agriculture, Hyattsville, Maryland, 20782.

Sec. 22-324-2. Intrastate movement of infected or exposed live poultry or materials

(a) No live poultry infected with or exposed to highly pathogenic avian influenza or other contagious poultry disease shall be moved intrastate.

(b) No carcasses or parts thereof from poultry infected with or exposed to highly pathogenic avian influenza or other contagious poultry diseases, no manure from such poultry and no litter which has been used by such poultry shall be moved intrastate unless heated throughout to at least 160°F (71°C) or unless moved intrastate from a quarantined area for incineration, rendering, or burial in a landfill in accordance with Section 22-324-8 of these regulations.

Sec. 22-324-3. Contaminated means of conveyance, premises, containers, and other accessories; not to be used for movement of poultry until cleaned and disinfected

No means of conveyance or premises which have contained any poultry which have been found infected with highly pathogenic avian influenza or other contagious poultry diseases, and no coops, containers, troughs, or other accessories used in the handling of such infected poultry, shall be used in connection with the movement of poultry until the said means of conveyance, premises, coops, containers, trough, or other accessories have been cleaned and disinfected under supervision of a Federal or State inspector with a permitted disinfectant, as provided in §§ 71.4, 71.6, 71.7, 71.10, and 71.11 of 9-CFR: or with three percent solution cresol compound, U.S.P.

Sec. 22-324-4. Quarantined areas

Quarantined areas are those areas so designated by the Commissioner.

Sec. 22-324-5. Prohibited articles

(a) The following are designated as prohibited articles:
(1) Live Poultry;
(2) Manure from poultry;
(3) Litter that has been used by poultry, and
(4) Hatching eggs.

(b) A prohibited article shall not be moved from a quarantined area.

Sec. 22-324-6. Restricted articles

(a) The following are designated as restricted articles:
(1) Poultry carcasses or parts thereof,
(2) Eggs from poultry used for food,
(3) Coops, containers, troughs, or other accessories that have been used in the handling of poultry or poultry eggs.

(b) A restricted article shall not be moved without a permit from a quarantined area except in accordance with the provisions in Sections 22-324-6 through 22-324-9 of these regulations.

(c) Poultry carcasses or parts thereof may be moved from a quarantined area:
(1) If from a poultry flock inspected by a Federal or State inspector prior to movement for slaughter and not found to have clinical evidence of highly pathogenic avian influenza, and if from poultry slaughtered at a federally inspected slaughtering establishment;
(2) If heated throughout to at least 160°F (71°C); or
(3) If moved under the supervision of State or Federal inspectors for incineration, rendering, or burial in a landfill (the incinerator, rendering facility, or landfill must have equipment and use procedures that are determined by the Commissioner to be adequate to prevent the dissemination of highly pathogenic avian influenza and must comply with the applicable laws for environmental protection).

(d) Poultry eggs for use as food which are from poultry not found infected with or exposed to highly pathogenic avian influenza may be moved from a quarantined area pursuant to a permit if prior to movement they are washed free of adhering material and rinsed with warm water containing not less than 50 p/m nor more than 200 p/m of available chlorine or its equivalent, and if moved in unused flats and cases, or in plastic flats and cases washed free of adhering material since last use and rinsed with warm water containing not less than 50 p/m of available chlorine or its equivalent.

Pursuant to a permit, poultry eggs for use as food which were laid outside of a quarantined area and which were subsequently moved into a quarantined area to an egg processing (cleaning, sanitizing, and repackaging) plant may then be moved from the egg processing plant if prior to the movement such eggs are washed free of adhering material and rinsed with warm water containing not less than 50 p/m nor more than 200 p/m of available chlorine or its equivalent, if such eggs are moved in new cartons for retail sale, and if the operator of the egg processing plant is operating under a compliance agreement whereby the operator of the processing plant agrees to comply with the provisions of this part. (See Attachment 11-Compliance Agreement)

(e) Any poultry eggs may be moved from a quarantined area under the supervision of a State or Federal inspector for incineration, rendering, or burial in a landfill (the incinerator, rendering facility, or landfill must have equipment and use procedures that are determined by the Commissioner to be adequate to prevent the dissemination of highly pathogenic avian influenza and must comply with the applicable laws for environmental protection).

(f) Used poultry coops, containers, troughs, or other accessories for use in the handling of poultry or poultry eggs may be moved from a quarantined area if prior to movement they are cleaned and disinfected with a permitted disinfectant specified in 9-CFR §§ 71.10 or 71.11.

Sec. 22-324-7. Permits for movement of restricted articles

(a) A permit for the movement of a restricted article may be obtained from a State or Federal inspector.1It shall list the name and address of the consignor and consignee, the origin and destination locations, the number and type of articles covered, and the purpose of the movement.

(b) Any permit which has been issued may be withdrawn by a Federal or State inspector or the Commissioner if he determines that the holder thereof has not complied with any condition for the use of the permit. The reasons for the withdrawal shall be confirmed in writing as promptly as circumstances allow. Any person whose permit has been withdrawn may appeal the decision in writing to the Commissioner within ten (10) days after receiving the written notification of the withdrawal. The appeal shall state all of the facts and reasons upon which the person relies to show that the permit wrongfully withdrawn. The Commissioner shall grant or deny the appeal, in writing, stating the reasons for the decision as promptly as circumstances allow. If there is a conflict as to any material fact, a hearing shall be held to resolve such conflict.

Sec. 22-324-8. Movement by United States Department of Agriculture or Connecticut Department of Agriculture for diagnostic or experimental purposes; other movements

(a) Notwithstanding other provisions in Sections 22-324-1 through 22-324-11 of these regulations, a prohibited article or restricted article may be moved by the United States Department of Agriculture or Connecticut Department of Agriculture for diagnostic or experimental purposes under conditions found by the Commissioner to be adequate to prevent the spread of highly pathogenic avian influenza.

(b) Notwithstanding other provision in Sections 22-324-1 through 22-324-11 of these regulations the Commissioner may in specific cases allow the movement of prohibited articles or restricted articles other than as provided for in Sections 22-324-1 through 22-324-11 of these regulations under conditions as the Commissioner may prescribe in each case to prevent the spread of highly pathogenic avian influenza. The Commissioner will promptly notify the appropriate officials of Federal and State Agencies involved of any such action.

Sec. 22-324-9. Inspections and seizures

State inspectors and federal inspectors appointed as representatives of the Connecticut Department of Agriculture designated by the Commissioner and identified by an official identification card, shall have authority, in accordance with Section 22-324 of the Connecticut General Statutes to enter upon any premises in Connecticut for the purpose of making inspections and seizures necessary under Sections 22-324-1 through 22-324-11 of these regulations.

Sec. 22-324-10. Disposal

(a) Whenever the Director of the Task Force finds that any poultry upon any premises in Connecticut are or have been infected with or exposed to highly pathogenic avian influenza, or that any carcasses or parts thereof, eggs, or other products or articles were so related to such poultry as to be likely to be a means of disseminating the disease, the Director of the Task Force will order the owner thereof, or the owner's agent in possession thereof, to maintain them in quarantine on such premises for such period and dispose of them within such time, and in such manner as the Director of the Task Force shall prescribe in accordance with Section 22-324 of the Connecticut General Statutes. The order shall be served upon the owner of the poultry, carcasses or parts thereof, egg products or articles, or the owner's agent, in person by a Federal inspector appointed as an employee of the Connecticut Department of Agriculture or by a State inspector. If the owner or the owner's agent does not comply with such order, after such notice thereof, the Director of the Task Force may seize, quarantine, and dispose of the poultry carcasses or parts thereof, eggs, products, or articles as provided in Section 22-324 of the Connecticut General Statutes.

(b) When any poultry, carcasses or parts thereof, eggs, products, or articles are ordered to be quarantined on any premises under paragraph(s) of this section, they shall not be moved from such premises unless authorized by the Director of the Task Force.

(c) A premises quarantine shall remain in effect until the following conditions are met:

(1) All poultry on such premises are depopulated;
(2) All carcasses and parts thereof from the depopulated poultry, and any other poultry carcasses and parts thereof, eggs, products, and articles so related to the depopulated poultry as to be likely to be a means of disseminating highly pathogenic avian influenza, and disposed of by incineration, rendering, burial in a landfill or other place, or by such other means as the Commissioner determines would be adequate to prevent the spread of highly pathogenic avian influenza (the incinerator, rendering facility, place of burial, or other place of disposal must have equipment and use procedures that are determined by the Commissioner to be adequate to prevent the dissemination of highly pathogenic avian influenza and must comply with the applicable laws for environmental protection);
(3) The premises are found by a Federal or State inspector to have been cleaned and disinfected in accordance with Section 22-324-11 after the carcasses or parts thereof, eggs, products, or articles are disposed of as specified in paragraph (c) (2) of this section;
(4) No live poultry are taken onto the premises for a 30-day period after the premises have been found to meet the cleaning and disinfection provisions of paragraph (c) (3) of this section, and for any additional time period determined necessary by the Director of the Task Force to insure that the premises are free of highly pathogenic avian influenza; and
(5) The Director of the Task Force has determined (by means which may include testing with test birds and evaluation of epidemiological conditions) the highly pathogenic avian influenza has been eradicated and that the premises can be safely repopulated.

Sec. 22-324-11. Cleaning and disinfecting requirements

All pens, coops, containers, troughs, other accessories, or means of conveyance found by a Federal or State inspector to have been used in the handling of any poultry or related products, carcasses or parts thereof, egg

products, or articles subject to an order under Section 22-324-11 of this regulation shall be cleaned and disinfected in accordance with the provisions in §§ 71.7, 71.10, and 71.11 of 9-CFR or with a three percent solution cresol compound, U.S.P., unless other disposal is ordered under Section 22-324-10 of these regulations.

B. Department of Energy and Enviromental Protection

Department of Energy and Environmental Protection

Statutes and Regulations

Below are the existing DEEP statutes and regulations that may be triggered in the event of a High Path Avian Influenza event.

Emergency/Temporary Authorization for Regulated Activity - Conn. Gen. Stat. section 22a-6k

- DEEP Commissioner may issue an emergency authorization for air, waste and water permitting activities regulated by DEEP if necessary to prevent, abate or mitigate an imminent threat to human health or the environment, and such authorization is "not inconsistent" with the federal Water Pollution Control Act, Rivers and Harbors Act, Clean Air Act or RCRA
- DEEP Commissioner may issue a temporary authorization for air, waste and water permitting activities
  - Activity not to exceed 90 days, whether consecutive or not;
  - No significant threat to human health or the environment posed by the activity;
  - Such authorization is necessary to protect human health or the environment or is otherwise necessary to protect the public interest; and
  - Such authorization is "not inconsistent" with certain specified federal laws (identified above)

Issuance of Cease and Desist Orders – Conn. Gen. Stat. section 22a-7

- DEEP Commissioner is authorized to issue such an order following an investigation and finding that any person is causing, engaging in or maintaining, or is about to cause, engage in or maintain, any condition or activity which will result in or is likely to result in imminent and substantial damage to the environment or to public health within the jurisdiction of the commissioner under specific statutory provisions

Composting

- At farm – Regulations of Connecticut State Agencies (Regs.) section 22a-174-3a (New Source Review Permitting). Farm is exempt from section 22a-174-23 (nuisance odors) if operations follow generally acceptable agricultural practices.
- Off site, whether state or private land –Regs. section 22a-174-23 (nuisance odors), Conn. Agencies Regs. section 22a-174 -3a (New Source Review Permitting);); CGS section 22a-208a (Solid Waste Facilities) and Regs sections 22a-208i and 22a-209-1 et seq.

Portable Incinerators

- At farm and off site – Conn. Agencies Regs. section 22a-174-23 (nuisance odors), section 22a-174-18 (Control of Particulate Matter), and section 22a-174 -3a (New Source Review Permitting)

Resource Recovery Facilities (RRFs)

- New Source Review Permit limitations on chicken mortality throughput
- Conn. Agencies Regs. section 22a-174-23 (nuisance odors)
- Special Waste Disposal Plan authorizations pursuant to Section 22a-208y of CGS

Wild Birds

- DEEP Commissioner's Authority to destroy and dispose of diseased wildlife in the interest of wildlife management consistent with wildlife management principles if the wildlife is found to be a likely carrier of disease detrimental to other wildlife – Conn. Gen. Stat. section 26-3 (Note: the hunting of swans is prohibited under section 26-94, however, if swans are found to carry and spread the virus, the commissioner may want to employ this provision)
- DEEP Commissioner's authority to impound live wild birds to examine and determine whether diseased; also authorized to order destruction of such bird if "advisable in the public interest" – Conn. Gen. Stat. section 26-78.

C. Department of Motor Vehicles Sample Waivers

Waiver of International Registration Plan (IRP) Requirements for Connecticut

On [DATE], the State of Connecticut Governor Dannel P. Malloy declared a civil preparedness emergency pursuant to his authority under section 28-9 of the Connecticut General Statutes as a result of [DESCRIBE EMERGENCY].

In response to this emergency, the Commissioner of Motor Vehicles has authorized a temporary waiver of IRP requirements pursuant to section 14-5c of the Connecticut General Statutes for the purpose of ensuring that essential emergency relief supplies, equipment and services reach the affected areas. This waiver applies only to commercial motor vehicles based outside of Connecticut that are properly registered and are entering Connecticut for the specific purpose of responding to the emergency, including vehicles transporting relief supplies and equipment, utility company vehicles, tree service vehicles and vehicles used by relief agencies. This waiver will remain in effect until further notice.

Dated this day of , 201

Micheal Bzdyra.
Commissioner
State of Connecticut
Department of Motor Vehicles

Notice of Emergency Exemption From Hours of Service of Drivers

Pursuant to Connecticut General Statutes (CGS) §14-163c and the Regulations of Connecticut State Agencies §14-163c-10, the Commissioner of the Department of Motor Vehicles Andres Ayala, Jr. (Commissioner) has granted a limited exemption from the provisions of 49 CFR Part 395 governing Hours of Service of Drivers specifically for the **intrastate** transportation of [DESCRIBE] in connection with emergency conditions resulting from [DESCRIBE]. **The emergency exemption is effective beginning [DATE/TIME].**

This emergency exemption relieves motor carriers from compliance with the Maximum Driving Time Regulations contained in 49 CFR §395.3 and adopted through CGS §14-163c only while providing direct assistance through the delivery of heating oil and propane to Connecticut homes and businesses during the emergency. Direct assistance terminates when a driver or commercial motor vehicle is used in intrastate or interstate commerce to transport cargo not destined for the emergency relief effort or when the carrier dispatches such driver to another location to begin operations in commerce.

Nothing contained in this notice shall be construed as an exemption from the Controlled Substances and Alcohol Use and Testing Regulations (49 CFR Part 382), the Commercial Driver's License Regulations (49 CFR Part 383), the Minimum Levels of Financial Responsibility for Motor Carriers (49 CFR Part 387) and applicable size and weight requirements or any other portion of the statues or regulations not specifically identified herein.

Motor Carriers that have an Out-of-Service Order in effect cannot take advantage of the relief from the regulations that this declaration provides under CGS §14-163c and the Regulations of Connecticut State Agencies §14-163c-10. Motor carriers who have any suspension or revocation of registration privileges under CGS §14-35a or §14-215 cannot take advantage of relief from regulations.

No motor carrier operating under this notice shall require or permit a fatigued or ill driver to operate a commercial motor vehicle. A driver who informs a motor carrier that he or she needs immediate rest shall be given at least ten consecutive hours off-duty before the driver is allowed to return to service.

Drivers of motor carriers that operate under the Notice of Emergency Exemption must have a copy of it in their possession.

Drivers who utilize this exemption may come back into compliance and restart the computation of maximum driving time after 24 hours off-duty which starts at the end of their extended-hours period.

Consistent with CGS §14-163c and the Regulations of Connecticut State Agencies §14-163c-10, the emergency exemption notice will remain in effect until [DATE/TIME] or until sooner terminated by the Commissioner.

_____ _____

Date

Commissioner
State of Connecticut
Department of Motor Vehicles

Load Limit Waiver (Sample)

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION
2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546

Office of the
Commissioner

An Equal Opportunity Employer

I, James Redeker, Commissioner of Transportation of the State of Connecticut, hereby declare under the authority vested in me pursuant to Section 13b-26(f) of the Connecticut General Statutes that an emergency condition exists that demands immediate attention to insure the safe and efficient transport of emergency relief supplies.

As the result of Hurricane Sandy, President Obama has declared an Emergency under the Stafford Act. In order to expedite the transport of emergency relief medical, food, water, fuel and related relief supplies for the next 30 days, divisible load limits will be increased from 80,000 pounds GVW to 100,000 pounds GVW. Such loads are limited to emergency relief supplies only; including, but not limited to, medicine and medical supplies, food and water, and fuel and other supplies directly supporting the relief effort.

Accordingly, I intend to employ, in any manner, such assistance as may be required to address the emergency condition that will provide for safe travel and efficient transport of emergency relief supplies.

Dated this 6 day of November, 2012 at Newington, Connecticut.

James Redeker
Commissioner

State of Connecticut

ss: Newington

On this, the 6th day of November, 2012, before me, Lisa S. King, the undersigned, personally appeared, James Redeker, Commissioner of Transportation of the State of Connecticut, known to me to be the person described in the foregoing instrument, and acknowledged that he executed the same in capacity therein and for the purpose therein contained.

Lisa S. King
Notary Public

LISA S. KING
Notary Public
My Commission Expires June 30, 2016

e 30, 2016

Attachment 3: Economic Impact

The Economic Impact of Avian Influenza on Connecticut's Egg Industry (2015)

Submitted by
Mark R. Prisloe and Nandika D. Prakash, Ph.D.
Associate Economists
Connecticut Department of Economic and Community Development
January 13, 2016

The Connecticut Department of Agriculture (DOA) requested the assistance of the Connecticut Department of Economic and Community Development (DECD) to produce an economic impact analysis (EIA) of a potential loss from an outbreak of Highly Pathogenic Avian Influenza (HPAI). This statement is meant to update and expand on a 2003 DECD study for the DOA.[1] At that time in an attempt to avoid the damage to Connecticut's egg industry that would be caused by depopulation, the Connecticut DOA sought and received approval from the United States Department of Agriculture (USDA), to vaccinate chickens under a pilot program. This was a preferred alternative to destroying the flock. The USDA allowed the vaccination program to go forward and Connecticut avoided depopulation

In December 2015, DECD ran a new simulation of the loss of the state's egg production and the payments received by related industry vendors with the use of the Regional Economic Models, Inc. (REMI) Policy Insight PI+ model, a 70-sector structural and econometric model. The model results indicate that the loss of direct output of a DOA-estimated **$224 million** in the gross sale of eggs produced in Connecticut results in an average annual change in total output (among all industry sectors) that exceeds **$306 million.**

[1] W. Michael Regan and Mark R. Prisloe, Connecticut Department of Economic and Community Development, *The Economic Impact of Avian Influenza on Connecticut's Egg Industry*, June 20, 2003.

Attachment 4: Executive Order No. 34- Dannel P. Malloy

STATE OF CONNECTICUT

2013 JUN 12 P1:12

BY HIS EXCELLENCY

DANNEL P. MALLOY

GOVERNOR

EXECUTIVE ORDER NO. 34

WHEREAS, the United States Department of Homeland Security National Incident Management System (NIMS) provides a consistent, nationwide system to enable federal, state, tribal, and local governments, as well as the private sector and non-governmental organizations to work together to prepare for, prevent, respond to, recover from, and mitigate the effects of incidents regardless of cause, size, location or complexity; and

WHEREAS, it is necessary and desirable that federal, state, local, and tribal agencies and personnel coordinate their efforts to effectively and efficiently provide the highest levels of incident management; and

WHEREAS, to facilitate efficient and effective incident management, it is critical that federal, state, tribal, and local governments and organizations use standardized terminology and organizational structures, interoperable communications, consolidated action plans, unified command structures, uniform personnel qualification standards, uniform standards for planning, training and exercising, comprehensive resource management, and designated incident facilities during emergencies or disasters; and

WHEREAS, the NIMS standardized procedures for managing personnel, communications, facilities, and resources has improved, and will continue to improve, the State of Connecticut's ability to enhance local and state agency readiness, maintain first responder safety, and streamline incident management processes; and

WHEREAS, the NIMS concepts have improved, and will continue to improve, the State of Connecticut's ability to provide a coordinated and integrated program of emergency management and homeland security through local, regional and state-wide collaborative planning, training, exercise, response, recovery, prevention and mitigation; and

WHEREAS, the Incident Command System (ICS) components of NIMS are presently, and must continue to be, an integral part of various incident management activities throughout the State of Connecticut; and

WHEREAS, the continued use of the NIMS and an integrated ICS by the State of Connecticut is vital to ensuring continued access to federal funds from a variety of sources, which funds are used to further increase the preparedness of Connecticut to respond to incidents that threaten the health, welfare, safety and security of the residents of Connecticut;

NOW, THEREFORE, I, Dannel P. Malloy, Governor of the State of Connecticut, by virtue of the power and authority vested in me by the Constitution and Statutes of the State of Connecticut, do hereby ORDER AND DIRECT that:

1. Executive Order No. 10 of Governor M. Jodi Rell concerning the NIMS program is hereby rescinded in its entirety and the following is substituted in lieu thereof;

2. NIMS, as promulgated and, from time to time, revised by the United States Department of Homeland Security, shall continue to be established and recognized as the standard system within the State of Connecticut for the management of domestic incidents that affect the health, welfare, safety and security of the residents of Connecticut;

3. The Commissioner of the State of Connecticut Department of Emergency Services and Public Protection ("DESPP") and the Deputy Commissioner of DESPP for the Division of Emergency Management and Homeland Security ("DEMHS") shall take such action as they shall deem advisable to establish and support training programs, policies,

procedures, and protocols to implement and maintain the NIMS and integrated ICS components within all appropriate emergency operations and all other plans for the State of Connecticut, so as to ensure effective and efficient levels of incident management;

4. All other Commissioners and Department Heads shall work with DESPP/DEMHS to ensure that: all appropriate agency emergency activities and other plans follow the NIMS components; all agency staff and contractors with roles in emergency preparedness, planning, response, or recovery are trained in the appropriate NIMS and ICS components, including active participation in planning, training and exercises; and

5. For purposes of funding the activities of DESPP/DEMHS in carrying out the purposes of this Executive Order, the DESPP/DEMHS, as necessary or permitted in accordance with applicable law and to the extent available may: (1) apply for grants from governmental or other sources; (2) accept and expend such grants on behalf of itself, municipalities, or such other state agencies as is advisable; and (3) operate within the existing appropriations of the agency.

This order shall take effect immediately.

Dated at Hartford, Connecticut, this 12th Day of June 2013.

Daniel P. Malloy
Governor

By His Excellency's Order

Denise Merrill
Secretary of the State

Attachment 5: Sample Flock Plan

Sample Flock Plan for Highly Pathogenic Avian Influenza (HPAI)
Euthanasia, Disposal, Cleaning and Disinfection Procedures

The following is a sample flock plan provided for illustration only. The actual flock plan between the farmer, CT DoAg, and USDA may differ.

Quarantine Number was issued by the Connecticut Department of Agriculture on due to evidence of exposure to HPAI.

Quarantine instructions include completion and compliance with this Flock Plan, increasing biosecurity measures to minimize traffic and implementing protocols to clean and disinfect vehicles and equipment. Mortalities shall be managed according to this plan. Contaminated materials shall be disposed of and the farm cleaned and disinfected according this plan. Prior to repopulation and all flock and environmental testing has been completed with negative results. Repopulated birds shall be confirmed to be free of Avian Influenza virus. Post-repopulation, abnormal mortality losses shall be reported to the Connecticut Department of Agriculture and shall be investigated by Connecticut Department of Agriculture or USDA, VS personnel. The quarantine shall be released after 180 days have passed with no signs or evidence of Avian Influenza on the premise.

Date Approved:
Premise ID:
Premises Owner:
Premises Address:
Poultry present:

Brief History (clinical signs, test results etc):

This flock will be handled in accordance with State of Connecticut Avian Influenza Response Plan, the Regulations of Connecticut State Agencies R.C.S.A. § 22-324-1 through 22-324-11 inclusive, the Red Book for Highly Pathogenic Avian Influenza and the USDA, APHIS, VS Code of Federal Regulations (CFR).
The main tenets of this plan include:

- Removal of all poultry from the premises
- Cleaning and disinfection of the premises
- Assuring the premises are disease free
- Downtime and environmental testing
- Repopulation and monitoring for disease

Primary Responsibilities:
Euthanasia will be the primary responsibility of (the Connecticut Department of Agriculture, USDA VS, the owner, a selected private contractor). The owners of the poultry may be eligible for indemnification. All necessary indemnity documents regarding the live poultry will be completely filled out and signed prior to euthanasia. Value of the poultry will be obtained by a USDA, VS-prepared calculator based on the fair market value of the birds.
Disposal of dead poultry, litter (poultry bedding), and other contaminated materials that result from the depopulation will be the primary responsibility of the (poultry owner) with oversight by USDA, VS and Connecticut Department of Agriculture. These materials will be handled by on-site composting (or insert other method, with concurrence from USDA, VS and State).

The Poultry/premises owner will be primarily responsible for cleaning of the equipment, conveyances, and other contaminated materials during the composting process. Any wastewaters resulting from cleaning activites shall be collected, disposed, or handled appropriately in an environmentally protective manner. They will also apply the insecticide and rodenticide in compliance with applicable laws.
Disinfection of equipment, conveyances, and other contaminated materials associated with the depopulation will be the primary responsibility of (depopulation crew or contractor), and Connecticut Department of Agriculture VS. The disinfectant used will be approved by the USDA, VS and the Connecticut Department of Agriculture from a list that has been approved for use with HPAI.

Requests for Indemnity for Disposal, Cleaning, and Disinfection Activities

Any disposal of poultry and cleaning and disinfection of premises, conveyances, and materials for which indemnity is requested by the farm owner must be performed under a separate compliance agreement between the claimant, the Cooperating State Agency, and USDA, VS. The compliance agreement must be signed by all parties before the start of any of the activities for which indemnity is claimed. Any work performed before the compliance agreement is signed may not be eligible for reimbursement.

Euthanasia

All flocks on the affected premises will be depopulated in a timely manner. Workers will be fit tested and medically approved before entering the farm and will don appropriate personal protective equipment. Biosecurity will be maintained using a clean area and dirty area, to be established before euthanasia and disposal start. Euthanasia will be overseen and documented by Connecticut Department of Agriculture /USDA, APHIS, VS personnel.
Poultry will be euthanized by using , on . Euthanasia will be conducted under the direct supervision of Connecticut Department of Agriculture or Federal USDA, VS personnel.

Disposal of Euthanized Poultry

The euthanized birds will be with the concurrence of Connecticut Department of Agriculture, USDA VS following the procedures below.

☐ Disposal of all euthanized poultry and eggs. These items will be composted on site by the owners with supervision by the Connecticut Department of Agriculture and USDA, VS, federal or State Debris Management contractor(s), in coordination with the Connecticut Department of Energy and Environmental Protection. (insert other method if applicable) .

☐ Disposal of litter, manure, debris, and feed. These items will be composted on site in accordance with the guidelines in **Procedure 7. Guidelines for In-House Composting of Carcasses** by the owners with supervision by the Connecticut Department of Agriculture and USDA, VS federal or State Debris Management contractor(s), in coordination with the Connecticut Department of Energy and Environmental Protection . (insert other method if applicable)

☐ Disposal of euthanized poultry, litter, manure, debris, and feed. These items will be composted off site in accordance with the guidelines in **Procedure 8. Guidelines for Off-Site Composting of Carcasses** at a DEEP permitted location(s) - by the owners, Connecticut Department of Agriculture and USDA, VS, and /or federal or State Debris Management contractor(s), in coordination with DEEP. (insert other method if applicable)

☐ Disposal of all euthanized poultry and eggs will be by on-site composting, off site composting, and/or combustion at resource recovery facilities at . Transportation, biosecurity, cleaning and disinfection of

vehicles, people and equipment shall be under the supervision of the Connecticut Department of Agriculture and USDA, VS., federal or State Debris Management contractor(s), in coordination with the Connecticut Department of Energy and Environmental Protection(insert other method if applicable)

Cleaning and disinfection of conveyances following depopulation

All trucks and vehicles used in transporting/contacting affected poultry, poultry products or materials will be cleaned and disinfected prior to leaving the index premises. Trucks must be permitted if leaving the 10km control zone. Drivers will be instructed to avoid contaminating the cab of the truck. Should exiting the vehicle become necessary, plastic boot covers will be provided along with instructions on their proper use and disposal. Before any vehicles or tractors leave the quarantined farms, all vehicles will be cleaned and disinfected. Exterior, including the undercarriage, and interior surfaces, including truck cabs, will be cleaned. The interior of the truck cabs will be washed with clean water and a disinfectant applied as authorized in 9 CFR§ 71.10(a). Manure and litter removed from these vehicles will be handled in a manner similar to that described above. Disinfection of contaminated vehicles and equipment needs to be completed by Connecticut Department of Agriculture or USDA, VS personnel. Wastewaters resulting from disinfection activity shall be collected and disposed and managed appropriately in an environmentally protective manner.

Preparation for Cleaning and Disinfection

The following procedures will be completed prior to cleaning and disinfection:
Secure and remove all feathers that might blow around outside the house in which the infected or exposed poultry were held and clean any debris for the exterior of the poultry houses. will apply insecticides and rodenticides immediately after the removal of the birds or the construction of compost piles. With the exception of temperature monitoring and the turning of the piles (which should be done only by direction from state or USDA, VS personnel), leave the house undisturbed in order to allow as much HPAI virus as possible to die a natural death.

When to Clean

Houses should not be cleaned out or litter moved until all potential HPAI virus that may have contaminated the manure and litter is inactivated, as determined by Connecticut Department of Agriculture, or USDA, VS personnel and in accordance with the flock plan and the State of Connecticut Avian Influenza Response Plan. Before cleaning and disinfection, the premises will be inspected by the producer and personnel from Connecticut Department of Agriculture and/or USDA, VS personnel determine if there are contaminated items for which the cost of cleaning and disinfection would exceed the value of the materials or for which cleaning and disinfection would be impractical for another reason. The fair market value (used price) of these items will be determined by the State or USDA, VS appraiser with input from the owner. The destruction and disposal of these items will be conducted in accordance with the State of Connecticut Avian Influenza Response Plan and in accordance with USDA, VS Guidance 8603.1. Prior USDA, VS approval and the determination of fair market value is required for destruction of items for which indemnity will be claimed.

Cleaning and Disinfection

Cleaning and disinfection will be performed on all contaminated buildings and surfaces including pump houses and service areas.

1. Disposal of all litter, manure, debris, and feed. These items will be composted under the direction of Connecticut Department of Agriculture or USDA, VS personnel and in accordance with State of Connecticut Avian Influenza Response Plan regulations and allowed to remain undisturbed for an amount of time approved

by the Connecticut Department of Agriculture or USDA, VS personnel. Once composting is completed and the composting material is considered safe to move, said material can be (insert disposal method, spread on field stored etc) (and preferably be 2 miles from any other commercial poultry premises) The Connecticut Department of Agriculture or USDA, VS personnel will oversee, monitor and document this process. Compost material must remain on the infected premises for at least 90 days. After use, equipment used to clean out manure, debris, and feed will be washed and disinfected. In the case of inclement weather, the equipment may be washed, disinfected, and inspected at off-site wash stations at the discretion of the Official State Agency and USDA, APHIS.

2. Cleaning of the premises and equipment. Dry cleaning (the removal of contaminating materials without the use of water) and wet cleaning (washing) processes will be sufficient to ensure that all materials and substances contaminated with HPAI virus, such as manure, dried blood, and other organic materials, are removed from all surfaces. Areas with gross organic contamination that cannot be cleaned using only dry processes will be wet cleaned. Equipment will be disassembled as required to clean all contaminated surfaces. Special attention will be given to automatic feeders and other closed areas to ensure adequate cleaning. Houses and equipment will be inspected and documented by Connecticut Department of Agriculture or USDA, VS to ensure that cleaning has removed all contaminated materials or substances and that houses and equipment are completely dry before applying disinfectant.

3. Disinfection of premises and materials. When cleaning has been completed and all surfaces are dry, all contaminated interior surfaces of the structure should be saturated with a disinfectant as authorized in 9 CFR §71.10(a) and approved by USDA, VS. Disinfectants will be applied as specified by the manufacturer. A spray unit will be used to spray the disinfectant on all surfaces, making sure that the disinfectant gets into cracks and crevices. Special attention will be given to automatic feeders and other closed areas to ensure complete coverage.

Ensuring the Premises are Free of Avian Influenza

Environmental testing. Following depopulation, cleaning and disinfection, the premises will remain free of avian species for 21 days. During this time environmental sampling will be performed by Connecticut Department of Agriculture and/or USDA, VS personnel.

Repopulation and flock monitoring: If testing does not find evidence of avian influenza, the premises will be allowed to repopulate with prior approval by Connecticut Department of Agriculture. The birds will be tested weekly by collecting tracheal swabs and submitting the samples to, (NAHLN) lab for PCR testing for evidence of avian influenza. Testing will start at 28 days of age and continue until the birds reach 12 weeks of age.

Surveillance around the Affected Premises

There are (insert number) commercial poultry flocks found in a 10 Kilometer radius of the affected premises. (Insert testing procedures, quarantines, movement controls that apply). All non-commercial poultry premises within a 10 Kilometer radius of the exposed farm will be visited by Connecticut Department of Agriculture or USDA, VS personnel and allow testing of their poultry. They will also be provided information on avian influenza, biosecurity, and instructions on whom to contact if sick birds are found.

Signature Producer/Grower Representative: Date:

Signature State Veterinarian: Date:

Signature USDA APHIS VS ADD: Date:

Signature USDA APHIS VS District Director: Date:

Attachment 6: Emergency Orders

A. HPAI Detected in CT Order (v1 Oct 2015)

STATE OF CONNECTICUT
DEPARTMENT OF AGRICULTURE

CONNECTICUT GROWN

Tel: (860) 713-2500
Fax: (860) 713-2514

xxxx, 2015

Emergency Order #2015-01

Effective Immediately

Authority: Connecticut General Statute section (C.G.S. §) 22-324(c)

The Commissioner of the Department of Agriculture has determined that the contagious, transmissible Avian Disease known as **Highly Pathogenic Avian Influenza (HPAI)** has been detected in Connecticut. In order to control and eradicate HPAI in flocks of poultry in Connecticut, the Commissioner has determined it necessary to issue the following order concerning:

The Movement of Poultry in the State of Connecticut

Effective immediately all movement of live poultry, poultry mortalities, eggs produced in this state, poultry manure, poultry litter, and, any vehicles, equipment and conveyances in contact with live poultry shall be subject to the Connecticut Department of Agriculture, Avian Influenza response plan and the Regulations of Connecticut State Agencies sections (R.C.S.A. §) 22-324-1 through 22-324-11, inclusive.

Effective immediately all live poultry consignment sales, shows and exhibitions are banned.

Effective immediately live poultry shall not be imported into this state without prior authorization from the State Veterinarian.

Effective immediately any premise where HPAI is detected shall immediately be placed under quarantine and shall remain under quarantine until released. The premise and poultry contained therein shall be subject to mandatory biosecurity and HPAI control measures as prescribed by the State Veterinarian necessary to control and eradicate the HPAI virus.

Effective immediately any premise on which live poultry are kept may be subject to testing for Avian Influenza and subject to mandatory biosecurity measures as prescribed by the State Veterinarian.

This order shall be effective immediately and remain in effect for 120 days, and, may be re-issued, modified or extended if the Commissioner determines it necessary to continue protective actions to prevent the introduction of Highly Pathogenic Avian Influenza into this State.

All Connecticut General Statutes, Regulations of Connecticut State Agencies, United States Department of Agriculture publications and National Poultry Improvement Program documents cited in this order are on file with and available in electronic or print form, from the Department.

By Order of the Commissioner of Agriculture

_____ _____

Steven K. Reviczky Date

Seal of the Connecticut Department of Agriculture

B. HPAI Detected outside CT order (v1 Oct 2015)

STATE OF CONNECTICUT
DEPARTMENT OF AGRICULTURE

CONNECTICUT GROWN

Tel: (860) 713-2500
Fax: (860) 713-2514

xxxx, 2015

Emergency Order #2015-02

Effective Immediately

Authority: Connecticut General Statute section (C.G.S. §) 22-324(c)

The Commissioner of the Department of Agriculture has determined that the contagious, transmissible Avian Disease known as **Highly Pathogenic Avian Influenza (HPAI**) poses a significant risk to poultry in Connecticut. In order reduce the risk of introducing HPAI into flocks of poultry in Connecticut, the Commissioner has determined it necessary to issue the following order concerning:

The Importation of Poultry into the State of Connecticut

Section A, Definitions

As used in this order:

"Poultry" shall have the same meaning as in the Regulations of Connecticut State Agencies section 22-324-1, which includes chickens, turkeys, waterfowl, ducks, geese, swans, pigeons, doves, pheasants, grouse, partridges, quail, chucker, guinea fowl, and pea fowl, including the day old chicks and the hatching eggs of any of the species listed.

"Avian Influenza" means an infection or disease of poultry caused by viruses in the family Orthomyxoviridae, genus Influenzavirus A.

"Highly Pathogenic Avian Influenza (HPAI)" shall have the same meaning as in the Regulations of Connecticut State Agencies section 22-324-1.

"USDA APHIS, VS" means the United States Department of Agriculture, Animal Plant Health inspection Service, Veterinary Services.

Section B, The Importation of Poultry

No poultry shall be imported into this state from any flock, hatchery or geographical area that has been placed under quarantine by any State Animal Health Authority or the United States Department of Agriculture due to the detection of HPAI, or, is subject to any order concerning movement and control issued by a State Animal Health Authority or the United States Department of Agriculture due to HPAI. Exceptions may be granted by the State Veterinarian, provided the request is made in writing, no less than ten days prior to importation, and, provided the movement of poultry is approved by USDA APHIS, VS.

Section C, Imported Poultry

(1) In addition to compliance with section B of this order, and, all other statutory and regulatory legal requirements, all poultry imported into this state shall have been tested for Avian Influenza using a species appropriate Avian Influenza test, and, found negative, prior to the date of movement, or shall have a National Poultry Improvement Program status of Avian Influenza Clean.

(2) All poultry originating from a premise within a state which has an active HPAI infection, but are not prohibited entry pursuant to section B and are permitted to move interstate by USDA APHIS, VS, shall be tested for Avian Influenza using a species appropriate Avian Influenza test and found negative no more than seventy-two (72) hours prior to the date of entry into this state. The date of sample collection must be within seventy-two hours prior to the date of entry into Connecticut.

Section D, Proof of Avian Influenza Test

In addition to compliance with section B and Section C of this order, and, all other statutory and regulatory legal requirements all poultry imported into this state shall be accompanied with proof of Avian Influenza testing or National Poultry Improvement Program Avian Influenza Clean status. Such proof shall be in the form of a USDA APHIS, VS Form 9-3, a Certificate of Veterinary Inspection which states the date, type of Avian Influenza test and result of the Avian Influenza test or, an invoice or bill of lading which states the date and results of the Avian Influenza test.

This order shall be effective immediately and remain in effect for 120 days, and, may be re-issued, modified or extended if the Commissioner determines it necessary to continue protective actions to prevent the introduction of Highly Pathogenic Avian Influenza into this State.

All Connecticut General Statutes, Regulations of Connecticut State Agencies, United States Department of Agriculture publications and National Poultry Improvement Program documents cited in this order are on file with and available in electronic or print form, from the Department.

Section E, Commingling Poultry

Effective immediately the importation of live poultry to be sold at consignment sales is banned, and, the exhibition of live poultry at fairs, shows and exhibitions is banned.

By Order of the Commissioner of Agriculture

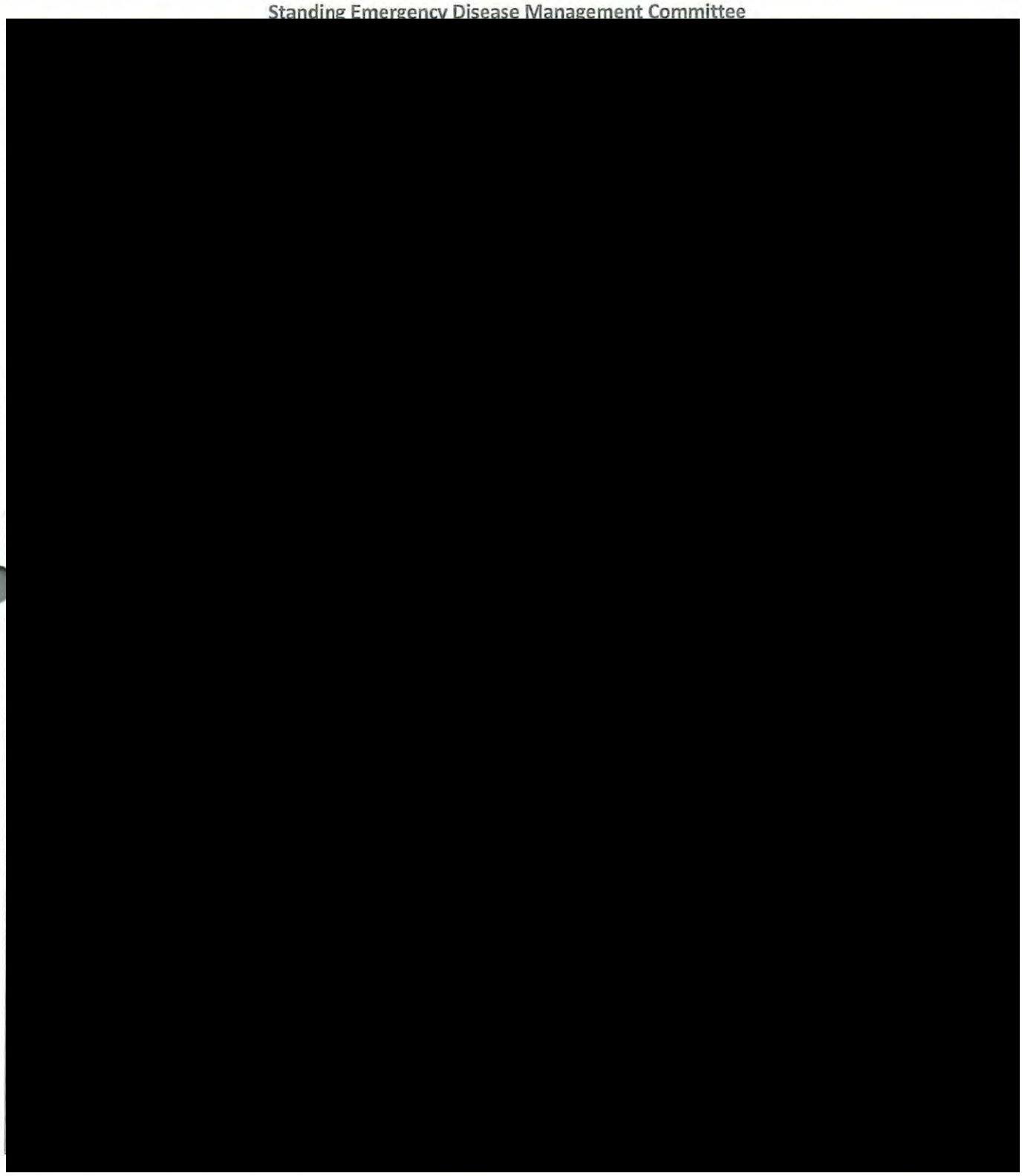
_____ _____

Steven K. Reviczky Date

Seal of the Connecticut Department of Agriculture

Attachment 7: Committees

Standing Emergency Disease Management Committee



Highly Pathogenic Avian Influenza Workgroup

In addition to members of the Standing Emergency Disease Management Committee the following agencies and organizations are represented on the HPAI workgroup:

The Office of the Governor
CT Department of Administrative Services (DAS)
CT Department of Community and Economic Development (DECD)
CT Department of Emergency Services and Public Protection (DESPP)
- Division of Emergency Management and Homeland Security (DEMHS)
  - --DEMHS Regions
- Connecticut State Police (CSP)
- Fire Prevention and Control (CFPC)

CT Department of Energy and Environmental Protection (DEEP)
- Solid Waste Permitting
- Water Permitting
- Division of Remediation

CT Department of Public Health (DPH)
CT Department of Transportation (DOT)
CT Military Department/CT National Guard (CTNG)
211 United Way
Private Sector Producers

Attachment 8: Quarantine Order

State of Connecticut
Office of the Commissioner of Agriculture
ORDER OF QUARANTINE
In accordance with the provisions of the
Connecticut General Statutes Section (C.G.S. §) 22-324

Date of Quarantine: Premise ID:

TO: Quarantine Number:

The above named party is hereby ordered, by virtue of the power and authority in me vested by law, that the following described poultry, including poultry mortalities, poultry eggs, poultry manure and poultry litter:

Are to be held in quarantine upon the premises of:

PREMISE OWNERS NAME: First: Last: Middle:

PREMISE ADDRESS: Street: Town: Zip Code:

an agent of the Commissioner of Agriculture have reasonable grounds to believe the poultry kept at are infected with Highly Pathogenic Avian Influenza a communicable, contagious or infectious disease;

You, your agents, servants, employees and all other persons whom this order may concern, are hereby forbidden to remove said poultry, poultry mortalities, poultry manure, poultry litter, poultry eggs, poultry feed, and, any equipment or conveyances which contact poultry from this premise wherein they are quarantined, for any purpose whatsoever, or to slaughter or otherwise dispose of poultry until otherwise permitted by the Commissioner of Agriculture. And, furthermore, you, your agent, servants and employees, and all other persons whom this order may concern, whether acting for you and in your behalf, or for themselves, are forbidden to use, sell, exchange or expose for sale or exchange, any products of the aforesaid poultry, except as permitted and directed by the Commissioner.

Permits for movement of poultry, mortalities, poultry manure and/or litter, and, eggs shall be obtained no less than twenty-four (24) hours prior to movement by calling (860) 713-2505. The owner of the poultry covered by this order and the Connecticut Department of Agriculture shall complete a Flock Plan which shall detail the HPAI control and eradication procedures for this premise.

Any person on who this order is legally binding who disregards or breaks this order of quarantine or violates any provision of any quarantine issued under this section shall be fined five hundred dollars for each day during which such violation continues, up to a maximum fine of twenty-five thousand dollars.

_____

Agent of the Commissioner of Agriculture (signature)

☐ The above Order of Quarantine was delivered by personal service to:

NAME: TITLE: DATE:

ADDRESS: CITY: STATE: ZIP:

Quarantine Sign Placed: ☐ Yes ☐ No

This Order of Quarantine was personally served by:

PRINTED NAME:

_____

SIGNATURE DATE

☐ This quarantine order was sent certified mail with return receipt #:

Attachment 9: Situation Report Template

Surveillance, Preparedness and Response Services (Avian Health)

4700 River Road, Unit 46
Riverdale, MD 20737

(301) 851-3437

USDA, APHIS, Veterinary Services

Safeguarding Animal Health

National Preparedness and Incident Coordination Center

4700 River Road, Unit 41
Riverdale, MD 20737

SITUATION REPORT (Template)

For Official Use Only

Incident Name:	To: VSMT and NAI distribution list
SITREP #	Date Submitted/Transmitted:
Preparer: Name/Contact Info	

I. GENERAL INFORMATION

II. INCIDENT OBJECTIVES, PROGRESS AND ACCOMPLISHMENTS - Operational Objectives

III. RESOURCES - Current Incident Personnel	
Personnel Source	Number of Personnel
USDA:APHIS:VS	
Federal Agency	
State Agriculture Department	
Federal Contractor	
Other Contractor	
Grand Total	

IV. SUMMARY INCIDENT INFORMATION

1. Positive Premises

Description of Positive Premises, Connecticut _____				
Species	Production Type	Premises with a confirmed H5 positive specimen	Premises with confirmed H5N2 positive specimen and clinical signs	Total Number of Premises
Avian	Backyard Producer			
Chicken	Backyard Producer			
	Commercial Mail Order Breeder Operation			
	Commercial Table Egg Layer			
	Commercial Table Egg Pullets			
Duck	Backyard Producer			
Poultry	Backyard Producer			
Turkey	Commercial Turkey Meat Bird			
Grand Total				

MAP of Cotrol Zones:

2. Infected Premises

Infected Premises – Completed Work To Date, Connecticut by County (year)												
County	First Case	Latest Case	Number of Infected Premises	Number of Birds or Hatching Eggs	Number of Dozen Eggs Appraised	Total Indemnity Due	Depop Complete	Disposal Complete	Cleaning Complete	Disinfecting Complete	Environmental Sampling Complete	Eligible to Re-stock *

Note: The date of the case is the date of the confirmed H5N2 positive specimen or if not H5N2 confirmed, then it is the date of the confirmed H5 positive specimen.
*Premises may have completed 21 day fallow period or successfully passed the restock inspection checklist and not be eligible for restock until both have been completed.

3. Permitting

Number of Permits Issued and Reason for Issuance – MMDDYY through current date																			
Item Permitted	Reason for Permit																		
	Direct to Farm	Direct to Hatchery	Direct to Incineration	Direct to Laboratory	Direct to Landfill	Direct to Off-site Burial	Direct to Processor	Direct to Renderer	Direct to Slaughter	Feed Into Control Zone	Feed Out of Control Zone	In Commerce	Into Control Zone	Out of Control Zone	Quarantine	Temporary Relocation	Trucks Out of Control	Within Control Zone	Total
Eggs																			
Feed																			
Groups of animals																			
Manure/ Litter																			
Other																			
Product																			
Truck/Conveyance																			
Milk																			
Grand Total																			

4. Surveillance

Surveillance Zone	Status of EMRS Investigation Record					
	Assigned	Investigated (Converted to Investigation)	Contacted (Further Processed)	Pending Investigation	Surveillance Conducted - No Animals	Grand Total
Buffer						

(3-10 km)						
Pending Zone Assignment						
Infected- 3K						
Surveillance (10-20 km)						
Grand Total						
These data are under extensive review; therefore, subject to daily fluctuations						

A HPAI Surveillance and Control Zone Release by County						
Infected Counties	Status	Backyard Surveillance			Commercial Surveillance	Control County Release Date
		Infected 3k	Buffer 3-10k	Surveillance 10-20k		

5. **Epidemiological Investigations and Studies**

6. **Roll off Disposal and Other Information (information and data obtained from contractors)**

V. LIAISON, PIO, AND OUTREACH
VII. CURRENT TRADE BAN/STATUS:

Prepared By:	**Reviewed By:**

Attachment 10: Information Rhythm

Connecticut Status: Monitoring
Week of: _____

	Meetings	Conference Calls	Receive Information	Publish Reports	Other Activities
Monday			Monitor: USDA Reports National/Local Media Reports 211		
Tuesday			Monitor: USDA Reports National/Local Media Reports 211		
Wednesday			Monitor: USDA Reports National/Local Media Reports 211		
Thursday			Monitor: USDA Reports National/Local Media Reports 211		
Friday			Monitor: USDA Reports National Media Reports		

Comments:
Press Releases – issued as necessary

Attachment 11: Compliance Agreements

A. Euthanasia and Disposal Agreement

COMPLIANCE AGREEMENT

Euthanasia and Disposal (9CFR 56.4)

Between USDA, APHIS, Vet Services, _____(owner) and CT DoAG

A. USDA, APHIS, Veterinary Services Responsibilities:

To review, approve and submit for payment indemnity claims arising from LPAI eradication and control activities, including reasonable costs associated with euthanasia, disposal of carcasses. Approval will be granted on the agreed upon associated costs and expenses as documented by itemized invoices and/or other requested and justifiable documentation of expenses, as long as such activities were conducted according to the CT plan, and supervised by an approved embedded official.

B. _____(Owner) Responsibilities:

Fully comply with the CT Avian Influenza Response Plan (CT Plan) for euthanasia, disposal.

C. CT DoAG Responsibilities:

Assign an embedded official to work with the poultry owners and insure compliance with the CT Plan.

Considerations for the Breakdown of cost:

Mileage:
Per diem:
Number of houses:
Types of houses:

Materials:
Labor
Biosecurity (coveralls and boots):

OWNER (company or private owner):

_____

AFFECTED PREMISE (name and address):

_____

Signature of premise owner:

_____

Signature of company or bird owner:

_____

Signature of Connecticut DoAG representative:

_____

Signature of USDA APHIS VS Connecticut:

_____

B. Destruction of Eggs Agreement

COMPLIANCE AGREEMENT

Destruction of the Eggs (9CFR 56.4)

Between USDA, APHIS, Vet Services, _____(owner) and State of CT DoAG

A. **USDA, APHIS, Veterinary Services Responsibilities:**
To review, approve and submit for payment indemnity claims arising from LPAI eradication and control activities, including reasonable costs associated with destruction of eggs. Approval will be granted on the agreed upon associated costs and expenses as documented by itemized invoices and/or other requested and justifiable documentation of expenses, as long as such activities were conducted according to the GA plan, and supervised by an approved embedded official.

B. _____**(Owner) Responsibilities:**

To have fully complied with the CT Avian Influenza Response Plan (CT Plan) for destruction of the eggs.

C. **DoAG Responsibilities:**
Assign an embedded official to work with the poultry owners and insure compliance with the Plan.
OWNER (company or private owner):

_____

_____

AFFECTED PREMISE (name and address):

_____

_____

Signature of premise owner:

_____

Signature of company or bird owner:

_____

Signature of OSA representative:

_____

Signature of GDA representative:

_____

Signature of USDA APHIS VS GA:

_____

C. C&D of Infected Premises

COMPLIANCE AGREEMENT

C&D of Infected Premises (9CFR 56.4)

Between USDA, APHIS, Vet Services, _____(owner) and CT DoAG

A. **USDA, APHIS, Veterinary Services Responsibilities:**
To review, approve and submit for payment indemnity claims arising from LPAI eradication and control activities, including reasonable costs associated with removal of debris, cleaning and disinfection of the infected premises Approval will be granted on the agreed upon associated costs and expenses as documented by itemized invoices and/or other requested and justifiable documentation of expenses, as long as such activities **were conducted according to the Il plan, and supervised by an approved embedded official.**

B. **_____(Owner) Responsibilities:**
To have fully complied with the CT Avian Influenza Response Plan (CT Plan) for cleaning and disinfection.

C. **State of CT DoAG - Responsibilities:**
Assign an embedded official to work with the poultry owners and insure compliance with the GA Plan.
Considerations for the Breakdown of cost:
Mileage:
Per diem:
Number of houses:
Types of houses:
Biosecurity (coveralls and boots):
Labor and materials:

OWNER (company or private owner):

_____

AFFECTED PREMISE (name and address):

_____

Signature of premise owner: _____

Signature of company or bird owner:_____

Signature of CT DoAG representative: _____

Signature of GDA representative: _____

Signature of USDA APHIS VS GA: _____

Attachment 12: Listing of *Potential* Funding Sources

The purpose of this attachment is to explore different funding mechanisms in the event of an outbreak of any level or type. These mechanisms may not be feasible at the time of an event. This listing does not officially designate a primary funding source.

In the event of an outbreak the State of Connecticut may be able to leverage a variety of different State, Federal and other funding mechanisms.

State:

- **Emergency Funds and Existing State Appropriations:**
  - A Civil Preparedness or Public Health Emergency declaration gives the Governor the power to "advance or lend funds available to the Governor from any appropriation made by the legislature, or from any other source" for the purpose of preparing for, responding to or recoving from a a civil preparedness or public health emergency (Sec. 28-9a). It also gives the governor the ability to "pass through funds made available by any agency, public or private"
  - Section 22-326c gives the Commissioner of Agriculture the ability to approve payments to compensate the owner of any property destroyed based on a valuation of the property determined by the Commissioner of Agriculture.
- **State bond funding (new or reallocated):**
  - Bond fuding ***may*** be reallocated for any infrastructure realated expenses. This would require consultation and approval with the Office of Policy and Management and the Office of the Governor.

Federal:

- **Emergency Funds:**
  - These funds are generally made available by USDA (APHIS is primary funding source for compensation, based on NPIP participation (Page 42 AIMRP)) or other federal entity, such as the Federal OMB, may be used to compensate for property destroyed and the costs of cleaning and disinfecting. (Ie. 5/5/2015 OMB allocated $330 Million in Emergency Funds to contain Avian Influenza).
- **Federally administered grant programs**
  - The State of Connecticut receives funds from many different Federal agencies. Shall the need arise, agencies should explore whether certain expenses (operational, labor/personnel, construction etc.) can be covered or passed through to entities for compensation. While compensation is generally handled by USDA/APHIS, expenses incurred during the initial response and recovery that are not covered by USDA/APHIS may be covered under other programs.

Guidance form USDA/APHIS is available at the following link:
https://www.aphis.usda.gov/animal_health/emergency_management/downloads/hpai/financepolicy.pdf

Attachement 13: Procedures

1. HPAI Response Timeline for First 72 Hours

2. Surveillance

3. Biosecurity Measures and Response Worker Safety

4. New England Farm Protocol for Dead Bird AI Surveillance

5. AI Eradication Program with Emergency Use of Vaccine, Sequential Depopulation and Enhanced Biosecurity

6. Established Diagnostic Testing and Reporting Procedures

7. Guidelines for In-House Composting of AI Carcasses

8. Guidelines for Off-Site Composting of AI Carcasses

A. Procedures 1: HPAI Response Timeline for First 72 Hours

HPAI Response Timeline for First 72 Hours

In the first 72 hours after the detection of HPAI in Connecticut, specific actions must occur; as seen the chart below, these critical tasks are fundamental to the rapid control and containment of HPAI. The chart covers many of the most important tasks and activities, but is not all-inclusive. Each response effort is different; however, some activities—such as rapid appraisal and depopulation of affected flocks—are of ultimate importance in any HPAI incident.

Presumptive positive detection of HPAI in Connecticut

0-24 hours	— Initiate notifications (Gov.'s Office, DESPP/DEMHS, other state agencies, USDA/APHIS/VS (VS), industry, federal and /or State Debris Management contractor(s) if needed and other states as appropriate — Establish quarantine, hold orders, movement restrictions, and standstill notices (e.g., 24–72 hours) for relevant zones and regions — Initiate flock appraisal process with assistance of VS — Begin depopulation activities — Coordinate notification of media — Implement increased biosecurity measures — Start tracing activities (epidemiological investigation) — Begin confirmatory diagnostics and further virus typing — Initiate incident management organizational structures and processes — Consider requesting activation of the State EOC — Request deployment of VS field Incident Management Team and/or imbedded VS staff — Begin data collection and information management in Emergency Management Response System (EMRS)
24-48 hours	— Evaluate quarantine and movement controls — Continue depopulation and disposal activities — Ensure compensation process moves forward for indemnity — Proceed with surveillance and tracing activities — Execute timely and accurate data entry in EMRS — Initiate public awareness messaging and communication campaign — Implement and enforce increased biosecurity measures — Initiate continuity of business plans — Continue confirmatory diagnostics — Prepare for arrival of USDA IMT
48-72 hours	— Continue ramping up Incident Command and Incident Coordination staff — Ensure compensation (including flock plan) process proceeds — Continue any ongoing depopulation and/or disposal activities — Continue timely and accurate data entry in EMRS — Continue surveillance and tracing activities — Implement and enforce increased biosecurity activities — Continue public awareness campaign — Ramp up permitting and continuity of business activities

B. Procedures 2 Surveillance.

Surveillance

1. The State will maintain "H5/H7 Avian Influenza Monitored State" status under the National Poultry Improvement Plan (NPIP) program for avian influenza.

2. All commercial producers should sign a Memorandum of Understanding (MOU) with their State Veterinarian or NPIP coordinator for their participation of the program.

3. The commercial producer has the responsibility to implement biosecurity measures in his/her farm.

4. The commercial producer has to maintain complete flock records such as daily mortality, feed/water consumption, egg production etc. and shall make such records available for review by the State upon request.

5. Testing/Monitoring Plan:

a. Active Surveillance:
   1) Commercial table-egg layers:
      - Eleven birds or eggs tested negative 30 days prior to disposal or
      - Eleven birds or eggs tested negative during a 12 month period or
      - Flocks that have ongoing active and passive surveillance program for H5/H7 subtypes of AI approved by OSA and APHIS.
   2) Commercial meat-type chickens:
      - Eleven birds per shift or
      - Eleven birds per flock tested negative within 21 days of slaughter, or
      - Flocks that has ongoing active and passive surveillance program for H5/H7 subtypes of AI approved by OSA and APHIS.
   3) Commercial Turkey:
      - Sixty birds tested negative each month or
      - Flocks that has ongoing active and passive surveillance program for H5/H7 Subtypes of AI approved by OSA and APHIS

b. **Passive or Diagnostic Surveillance** program for H5/H7 low pathogenic avian influenza:
All laboratories that perform diagnostic procedures on poultry will examine all submitted cases of unexplained respiratory disease, egg production drops, and mortality for AI.

6. AI Official Tests:

a. All blood or egg yolk samples will be tested using Agar Gel Immunodiffusion (AGID). All AGID positive tests will be further tested by NVSL using Hemagglutination Inhibition (HI) test. Confirmatory diagnosis will be done by NVSL through virus identification. All antigens or test kits that will be used must be licensed by CVB.

b. Blood or egg yolk samples can also be tested with Enzyme-linked Immunosorbant Assay (ELISA) but any ELISA positive samples must be confirmed on AGID.

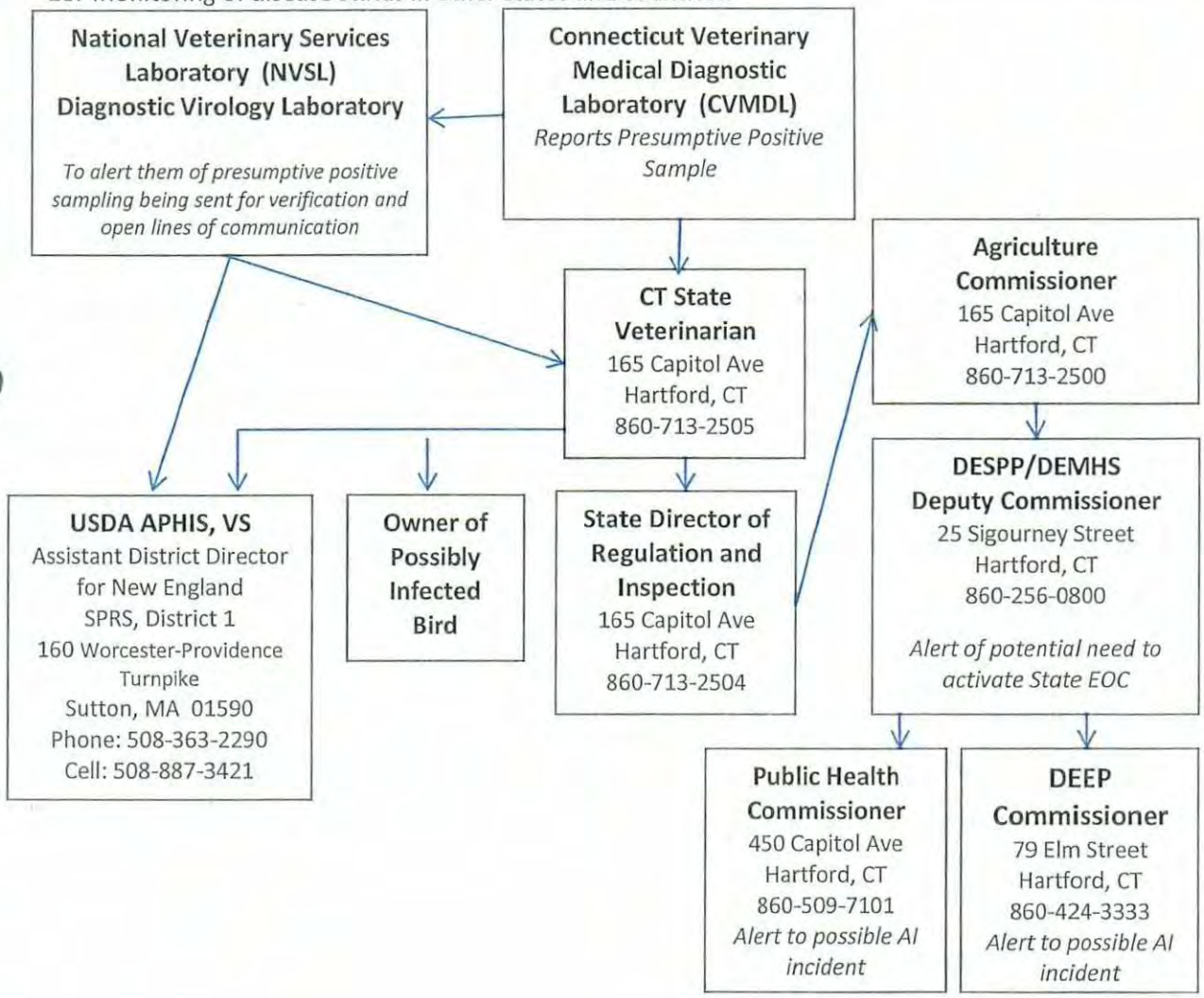
c. Oropharyngeal, tracheal, and cloacal swabs will be tested using Real-time Reverse Transcriptase-Polymerase Chain Reaction (RRT-PCR). They can also be tested using the Flu Detect Synbiotics, Directigen or Binax. All positive results will be sent to NVSL for confirmatory diagnosis.

7. Sampling noncommercial flocks: Follow the most current USDA APHIS **Veterinary Services** National Poultry Improvement Plan Program Standards.

8. Mortality sampling.

9. Required reporting of suspicious and confirmed cases of AI by diagnostic laboratories and veterinarians.

10. Monitoring of disease status in other states and countries.



C. Procedures 3: Biosecurity Measures and Response Worker Safety

Biosecurity Measures and Response Worker Safety

1. PREMISES - AI IS NOT SUSPECTED

   Minimum Farm Biosecurity Procedures for Everyday Implementation:

2. PREMISES - AI IS SUSPECTED OR CONFIRMED

   Enhanced Biosecurity Guidelines for Commercial and Breeding Poultry Farms
   (Based on CDC Protocols for PPE)

3. WORKERS/RESPONSE PERSONNEL – AI IS SUSPECTED OR CONFIRMED

   Enhanced Biosecurity Measures for Response Personnel

Basic Infection Control

Personal Protective Equipment

Surveillance and Monitoring of Workers

Evaluation of Ill Workers

1. PREMISES - AI - IS NOT SUSPECTED

Minimum Farm Biosecurity Procedures for Everyday Implementation:

The following minimum biosecurity measures should be followed by all commercial and breeding poultry farms and farm workers during daily, normal operations when the presence of AI is not suspected.

- Biosecurity/Disease Control Area signs will be posted at farm entrance;
- Farm workers should keep out visitors and not visit other poultry farms;
- Minimize the number of vehicles entering the farm;
- Be sure that visitor and vendor guidelines are followed.
  - They should sign the visitors logbook and follow all biosecurity procedures.
- Do not allow pets, livestock or wild animals to enter poultry houses;
- Keep wild birds out of poultry houses;
- Practice effective rodent and insect control;
- Keep workrooms clean;
- No birds of any kind will be visited or kept by employees;
- Equipment should not be shared between farms.
  - In event that equipment must be shared, effective cleaning and disinfection must take place between uses;
- Workers should wear clean protective clothing or clothing dedicated to the farm and footwear (disposable or rubber) prior to entering poultry houses.
  - Working clothes should not be brought outside the farm.
- Workers should wash hands with soap and water or use hand sanitizer before and after entering poultry houses;
- Workers must notify a company representative if they observe others not following good farm biosecurity.

2. AI - IS SUSPECTED OR CONFIRMED

Enhanced Biosecurity Guidelines for Commercial and Breeding Poultry Farms
(Based on CDC Protocols for PPE)

The following enhanced biosecurity measures should be followed by commercial and breeding poultry farms when a highly contagious disease such as AI is suspected or has been confirmed. The spread of Avian Influenza follows the movement of people and equipment:

- Do not allow movement of people, your employees or other individuals, from your farm to other farm.
- Conduct business by telephone. Inform other farms of the need for heightened Biosecurity.
- Do not let truck drivers, repairmen, delivery personnel, salesmen, etc. step onto your facility without new protective foot covering and coveralls.
- Provide a disinfectant footbath to be used by any personnel entering and leaving the farm.
- Windows must be closed on all vehicles parked at the farm.
- Wash and disinfect all vehicles prior to them entering and leaving the farm.
- Avoid movement of equipment off of the farm. Wash and disinfect any equipment prior to leaving the farm.
- Implement measures to prevent coming in contact with wild birds, by moving birds indoors or using barriers.
- Remove vegetation, miscellaneous items, and trash around poultry houses to eliminate habitat for possible vectors.
- Institute an insect and rodent control program. Flies and rodents are implicated as vectors in spreading Avian Influenza.
- Manure and dead birds may not be moved off the premises unless permitted to do so by the Department of Agriculture.

3. WORKERS/RESPONSE PERSONNEL – AI IS SUSPECTED OR CONFIRMED

Enhanced Biosecurity Measures for Response Personnel

Department of Agriculture, and authorized personnel will follow strict Biosecurity protocol within quarantine zones and when entering and leaving a poultry premises to reduce the risk of spreading disease. This protocol is to be followed when a suspected or confirmed highly contagious disease such as AI exists. Visits to farms or concentration points require following this protocol regardless of personal contact with livestock or their housing. Modification to this protocol may occur depending on the disease or species involved.

- Park your vehicle on paved or concrete surfaces away from production facilities. Windows must be closed when car is parked to avoid flies collecting within the vehicle.
- Use new disposable coveralls, boots, gloves and hair covering apparel for each premise.
- Consult the Safety Officer as to the level of respiratory protection required.
- Immediately put on clean coveralls (disposable apparel) clean rubber or new plastic boots upon exiting the vehicle.
- The minimum amount of equipment necessary should be taken onto the premises. All equipment taken onto the premises must stay on site or be disinfected before leaving the premises. Mobile phones, watches, and other items that are necessary but cannot be disinfected should be maintained in sealed waterproof bags while on the premises. If photos must be taken for documentation, a disposable waterproof camera is recommended.
- A disinfection point should be set up just outside the premises before entering.
- Avoid poultry housing areas unless it is necessary to complete the goal of the visit.
- Wash hands with soap and water or an antibacterial gel before entering and after leaving the premises to avoid transmitting disease agents from person to person.
- After returning to your vehicle, clean and disinfect all equipment used (including eyewear) and place all disposable supplies in a plastic bag to leave with the owner/producer for disposal. If not possible, place plastic bag in the "dirty" area of the vehicle and dispose of in a manner that prevents exposure to other poultry.
- Designate a "dirty" area in your vehicle for equipment that has been used on the farm and samples that have been obtained.
- Place the cleaned and disinfected equipment in the designated "clean" area of the vehicle.
- If the vehicle was parked on a paved surface, tires and wheel wells must be disinfected with an approved disinfectant using a hand held sprayer.
- If the vehicle was not parked on a paved surface, disinfect tires and wheel wells with an approved disinfectant and hand held sprayer, then proceed to a nearby car wash. Wash vehicle tires and wheel wells to remove dirt and debris at a nearby pressure car wash.
- At the end of the day, dispose of all plastic bags that contain dirty supplies in a manner that prevents exposure to other poultry.
- Launder all clothing worn.
- Personal hygiene should include blowing nose, shampooing hair and cleaning under fingernails.

This State guidance may be modified as needed to incorporate State DPH risk assessments and specific operational needs.

It is considered prudent to take all possible precautions when individuals have contact with birds and related articles during activities that could result in exposure to Avian Influenza.

Basic Infection Control

- Response workers will receive training about the importance of strict adherence to and proper use of hand hygiene after contact with infected or exposed poultry, contact with contaminated surfaces or after removing gloves.
- Hand hygiene will consist of washing with soap and water for 15-20 seconds or the use of an approved hand sanitizer when soap and water are unavailable.
- Personnel shall have access to appropriate personal protective equipment (PPE), instructions and training in PPE use, and respirator fit-testing (detailed below).

Personal Protective Equipment

- Disposable gloves made of lightweight nitrile or vinyl or heavy duty rubber work gloves that can be disinfected will be worn. To protect against dermatitis, which can occur from prolonged exposure of the skin to moisture in gloves caused by perspiration, a thin cotton glove can be worn inside the external glove. Gloves will be changed if torn or otherwise damaged. Remove gloves promptly after use, before touching non-contaminated items and environmental surfaces.
- Protective clothing, preferably disposable outer garments or coveralls, (plus an impermeable apron when needed) will be worn. Outer garments or coveralls will be changed if torn or otherwise damaged.
- Disposable protective shoe covers or rubber or polyurethane boots that can be cleaned and disinfected will be worn. Shoe covers will be changed if torn or otherwise damaged.
- Safety goggles will be worn to protect the mucous membranes of eyes.
- Disposable particulate respirators (e.g., N-95, N-99, or N-100) are the minimum level of respiratory protection that will be worn. Workers will be fit-tested to the respirator model that they will wear by employees of ConnOSHA and be taught how to check the face-piece to face seal. Workers who cannot wear a disposable particulate respirator because of facial hair or other fit limitations will wear a loose-fitting (i.e., helmeted or hooded) powered air purifying respirator equipped with high-efficiency filters.
- Disposable PPE will be properly discarded and left on the premise. Non-disposable PPE will be cleaned and disinfected and bagged for storage in the appropriate area of the vehicle. Hand hygiene measures will be performed after removal of PPE.

Respirators will be used in the context of a complete respiratory protection program as required by the Occupational Safety and Health Administration (OSHA). This includes training, fit-testing, and fit-checking to ensure appropriate respirator selection and use. To be effective, respirators must provide a proper sealing surface on the wearer's face.

Items included in PPE kit for first responders:

- Tyveck suit with elastic wrist and hood
- Apron
- Sleeves
- Respirator N95, N100 to be determined depending on tasking
- Gloves-heavy duty
- Eye Protection Goggles
- Foot Protection-yellow latex with tread
- Spray bottle-16 oz with virkon-s label
- Disinfectant-Virkon-s tablets
- Disinfectant Wipes

- Disposal Bags
- Duct Tape

Unvaccinated workers may be required to receive the current season's influenza vaccine to reduce the possibility of dual infection with avian and human influenza viruses.

It will be determined by the Department of Public Health if workers will receive an influenza antiviral drug daily for the duration of time during which direct contact with infected poultry or contaminated surfaces occurs. The choice of antiviral drug will be based on sensitivity testing when possible. In the absence of sensitivity testing, a neuraminidase inhibitor (oseltamavir) is the first choice since the likelihood is smaller that the virus will be resistant to this class of antiviral drugs than to amantadine or rimantadine.

Surveillance and Monitoring of Workers

— Public Safety Officers assigned to sites will monitor the health of response workers. Workers will be trained to watch for symptoms such as fever, respiratory symptoms Workers will be directed to be watchful for the development of fever and respiratory symptoms for 1 week after last exposure to potentially contaminated or contaminate areas.

— Should an individual exhibit flu-like symptoms, he/she should immediately report this to the site Safety Officer or the Department of Public Health who in turn will report to the Department of Agriculture.

Evaluation of Ill Workers

CT DPH will evaluate or assist with the evaluation of ill response workers.

— Workers who develop a febrile respiratory illness will have a respiratory sample (e.g., nasopharyngeal swab or aspirate) collected.
— The respiratory sample will be tested by RT-PCR for influenza A, and if possible for H1 and H3. If the result of local testing is positive, then CDC will be contacted and the specimen will be sent to CDC for additional testing.
— An acute (within 1 week of illness onset) and convalescent (after 3 weeks of illness onset) serum samples will be collected and stored locally in case testing for antibody to the AI virus should be needed.

D. Procedures 4: New England Farm Protocol for Dead Bird AI Surveillance

New England Farm Protocol for Dead Bird AI Surveillance

Overview

Dead bird surveillance should include 10 birds per house taken from normal mortality that has occurred in the last 24 hours. If 10 birds might not be available during a specific 24-hour period, birds can be refrigerated or frozen and held until the sampling date. Also, if less than 10 birds per house are available, they will still be sampled. Owners will be asked to put the dead birds in plastic bags and place them in trash cans at the end of the driveway early on the morning the Surveillance Team is scheduled to visit. After sampling the birds, the Surveillance Team will place the birds back in the trashcan for the owner to dispose of in the usual manner. All disposable coveralls, booties, swabs, etc. will be placed in a separate plastic bag and also left for the owner to dispose of. After sampling the birds the Surveillance Team will use a different color surveyors tape to mark the trash cans to let the owners know that the birds have been sampled and can be disposed of.

The day before your visit to the farm:

- Contact the flock owner and arrange to have dead birds placed in the trashcan for your visit.

First thing in the morning:

- Obtain ice or ice packs for the coolers.
- Mix disinfectant in the sprayer using 1.3 ounces of Virkon-S per gallon of water.
- Obtain enough BHI broth for the day and place it in the cooler in the front of the car. Ensure that the tubes contain 2cc of broth and that the caps are on tight.
- Put disinfectant in the empty plastic containers which will hold used scissors.
- Fill water jug with water.
- Review the equipment checklist to make sure the vehicle contains adequate supplies for all the testing scheduled for that day.

Protocol for the Collector:

- **Before leaving the vehicle,** close windows of the vehicle. Place two pairs of boots over your shoes (if you have clear plastic ones, put those on the inside. Some kits will have two pairs of identical boots).

- Put on Tyvek suit and hair bonnet. Before donning two pairs of gloves, tape trash bags to your suit with duct tape, then put on your two pairs of gloves. Duct tape can also be used to tape the Tyvek sleeves to gloves, which will prevent skin contamination when reaching into the can. Dust mask is optional; however, if one team member uses it, the other team member should for consistency. Obtain sufficient surveyor's tape to make each can that holds birds and one or more plastic bags for placing the dead birds on. **Do not take the entire roll of surveyor's tape with you or it will be contaminated.** Get disinfectant sprayer out. Place vehicle Safety Triangles appropriately.

- Check the can, count the number of birds by putting the birds on a clean plastic bag placed on the ground, and inform assistant of the BHI tubes and swabs needed.

- Place the lid upside-down on trash can if you want to use as a collection surface and place a clean plastic bag on top of lid as a "table cloth" (can also do sample collection on the ground, in that case, place clean plastic bag on the ground for your work surface).

- Obtain a clean pair of scissors from your assistant.

- Use the scissors to expose the trachea. Take a swab from your assistant and swab the trachea in an attempt to maximize chance of collecting cells in addition to fluid.

- Place the swab in the BHI tube which your assistant will hold for you (do not touch the tubes).

- Get a heavy trash bag from you assistant. Place the sampled bird into the bag and close. Continue to put sampled birds into the bag until sampling is completed. More than one trash bag may be needed to complete sampling.

- Continue collecting tracheal swabs. Place up to five swabs in each tube. There may be up to ten birds per house but there also may be multiple houses per farm. All samples from each farm should go into the same sample box.

- When a tube is filled (5 swabs), you will remove the swabs. The assistant should not touch the swabs during sampling. Wring the swabs out against the neck of the tube. Twisting will help extract all 5 swabs at once and retain more fluid in the tube. **Throw swabs away in your trash bag. Nothing except birds, goes into the bag with the birds.**

- When sampling is completed, have your assistant open the plastic container with the disinfectant and place your used scissors there. Place the bag of birds into the garbage can.

- Put the plastic "table cloth" (trash bag) into the bag you are filling with trash. Remove your first pair of gloves and place them in your trash bag.

- Mark all the trashcans with surveyor's tape so the producers will know you have taken your samples.

- Spray the outside of all trashcans that held birds with Virkon-S.

- Spray sample bag, wheels, wheel wells, Safety triangles and sprayer handle with disinfectant.

- Remove your tyvek suit, bonnet and outer pair of boots and place in your trash bag.

- Place your trash bag and your assistant's trash bag in to the trashcan and seal with a bungee cord.

- Sit in your car without your hands or feet touching the inside. Remove both the inner boots by inverting the boot before removing the last pair of gloves. Remove second pair of gloves by inverting over the balled up boots to make one ball. Place the ball into an inside out Ziploc bag held by the assistant. Turn the bag right side out, spray the inside of the bag with Lysol, and seal it for later disposal at biomedical waste handling site.

- Spray your shoes with Lysol and wash your hands with waterless hand cleaner.

- When back at the hotel/motel, remove scissors from the disinfectant, clean thoroughly, and rinse with water. After scissors are clean, lay them out to air dry.

Protocol for the Assistant:

- Upon reaching the premises, park the vehicle in a safe location off the road, near where the containers are placed at each designated farm location. Obtain GPS coordinates for the can location and record on the 10-4 sample submission form.

- Next the collector will check the can for birds. When notified of the number of BHI tubes needed, label and number the tubes and place in a clean empty box. Put in an extra tube or two for errors. Also, place farm number and name on the top and bottom of the box and on the 10-4 sample submission form (use preprinted labels if available). Obtain the appropriate number of large and small swabs, scissors, and extra trash bags that will be needed.

- **Before leaving vehicle,** close the windows of the vehicle. Place two pairs of boots over your shoes (if you have clear plastic ones put those on the inside. Some kits will have two pairs of identical boots).

- Put on Tyvek suit and hair bonnet. Before donning two pairs of gloves, tape trash bags to your suit with duct tape, then put on your two pairs of gloves. Duct tape can also be used to tape the Tyvek sleeves to gloves, which will prevent skin contamination when reaching into the can. Dust mask is optional; however, if one team member uses it, the other team member should for consistency.

- Bring pre-labeled and numbered BHI tubes (in a sample box which is for this farm only), scissors, swabs and trash bags for bird disposal out of the car.

- Offer collector scissors when he is ready. When collector is ready, open and offer a dry swab. You are holding the BHI box. Open the BHI tube for the collector to place up to five swabs in.
- After the five or last swab, the Collector will remove the swabs. Swabs go in the trash bag, never in the bird bag. When he has completed this, close the tubes **tightly**. Dump extra BHI broth from unused tubes in **trash bag** (empty glass tubes stay in the box and will be disposed of in the lab. **Do not put empty glass tubes in trash bag.** Remove outer gloves and place in trash bag.

- Place completed sampling box in a Ziploc bag. After disinfection, place samples directly in cooler in back of vehicle.

- Remove bonnet, Tyvek suit, and outer boots and place in trash bag. Collector will place bag in trash can.

- Sit in your car without your hands or feet touching the inside. Remove both the inner boots by inverting the boot before removing the last pair of gloves. Remove second pair of gloves by inverting over the balled up boots to make one ball, which you will leave on the farm.

- Spray your shoes with Lysol and wash your hands with waterless hand cleaner. Prepare for the next farm.

End of the Day:

- FedEx or deliver samples to UConn or Laboratory.

- Have the car washed.

Equipment Checklist for Dead Bird Surveillance

a. For Back of Vehicle:

- 1 five-gallon water jug (you need to fill it with water)
- 1 garden sprayer
- 2 one-pound containers of Virkon-S with measuring scoop
- Goggles for mixing Virkon-S
- 1 large plastic cooler
- 1 box of gallon Ziploc bags for tube boxes
- 2 Plastic containers used for scissors (1 for sharp, 1 for dull)
- 1 five-gallon bucket
- 1 boot brush
- 1 clear-top sharps container for the vehicle

b. For Front of Vehicle:

- Disposable coveralls, gloves, booties, dust masks, and hair bonnets
- BHI broth (you can put five swabs in one tube of broth)
- 1 Small plastic cooler
- 1 plastic container for scissors
- Sterile scissors
- Sterile swabs (large and small)
- Ziploc bags or Whirl packs
- Empty tube boxes (1 per premises plus extras)
- Sharpies
- Pens
- Clipboard
- Backyard flock surveillance forms
- VS 10-4 sample submission forms
- Maps
- Cell phone
- GPS unit
- Heavy-duty trash bags
- 1 roll duct tape
- 1 roll scotch tape
- 1 roll surveyors tape
- 2 bottles waterless hand cleaner
- 1 roll or box of paper towels
- 2 cans of Lysol spray
- FedEx labels addressed for UConn or Maine Laboratory, insulated shipping containers, and ice packs (unless delivering samples in person)

BACKYARD FLOCK SURVEILLANCE FORM
(New England on Farm Protocol for Dead Bird Surveillance)

⚠

DO NOT GO ONTO FARM!

FILL OUT WHATEVER DATA IS AVAILABLE FROM THE ROAD!

GPS COORDINATES (LAT AND LONG IN DECIMAL DEGREES):

LATITUDE: _____

LONGITUDE: _____

NAME: _____

ADDRESS: _____

_____

SPECIES AND NUMBER: _____

OTHER COMMENTS: _____

_____

_____

_____

_____

_____

PREPARED BY: _____

DATE: _____

E. Procedures 5: AI Eradication Program with Emergency Use of Vaccine, Sequential Depopulation and Enhanced Biosecurity

AI Eradication Program with Emergency Use of Vaccine, Sequential Depopulation and Enhanced Biosecurity

An eradication program with emergency use of a H5 or H7 vaccine would require a Memorandum of Understanding (MOU) between the State of Connecticut, the poultry producer and USDA, APHIS, VS. The agreement would include adherence to an approved flock eradication plan (a.k.a. Flock Plan –see definition below) using sentinel birds to assure that the virus has been eliminated from each individual poultry house or unit. In addition to Biosecurity plans, monthly reports and an MOU for depopulate and dispose of cull birds are required.

A. Case Definitions:

Premises and houses will be classified as positive or negative. Quarantines are issued to a premises and not a house. The following definitions would apply:

Flock Plan: This is a written flock management agreement developed by APHIS and the Connecticut Department of Agriculture with input from the flock owner and other affected parties. A flock plan sets out the steps to be taken to eradicate H5/H7 LPAI from a positive flock, or to prevent introduction of H5/H7 into another flock. A flock plan shall include, but is not necessarily limited to, poultry and poultry product movement and geographically appropriate infected and control/monitoring zones. Control measures in the flock plan should include detailed plans for safe handling of conveyances, containers, and other associated materials that could serve as fomites; disposal of flocks; cleaning and disinfection; downtime and repopulation.

Positive House: This house has a flock that was diagnosed to be positive for H5 or H7 AI, through serology, virus isolation, or PCR. A house will remain positive until that flock is removed, the house is cleaned and disinfected, and environmental culture results are negative. At that time, the house will be considered negative.

Positive Premises: A premises that contains one or more houses positive for AI through serology, virus isolation, or PCR. Positive premises will remain under quarantine until all the flocks from positive houses complete their production cycle and are removed from the premises. When birds from the last positive house are removed, the quarantine will be released from the premises upon completion of C&D.

Negative House: A house in which no flocks have ever been diagnosed as positive or have ever had positive serology.

Virus-Negative House: This house has a flock that has positive serology for H5 or H7 AI, but is negative for virus-by-virus isolation or PCR. A house will remain virus negative until that flock is removed or becomes positive. Once that flock has been removed, the house will be considered negative if the next flock remains serologically negative.

Virus-Negative Premises: This premises has at least one flock that has serology positive for H5 or H7 AI, but is negative for virus by virus isolation or PCR. These premises will be continually monitored for possible re-emergence of H5 or H7 AI viruses. The frequency and modality of monitoring will depend on the risk of re-emergence and will be determined by the State Veterinarian.

Negative Premises: Premises on which all houses are negative for AI serology, virus isolation or PCR.

B. Vaccine Issues:

1. Purchase and Administration of the Vaccine:

Vaccine would be purchased by the company and be under the control and permitted for use by the Connecticut Department of Agriculture. The State and Federal role in the vaccination process will be limited to oversight and monitoring. It is the responsibility of the State of Connecticut and the poultry company to administer the vaccine program.
Vaccine will be administered by appropriate route. Pullets will receive two injections, unless less than 90% of the flock is immunized two weeks following vaccination. If that is the case then, an additional vaccination will be performed. Previously infected layers, now recovered, will receive one injection. All previously infected layers should be vaccinated prior to the end of the first 3-month assessment period of this program.

2. Replacement Pullet Procedures:

Birds should be vaccinated a **minimum** of two weeks prior to moving to positive premises, so there has been adequate time for antibody response. Preferably, vaccinated twice 4 weeks apart. A cohort of 100-125 replacement pullets will remain unvaccinated for AI. These will be individually wing tagged and bled twice to ensure they are test-negative for AI by AGID and PCR (subset of 30 tracheal swabs) before placement.

Vaccinated pullets will be moved under State and Federal supervision to a cleaned and disinfected house. Unvaccinated sentinels will be randomly placed in 20 cages throughout the laying house (See Sentinel Placement Diagram) or commingled with cohorts in floor systems. Every 2-4 weeks, 5 cages of sentinel birds (20-25 birds) will be serologically sampled and tested by AGID. These samples will be collected or their collection will be overseen by Connecticut Department of Agriculture personnel. Positive AGID results will require tracheal swabbing of 30 sentinel birds to determine whether virus is present using PCR or virus isolation. If the sentinels are positive for virus, the vaccine program will be reevaluated and immediate depopulation reconsidered. Negative premises will be monitored by serum or egg yolk antibody testing on a regular basis. Any egg production drops or increases in mortality will trigger additional diagnostic testing.

C. Manure Management:

Movement controls to take manure off farm must be consistent and enforced. USDA will cooperate with the State of Connecticut to develop procedures for the disposal and management of manure. Definitive Biosecurity procedures will be established that will not contribute to the spread of the disease. Manure samples will also be cultured for AI virus. Monitoring of daily bird mortality on a weekly basis for three to four weeks will be implemented to establish whether manure is safe for movement and disposal.

D. Goals and Timeframes:

The following steps may also be taken:

1. Spent hens may be required to be depopulated, rather than marketed, after completing their production cycle if previously infected with AI. Spent hens that were vaccinated and did not undergo and AI infection may be marked under USDA permit to a spent hen slaughter facility, provided they meet the requirements of the receiving State or country.

2. Review placement schedules and arrange for early push-outs. New placements indicate that a new group of replacement pullets will be of appropriate age for vaccination (13-14 weeks) every three to four weeks. Sequential house-by-house depopulation will eradicate the AI virus, with "all-in all-out" movements, on the index farm should be completed in 15 months

3. After three months, the Connecticut Department of Agriculture and USDA will reevaluate the frequency of testing and review results, making adjustments if necessary.

4. After six months of negative sentinel results, the need to continue with vaccination will be reviewed.

FIGURE 0-1 -SENTINEL PLACEMENT DIAGRAM

Note: Sentinel birds will always be located on the right side of each cage row.

X= Sentinel bird cages 5 birds/cage, second level from the top

Given a 6 row house – use five cage rows – in the sixth – no sentinels

Five row house – use all five cage rows

10 feet	10 feet	10 feet	10 feet	10 feet	
16X	17X	18X	19X	20X	
150 feet	150 feet	150 feet	150 feet	150 feet	
11X	12X	13X	14X	15X	
6X	7X	8X	9X	10X	
150 feet	150 feet	150 feet	150 feet	150 feet	
1X	2X	3X	4X	5X	
10 feet	10 feet	10 feet	10 feet	10 feet	

EGG BELT

FRONT OF COOP

Time Period #1 – Cages # 1, 7, 13, 19, 5
Time Period #2 – Cages # 2, 8, 14, 20, 16
Time Period #3 – Cages # 3, 9, 15, 17, 11
Time Period #4 – Cages # 4, 10, 18, 12, 6

Depopulation and Disposal:

The State of Connecticut will **facilitate disposal agreements** with appropriate facilities to receive flocks. Disposal options will include the following:

1. Incineration – Expensive and cumbersome, but an effective means of safe disposal.
2. In-House Composting – Generally considered the most efficient means of disposal.
3. Off-site composting – Also considered an efficient means of disposal when done in compliance with environmental regulations and BMPs.

Due to lack of available landfill space and previous experiences with landfill burial, landfill disposal is not considered a disposal option in Connecticut.

F. Enhanced Biosecurity Protocols (Adopted from Virginia Poultry Federation)

The following protocols assign Biosecurity recommendations to vehicles and persons entering and leaving infected and non-infected farms.

G. Protocols for Service Technicians:

1. Park a minimum of 50 feet from the first poultry house you approach when possible
2. Keep windows closed on farms
3. Put on clean cover alls, hairnets, and boots (rubber or disposable) prior to entering poultry houses
4. Clean and disinfect all equipment before entering houses
5. Use hand sanitizer before entering and when exiting houses
6. Spray shoes before reentering vehicle
7. Clean and disinfect vehicles daily, both inside and out

H. Biosecurity during Feed Mill Visits:

1. Wash trucks both inside and out following a feed mill visit prior to reuse
2. Clean the cabs on feed trucks daily. Spray the floors and pedals with approved disinfectant
3. Drivers are to spray their shoes with an approved disinfectant before entering the farm
4. Tires and wheel wells should be sprayed with approved disinfectant before entering a farm

I. Biosecurity for Visitors and Hired Help:

1. Biosecurity/ Disease Control Area signs will be posted at farm entrance
2. Farm workers should keep out visitors and not visit other poultry farms
3. Minimize the number of vehicles entering the farm
4. Be sure that vender guidelines are followed when a service call is needed (see attached vender guidelines)
5. Do not allow pets, livestock or wild animals to enter poultry houses
6. Keep wild birds out of poultry houses
7. Practice effective rodent and insect control
8. Keep work rooms clean
9. No birds of any kind will be visited or kept by the employees
10. Equipment should not be shared between houses. In the event that equipment must be shared, effective cleaning and disinfecting must take place between uses
11. Workers should wear clean protective clothing or clothing dedicated to the farm, footwear (disposable or rubber), and head gear (hat or hair nets) prior to entering poultry houses
12. Workers should wash hands with soap and water or use hand sanitizer before and after entering poultry houses
13. Workers must notify a company representative if they observe others not following good Biosecurity

J. Poultry Farm Biosecurity Measures for Traffic On and Off the Farm:

1. All poultry farms are bio-secured areas. Any business that can be, should be conducted over the phone. Necessary visits must be coordinated with company management
2. All vehicles entering a poultry farm must stop at the farm entrance and fill out the visitor log (this can be kept in a mailbox or other containment by the entrance). Information recorded should include name, date, time, company association, reason for visit, and farms visited previously on that day.
3. All vehicles must thoroughly disinfect their tires before entering and before leaving the farm. The acceptable disinfectants are the following: Virkon, DCR, and Phenols. Remember, surfaces must be adequately cleaned in order for disinfectants to work.
4. Personnel driving or riding in a vehicle that goes on the farm must have protective boots. Either rubber or plastic boots must be put on before getting out of the vehicle. These boots must be worn the whole time while on the farm, and be discarded onsite before reentering your vehicle

5. Vehicle windows must be rolled up at all times while on the poultry farm in order to prevent flies from getting into the vehicle

6. For all service vehicles, the floorboard area, including pedals and the entire floor, must be cleaned and disinfected daily. This is needed even if wearing disposable plastic boots.

7. Entry into the poultry houses is strictly forbidden unless pre-authorized by the manager

8. Any repair or maintenance personnel that must enter the poultry house must wear clean coveralls, hairnets, and clean boots. They must use disinfection stations provided at the entrances

9. When exiting the farm, disposable boots should be put in a receptacle provided at the farm. Then shoes should be sprayed with disinfectant before entering your vehicle. Hands, rubber boots, and any tools used on the farm must be washed and disinfected

10. Vendor vehicles must be kept clean at all times

K. Transport Method of Poultry and Avian Carcasses to Compost Sites and Resource Recovery Facilities (Only necessary during a large scale outbreak)

Transport to Compost Sites

1. The Contractor shall implement directives from the APHIS and the IDMTF on approved methods for the collection, processing, transport, and unloading of poultry and avian carcasses generated in response to an HPAI incident at the off-site compost locations that have been identified for composting and disposal.

2.The Contractor shall first procure nylon mesh super sacks with a duffle top and ties, 3,000 lb capacity, for packaging carcasses and a minimum, six (6) mil plastic sheets for lining and sealing dumps trucks, and necessary trucks approved by DEEP and CT DoAg and/or APHIS for the transport of poultry and avaian carcasses generated in response to an HPAI incident. The use of plastic sheeting for packaging of carcasses, in lieu of supersacks, for transport to compost sites is not recommended as plastic sheeting interferes with the composting operation.

3.Poultry carcasses shall be packed and transported in a manner that meets the goals of load containment with no leakage or dispersion of fluid and materials.

4. The Contractor shall first procure other necessary materials and supplies that may include a carbon source, water supply and temperature and moisture measurement equipment to conduct and maintain effective composting operations. Items required for procurement are dependent on type and scope of outbreak.

5. The Contractor shall verify collection points at the poultry coops for carcasses that have been identified by the APHIS or DOA personnel.

6. The Contractor shall be sure that truck loads are securely tarped as necessary to prevent blow-out of feathers during transport.

7. The Contractor shall coordinate each load to be transported to the composting site with the site property owner or designee and shall confirm that the receipt, unloading, and processing of carcasses will be done in a timely manner. Each truck shall have on board a load ticket and other necessary documentation that has been verified by APHIS or DOA personnel.

8. The Contractor shall transport carcasses to the compost site along routes as pre-determined by the APHIS and the ConnDOT. The Contractor shall expect that travel routes will be selected to limit human exposure minimizing the number of stops required and ensuring close proximity to the infected site, if possible, to limit refueling needs.

9. The Contractor shall coordinate with the IDMTF if law enforcement or police escorts are required to assist with the safe, uneventful completion of the transportation and disposal process.

The Contractor shall unload packaging as directed by the compost site property owner or designee.

Transport to the Resource Recovery Facilities (RRFs)

1. The Contractor shall implement directives from the APHIS and the IDMTF on approved methods for the collection, processing, transport, and unloading of poultry and avian carcasses at the RRFs that have been identified as final disposal sites.

2. The Contractor shall first procure necessary packaging that meets the goals of load containment or as directed by APHIS in cooperation with the RRF (such as poly sheeting, ties, covers, etc.) similarly effective packaging to wrap carcasses and stage the packaging materials at the farms.

3. The Contractor shall verify collection points at the poultry coops for carcasses that have been identified by the APHIS or DOA personnel. The Contractor shall also verify collection points for avian carcasses at other locations such as the municipal transfer stations.

4.The Contractor shall collect and package poultry carcasses in specified packaging as directed by APHIS or DoAg. This may include nylon mesh super sacks with a duffle top and ties, 3,000 lb capacity, or an in-truck burrito-type packaging using, at a minimum, 6 mil plastic wrapped and secured to prevent leakage.

5.The Contractor shall place nylon mesh supersacks, if used, into trucks that have been lined with, at a minimum, 6 mil plastic or are sealed to prevent leakage during transport.

6.The Contractor shall coordinate each load to be transported to the RRF with a designated contact at the RRF and shall confirm that each truck has on board a load ticket and other necessary documentation that has been verified by APHIS or DOA personnel.

7.The Contractor shall transport carcasses to the RRFs along routes as pre-determined by the APHIS and the ConnDOT. The Contractor shall expect that travel routes will be selected to limit human exposure minimizing the number of stops required and ensuring close proximity to the infected site, if possible, to limit refueling needs. CT DoAg is the regulatoru authority that issues poermits for the loads and specified routes . Routes shall circumvent other poultry operations to the degree possible and the risk of human exposure will be dependent on a number of factors including the AI virus strain.

8.The Contractor shall coordinate with the IDMTF is law enforcement or police escorts are required to assist with the safe, uneventful completion of the transportation and disposal process.

9.The Contractor shall unload pallets per the direction of the RRF tip floor personnel.

L. Resource Recovery Facilities

The DEEP will issue permits for the use of the following Resource Recovery Racility (RRF) as required by the situation:

Wheelabrator Lisbon Resource Recovery Facility
425 South Burnham Highway
Lisbon, CT 06351
Telephone: 860-885-3512
Contact: John Hogan
Capacity: 562.8 tons/day

Covanta Southeastern Connecticut Resource Recovery Facility *
132 Route 12 / Military Highway
Preston, CT 06365
Telephone: 860-889-4900 x135
Contact: John Vinson
Capacity: 689 tons/day

Covanta Bristol Resource Recovery Facility
170 Enterprise Drive
Bristol, CT 06010
Telephone: 716-589-6470
Contact: Leon Plumer
Capacity: 650 tons/day

Wheelabrator Bridgeport Resource Recovery Facility
6 Howard Avenue
Bridgeport, CT 06605
Telephone: 203-579-2607 ext. 2212
Contact: Glenn Lockhart
Capacity: 2,250 tons/day

**The Preston facility has been permitted for the disposal of carcasses in a previous AI event.*

Cleaning and Disinfection of Houses

1. All residual feed in the bins must be removed and disposed of with the litter
2. Houses should be thoroughly power washed to remove organic material before disinfection
3. If power washing is not possible, then the house must be blown down, scraped, and swept to remove as must organic material as possible before disinfection
4. All feeders and other equipment must be thoroughly washed to remove all organic residues
5. When cleaning is complete, disinfect with appropriate disinfectant.

F. Procedures 6: CVMDL-Established Diagnostic Testing and reporting Procedures

Established Diagnostic Testing and Reporting Procedures

1. Real-Time RT-PCR for the Detection of Avian Influenza Virus and Identification of H5 and H7 subtypes in Clinical Samples (NAHLN Protocol)

   Much of the Avian Influenza surveillance of birds utilizes the National Animal Laboratory Health Network's (NAHLN) Avian Influenza RT-PCR testing modality. CVMDL is a NAHLN laboratory member and thus subject to the stringent testing requirements of the NAHLN, including use of the most current NAHLN protocol. The current version of SOP-AV-0001, Real-Time RT-PCR for the Detection of Avian Influenza Virus and Identification of H5 and H7 subtypes in Clinical Samples, is revision 02.

   In general, at CVMDL, RNA from avian oropharyngeal or cloacal swabs (depending on avian species), appropriately sampled referencing the NAHLN protocol WI-AV-0020 revision 01, Recommendations for Collecting Swab Specimens from Poultry for Viral Diagnostics Testing, is extracted (high throughput processes are available), then subjected to PCR amplification using the ABI 7500 fast real time thermocycler system for AI matrix (e.g. Influenza A). Positive samples are then subjected to additional assays for H5 and H7, typically utilizing the Smartcycler thermocycler system. All AI matrix PCR positive samples are shipped to the National Veterinary Services Laboratory in Ames, Iowa, for confirmatory testing.

2. Agar Gel Immunodiffusion (AGID) for Avian Influenza (CVMDL uncontrolled SOP attached)

3. Procedure for Avian Influenza Virus Isolation for Live Bird Market Samples (CVMDL uncontrolled SOP attached)

SOP Number:	**AVI0007**
SOP Title:	Agar Gel Immunodiffusion (AGID) for Avian Influenza
Author (s):	**H. McGinnis, M. Sims**
SOP distribution:	Room 200
Date written:	03/30/04
Revision date:	03/20/15
Current version:	1.4
Supersedes version:	1.3

Approvals:

_____ _____

Area Supervisor Date

_____ _____

Quality Manager or Designee Date

Purpose and Application of Procedure:

This procedure describes the method for performing the agar gel immunodiffusion (AGID) test to screen for circulating antibodies to all Influenza A viruses, regardless of subtype (including group-specific antigens, namely the ribonucleoprotein (RNP) and matrix (M) proteins).

Revision History:

- In Precautions, made PPE required and added instruction on storage of reconstituted antigen, antiserum and controls
- To procedure, added instruction on when to use ARWKS0001 and ARWKS0009
- To Associated SOP's added SER0016, SER0018, SER0020
- To Reporting of Results and References, added WISSERO0033: Avian and Regulatory Canned Comments

Materials and Equipment:

- Refrigerator (2 to 8°C)
- Freezer (-20 °C).
- Incubator or airtight container for room temperature (approximately 20-25°C) incubation
- Autoclave or microwave.
- Hot plate/stirrer and magnetic stir bar.
- Vacuum pump or central vacuum line.
- Candling light or other appropriate light source for viewing results.
- AGID template cutter, seven-well pattern (a center well surrounded by six evenly spaced wells). Wells are 5.3 mm in diameter and 2.4 mm apart.
- Top loading balance (capable of measuring +/- 0.1 gm differences).
- 10 - 100µl Pipette with tips
- Erlenmeyer flasks, graduated cylinders, pipettes, 100 x 15 mm petri dishes, flexible vacuum tubing, side-arm flask (500 mL or larger), and a 12- or 14-gauge blunt-ended cannula.
- Phosphate buffered saline (1X PBS), 0.01 M, pH 7.2
- Agarose (Type II Medium grade, Sigma Chemical Co. Cat.# A-6877 or equivalent).
- Avian influenza AGID antigen and positive control antiserum approved by the NVSL.
- Strong positive, weak positive, and negative control antiserum approved by NVSL (strong positive control antiserum is optional).

Precautions:

1. All persons performing this test must demonstrate proficiency by passing the annual AI AGID proficiency test supplied by NVSL.

2. Required PPE to perform this test:

   2.1. Gloves

   2.2. Lab coat

   2.3. Close-toed shoes

3. Store reconstituted antigen, antiserum and controls at 2 to 8ºC.

4. Antigen and accompanying antiserum have been standardized and should be used together.

5. Do not allow reagents to stand at room temperature for excessive periods of time while performing tests.

6. Handle all reagents and their equipment as if capable of transmitting AI.

7. Autoclave all disposable test components and test specimens after use.

Procedure:

1. Fill out ARWKS0009: AI AGID Plate batch record for each lot of plates made.

2. Label the appropriate number of petri dishes with plate lot number (I.e. "AI MM/DD/YY")

3. Prepare the AI AGID agar by one of the following methods:

   3.1. Weigh 1.0gm of agarose and 8.0 gm of NaCl and add to 100ml of 1X PBS in a 250ml Erlenmeyer flask with a screw cap (makes 6 plates). A half batch of 3 plates can be made by dividing the volumes in half if desired.

   3.2. Fill out the batch record for AI plates.

   3.3. Dissolve the agar, either by:

      3.3.1. Autoclaving the mixture for 10 minutes, (be sure to unscrew the cap ¼ turn before beginning) remove from autoclave and mix the contents by swirling to ensure a homogeneous mixture of ingredients.; or

      3.3.2. Microwaving the mixture for approximately three minutes, (be sure to unscrew the cap ¼ turn before beginning)stopping every 20-45 seconds to swirl the flask to mix the contents until a homogeneous mixture is achieved with no undissolved agar particles present; or

      3.3.3. Dissolve the mixture by bringing to a boil on a hot plate (be sure to unscrew the cap ¼ turn before beginning) Check periodically to make sure there are no un-dissolved granules or flakes of agar as this will affect the test. If un-dissolved agar is present, continue to boil until no more is remaining.

NOTE:

1. **When using the hot plate method, DO NOT LEAVE THE HOT PLATE UNATTENDED!**

2. **ALWAYS use the orange oven gloves when handling the hot flasks from any method described above.**

3.3.4. Using a disposable pipette, add approximately 15ml to each Petri dish (100ml should make approximately 5 to 6 plates).

3.3.4.1. Gently swirl agar to evenly distribute on each plate.

3.3.4.2. Leave the lids off the plates and allow plates to cool and harden on the bench top for 10 to 15 minutes.

3.3.4.3. When cool, replace covers, stack and invert plates and store at 2 to 8ºC for up to 1 week.

3.3.5. Alternately, the agar can be stored in the capped flask at 4°C for several months, then melted and dispensed into plates as needed.

3.3.6. DO NOT use the agar if mold, contamination or a precipitate is observed.

4. The agar is cut using a template consisting of a seven-well pattern with one center well encircled by 6 outer wells. The wells are spaced 2.4 mm apart and 5.3 mm in diameter. The agar is cut after it has hardened sufficiently so that the cut edges of the wells do not break down when agar plugs are removed.

5. The agar plug is removed by a cannula connected to a vacuum line. If moisture is observed in the wells, the plates should not be used unless moisture is suctioned out. Plates should be used the same day they are cut and within 2 hours of when the plugs are removed.

6. Test Setup (See Figure 1 for illustration)

6.1. Fill out ARWKS0001: Avian Serology Log for all AI samples received.

6.2. Using a separate ARWKS0003: AGID Test Template, fill out one sheet for each plate setup.

6.3. Label the plate cover with "AI Plate #, setup (current date)"

6.4. Label the underside of the plate with the plate number and each well number as indicated on the Test Template for that plate.

6.5. Approximately 50µl of each test sample serum is placed in the appropriate labeled well using a new pipette tip for each sample.

6.6. The wells are filled level with the agar surface leaving no meniscus.

6.7. Test serum samples must not run on top of agar surface.

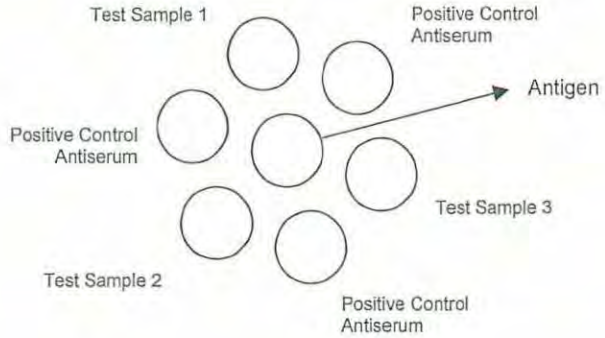
6.8. Care should be exercised to prevent contamination of the sample with other samples or reagents.

6.9. A weak positive control must be run on each plate. Additionally, a negative control may be run if space permits.

6.10. Approximately 50µl of positive control antiserum is placed in alternating wells from the test serum samples. The same pipette tip can be used to add all of the control antiserum. The wells are filled level with the agar surface leaving no meniscus. Control antiserum samples must not run on top of agar surface.

6.11. If necessary, reconstitute the antigen according to the kit directions. Approximately 50µl of reconstituted antigen is placed in the center well, being sure to fill the well level with the agar surface leaving no meniscus. Antigen sample must not run on top of agar surface.

Figure 1

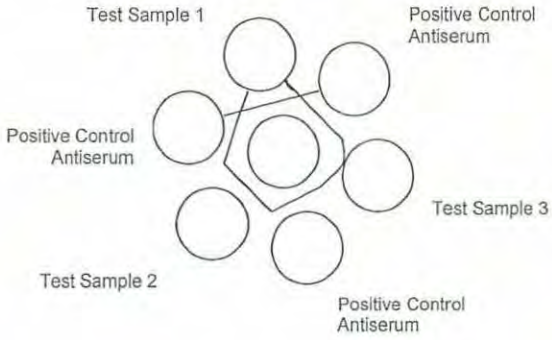


6.12. Complete all patterns on a dish before starting another. Cover each dish after filling all of the wells.

6.13. Allow the plates to sit a few minutes before moving to reduce the possibility of spillage.

6.14. Incubate plates at room temperature (20-25°C) in a closed light-proof chamber. If room temperature is above 25°C or below 20°C, a 22°C incubator should be used. NOTE: temperature changes during incubation may cause artifacts

Figure 2



Test Sample 1 is Negative (Note: the non-specific line under test sample 1)

Test Sample 2 is Positive

Test Sample 3 is Weak Positive

Quality Control:

Positive control antiserum is run alternate each test sample. Additionally, a known NVSL supplied weak positive serum must be run on every plate and a negative control may be run fi space permits.

Interpretation of Test:

1. Remove the lid and examine reactions from above by placing the plate(s) over a light source directed at an angle from below. A candling light works well and allows for varying intensities of light and positions.

2. The type of reaction will vary with the concentration of antibody in the sample being tested. The positive control serum line is the basis for reading the test. If the line is not distinct, the test is not valid and must be repeated. The following types of reactions may be observed:

   2.1. *Negative reaction:* The control lines continue into the test sample well without bending or with a slight bend away from the antigen well and toward the positive control serum well.

   2.2. *Positive reaction:* The control lines join with, and form a continuous line (line of identity) with, the line between the test serum and antigen. The location of the line will depend on the concentration of antibodies in the test serum.

   2.3. *Weak positive reaction*: Samples may not produce a complete line between the antigen and test serum but may only cause the tip or end of the control line to bend inward toward the test well.

   2.4. *Non-specific lines.* These lines occasionally are observed between the antigen and test serum well. The control lines will pass through the non-specific line and continue on into the test serum well. The non-specific line does not form a continuous line with positive control lines.

3. All positive reactions should be confirmed. Sample should be sent to the National Veterinary Services Laboratory (NVSL) for verification. See SER0016: "Procedure for Confirmatory Testing...".

Reporting of Results:

- If test does not perform as expected, see SER0020: "Procedure for Handling Non-conforming Test Results ..."
- WISSERO0024: Short Guide for Avian Serology Test Reporting
- WISSERO0033: Avian and Regulatory Canned Comments

Associated SOP's:

- SER0016: Procedure for Confirmatory Testing...
- SER0018: Procedure for Entering and Reporting Results for ... Avian...Serology Using ATI-LIMSpro
- SER0020: Procedure for Handling Non-conforming Test Results ...

Associated Forms, Records or Instruction Sheets:

- ARWKS0001: Avian Serology Log
- ARWKS0003: AGID Test Template
- ARWKS0009: AI AGID Plate batch record

References:

- WISSERO0033: Avian and Regulatory Canned Comments
- Current NPIP standards

SOP Number:	**AVI0014**
SOP Title:	**Procedure for Avian Influenza Virus Isolation for Live Bird Market Samples**
Author (s):	H. McGinnis
SOP distribution:	Rooms 200, A-137
Date written:	12/15/06
Revision date:	06/19/13
Current version:	1.4
Supersedes version:	1.3

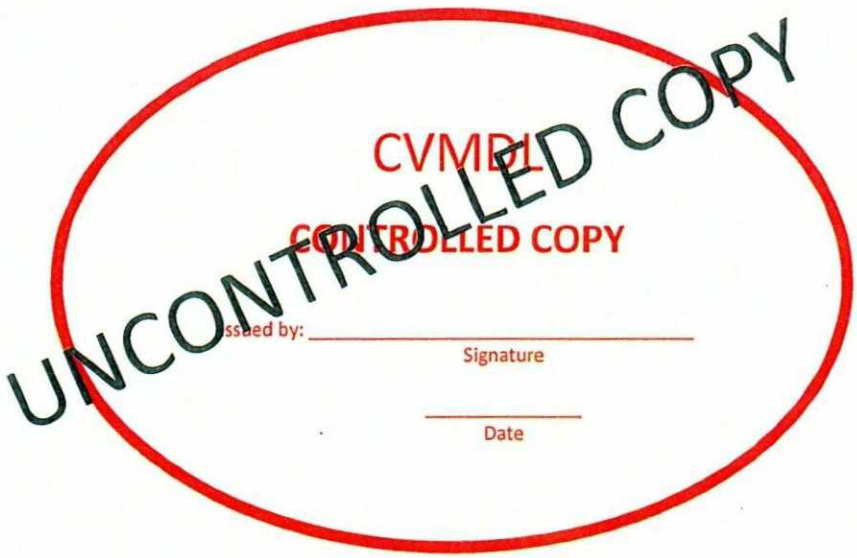
Approvals:

_____ _____

Area Supervisor Date

_____ _____

Quality Manager or Designee Date



Purpose and Application of Procedure:

The purpose of this Standard Operating Procedure (SOP) is to outline procedure used for the diagnosis of highly pathogenic avian influenza (HPAI) at the Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL) for cloacal samples from waterfowl and environmental samples. Specimens for virus isolation should be submitted in brain heart infusion (BHI) broth. Specimens should include cloacal and environmental swabs up to 11 pooled per tube.

Revision History:

- Changed Author to H. McGinnis
- In Purpose and Application, updated number of swabs per tube from 5 to 11
- Updated section D with location of paperwork and details
- Updated Section F with more details
- Updated section H with more details
- Section I, step 4 clarified "samples" and "controls"
- Section I, step 11, changed amount harvested per egg from 2-4ml to 1-3ml and total yield from 6-12ml to 3-9ml. Also added sentence on how to put allantoic fluid into conical tube
- Under Reporting of Results section: updated reporting procedure for VI harvest and PCR procedure
- Added AVI0022 TBTB procedure and QA0001Confirmatory Testing to Associated SOP's

Materials and Equipment:

• Class II biosafety cabinet	• Refrigerator
• 9-11 day old embryonated eggs	• 70% ethanol
• Egg candler	• Bleach
• Egg incubator (37°C) with humidity	• liter beakers (for 10% bleach)
• 1.3ml aliquots of antibiotic solution from NVSL for each sample to be tested	• Autoclave bags
• Single channel pipettor (1000 µL pipettes)	• Sterilization pouches
• Reach pipettor tips (1000 µL)	• Sharps container
• Refrigerated low speed centrifuge	• Lab coat
• 25 gauge 5/8 inch needles	• Gloves
• Tuberculin syringe	• Personal Protection Gown
• 20 gauge needle	• Duco cement
• 3 cc syringe	• Twist ties
• Sterile forceps	• Lab tape
• Sterile 1.5 mL microfuge tubes	• Paper towel roll
• Sterile 15 mL conical tubes	• Mini centrifuge
• Sterile 5 mL Nunc tubes	

Precautions:

- Perform all procedures with potentially live virus in a class II biosafety cabinet.
- Wear a lab coat and gloves at all times when handling samples.
- Work on one sample at a time.
- All surfaces and equipment that came in contact with potentially infectious material must be disinfected with 70% ethanol.
- Make fresh 10% bleach daily.

- All instruments must be placed in a 10% bleach solution after use.
- Rinse tips in a 10% bleach solution before ejecting them into the sharps container.
- Never place anything on the grill of the hood.
- Change gloves between samples.
- Use a new set of forceps, needles and syringes for each sample.

Procedure:

A. Egg Ordering

Eggs should be ordered through SPAFAS using the Egg Ordering Schedule Form located in the AI Virus Isolation binder in Room 208 or on PC #2 in Room 208. Three eggs should be ordered per sample/tube submitted, as well as six additional eggs to cover the Antibiotic and Negative controls. As a precaution, several extra eggs (3-4) should be ordered in addition to the total number of eggs needed for the samples.
NOTE: Eggs should be ordered 1.5-2 weeks in advance (SPAFAS needs at least 9 days to prepare the eggs), and should be available for pickup at SPAFAS (on Baxter Road) on a Wednesday.

B. Egg pick-up

1. On the appropriate Wednesday morning, pick up the eggs from SPAFAS on Baxter road in Mansfield. If the eggs are unable to be picked up on Wednesday morning, a call must be made to SPAFAS to inform them of this, so that they can put the eggs in the incubator until someone arrives to get them later. If necessary, a pickup may be scheduled for Thursday morning. (Call 860-429-7261)
2. Place the eggs in the 37°C incubator that is in room A20 (the room across from the grad lab computer room in the basement of the Atwater building). Fill up the bowl at the bottom of the incubator with water. Be sure to give the pink ordering slip on the side of the box to the person in charge of ordering.

C. Receiving samples

1. Accessioning staff will call when the samples have been accessioned; make sure that the samples are kept at 4°C until they are picked up.
2. Pick up samples, accompanying paperwork, and labels (will need 6 labels per sample submitted) from the refrigerator that is by the accessioning office. Samples will be in the box on the top shelf labeled "Virus Isolation samples".
3. Make sure each tube is labeled with an accession number.
4. After picking up the samples keep them at 4°C in Room 200 until they are ready to be processed.
5. On the day of the inoculation, bring them down to Room A137. This is where the entire virus isolation process will take place.

D. Filling out the paperwork

1. Place the original paper work in a sheet protector.
2. Fill out the QA/QC batch record "Live Bird Market-Avian Influenza Virus Isolation" (one sheet per submitted premise, for up to 5 samples). These worksheets are found in the Virus Isolation binder in Room 200, or in the AI Virus Isolation folder in (Room A137). There will be a line for a negative control and an antibiotic control on each sheet. If there are more than 5 samples for a premise, use extra sheets, and be sure to cross out unused wells.
3. Clip the submission sheet, labels and QA/QC paperwork together.

E. Hood Preparation (generally Thursday*)

1. Discard any beakers left in the hood with 10% bleach from previous days harvest or inoculation- (UNTREATED WASTE-the bleach replaces the autoclave)
2. Make fresh 10% bleach in a large beaker. Use this to fill up a small beaker with 10% bleach as well.
3. Wipe the hood and hood contents (pipetters, etc) with 10% bleach, and then wipe everything down with 70% ethanol.
4. Turn on the hood, and place a new sharps container in the middle.
5. Let the hood run for at least 15 minutes before you start to work.

***PLEASE NOTE**: Inoculations are normally scheduled to be done on Thursdays. However if a problem arises, an inoculation may take place on a Friday. If this happens, it will be necessary to candle the eggs on Saturday and Tuesday (being sure to put the eggs in the refrigerator after the Tuesday candle), with the harvest then taking place on Wednesday.

F. Processing the samples

1. Gently mix tubes by hand (DO NOT invert) and then centrifuge at 1,500 x g for 30 min at 4°C.
2. Take antibiotic tubes out of the -20°C freezer in room A-137 (extra stock of Ab is in room 210). Take out the appropriate number of tubes (1 antibiotic per sample) plus 1 extra antibiotic tube for the antibiotic control, and let them thaw in hood (~20 minutes).
3. Take out one 5mL Nunc tube for each sample and attach the accession labels to each tube.
4. Pour the contents of the antibiotics (~1.3mL total) to the 5mL sterile Nunc tubes. The antibiotic control tube does not need to be transferred.
5. When the samples are done centrifuging, place the tubes in a plastic rack inside the hood.

   Visually inspect each sample tube for volume. To adjust the volume for samples with less than 2.0 mL of supernatant:

   i. -Transfer as much of the sample as possible from the sample tube to the labeled tube being careful not to disturb the pellet

   ii. -Using a clean tip bring the volume of sample up to 2.5 mL using TBTB mixture

   iii. Mix after adding.

6. Use the 1 mL pipette with the reach 1000uL tips and add 2 mL of the sample supernatant to its appropriate tube being careful not to disturb the pellet.

   NOTE:*Discard each glass BHI sample tube in the large beaker filled with 10% bleach; making sure the tube is fully submerged.

7. Mix after dispensing and repeat Steps 5-6 with the remaining samples.
8. Incubate the specimen/antibiotic mixture for approximately 1 hour at room temperature.

9. After the original BHI sample tubes have soaked in the large beaker of bleach for at least 20 minutes, they may be rinsed out in the sink and discarded in the sharps container next to the sink.

G. Labeling the Eggs (done while the samples are incubating)

1. Three 9-11 day old specific–pathogen–free chicken embryos per sample are placed in rows on an egg flat. There will be 3 eggs to be used as an antibiotic control and 3 eggs that remain unpunched to be used as the negative control.
   NOTE: EACH MARKET GETS A SEPARATE FLAT AND THE CONTROL EGGS GET A SEPARATE FLAT
2. Spray eggs with 70% ethanol; allow eggs to dry before labeling or punching.
3. Candle eggs to check for embryo viability. While candling, mark an 'X' on the lowest part of the air sack with a pencil; this is where the egg will be punched. Any dead eggs at this point should be placed on a separate flat and placed in the refrigerator.
4. In front of the row of eggs affix an accession label for that row. Using a pencil, label that row of eggs with the date inoculated, accession and tube number, and the egg number (1, 2, 3).
5. Gently punch the eggs using a metal egg punch (**Do not punch the negative control eggs**). Any eggs with shells that crack or break too much cannot be used, and should be placed in the refrigerator.

H. Inoculating the embryonated eggs

1. Retrieve the 1mL tuberculin syringes and 5/8 inch needles located in the drawers below the centrifuge. Take out as many as needed.
2. Open and assemble the needles and syringes in the hood, and place them in an empty clean beaker.
3. Retrieve one flat of eggs and spritz with 70% ethanol as they are placed in the BSC
4. In the biosafety hood, begin inoculating the eggs. Draw up 0.9 mL of each sample with a syringe, and dispense 0.3 mL per egg (for 3 eggs total). **Be sure not to push air from syringe into eggs.**
5. Draw up bleach several times to rinse the used syringe, and then discard it in the sharps container.

****A NEW NEEDLE /SYRINGE MUST BE USED FOR EVERY SPECIMEN TUBE****

6. Seal the hole in the egg with Ducco cement, making sure the cement does not get onto the flat.
7. Repeat steps 3-6 with the remaining samples and eggs.
8. Repeat steps 3-6 for the antibiotic control **EXCEPT draw up 0.3 mL of antibiotic with a syringe, and dispense 0.1 mL per egg (for 3 eggs total).**
9. When the Ducco cement has dried, place the inoculated embryos in the 37°C incubator. Make sure the beakers in the incubator are filled halfway with distilled water.
10. Wipe the hood with 10% bleach followed by 70% ethanol.
11. The remaining specimen-antibiotic solution is stored at -80°C in Room 210.
12. Candle the eggs the next day (Friday) to check for embryo death. Any eggs with embryos that die within 24 hours are discarded and placed in the flat in the refrigerator. Any dead eggs are then recorded on

the Virus Isolation batch record, noting the date of embryo death in the corresponding box(es). Place the remaining viable eggs back in the incubator.

13. Let the eggs incubate over the weekend, and then candle them again on the 4th day (Monday). Any dead eggs at this point are marked with an "X" but placed back on the flat in the appropriate labeled rows. These are recorded on the paperwork and will still be harvested.

14. When all of the eggs have been candled, place all of the eggs in the refrigerator to kill the embryos.

NOTE: The embryos must be in the refrigerator for at least 4 hours to ensure embryo death. As a result, the eggs are usually refrigerated overnight and harvested the next day (Tuesday). If there is a problem with this schedule, it may be noted that the eggs may be refrigerated early Monday morning, and harvested that same afternoon, so long as the eggs have spent enough time in the refrigerator.

I. Harvesting (generally Tuesday)

- ***Always candle the eggs before harvesting to make sure the eggs are dead.
- Harvest the control eggs first.
- Wipe the hoods with 70% ethanol between flats of eggs.
- A new forceps, needle and syringe must be used for every specimen.
- Only eggs inoculated with the same specimen are opened at the same time.
- Personal protection gown must be worn over lab coat
- Double glove, and change gloves between controls and premises

1. Follow the procedure in section "**E. Hood Preparation**" when getting ready to harvest.
2. Retrieve the 3mL tuberculin syringes and 20 gauge needles (yellow box) located in the drawers below the centrifuge. Take out one for each sample and control.
3. Open and assemble the needles and syringes in the hood, and place them in an empty clean beaker.
4. Take out one blue topped 15mL conical tube for each sample (set of inoculated eggs) and each control (set of eggs for Ab and negative), and label them with the accession labels.
5. Rip off a couple pieces of lab tape and put them on the side of the hood.
6. Take eggs out of the refrigerator and candle them to ensure the eggs are all dead.
7. Open a few large biohazard bags (two per flat) and place them on the counter along with several twist ties.
8. Put on a blue personal protection gown and double glove your hands.
9. Place eggs in the hood and spray them with 70% ethanol.

10. Use sterile forceps to break open a small hole in the top of the shell of the negative control eggs. Immediately submerge the forceps in the large beaker of 10% bleach.

NOTE: The same forceps and syringe should be used for all three eggs in a sample.

11. Using an assembled syringe, pull out approximately 1-3 mL of allantoic fluid per egg and place the harvested fluid in its corresponding sterile 15 mL conical tube that is labeled with the correct accession number. Be careful to place the needle tip on the inside of the conical tube so as not to create bubbles. The allantoic fluid from the 3 eggs per specimen will be pooled together in the corresponding tube. The final yield of allantoic fluid in the 15mL conical tube should be between 3-9 mL per specimen.

NOTE: If there are fewer eggs for a sample, harvest a higher amount of allantoic fluid per egg (~4-5 mL if possible).

12. Rinse the syringe 3 times in the small beaker of 10% bleach and then throw it away in the sharps container.

13. Mix the allantoic fluid in the 15 mL conical tube by inverting the tube several times.

14. Repeat steps 10-1 with the antibiotic control eggs, and then with the remaining samples. Be sure to change gloves between Biosafety cabinet and premises and also between flats of eggs.

15. When finished harvesting eggs from one flat:

    1. Move the eggs to the center of the flat in the hood
    2. Wrap the flat containing the eggs with 2 layers of paper towel, and use the tape on the side of the hood to secure the paper towel.
    3. Place one of the large autoclave bags in the hood and put the paper towel wrapped flat into the autoclave bag
    4. Seal the autoclave bag with a twist tie while it is still in the hood
    5. Change gloves and then take the sealed autoclave bag out of the hood and put it into the second autoclave bag
    6. Seal the second autoclave bag with a twist tie.
    7. Place another piece of tape onto this bag, and write 'Avian Influenza Virus Isolation Eggs.'
    8. Place the sealed bags onto the moving cart. These will be disposed of later.

16. Repeat Step 15 until all the flats are secure in the autoclave bags, changing gloves frequently.

17. Remove and discard gown and change all gloves.

18. Spray working area in hood down with ethanol before continuing the harvest.

19. With a marker, label a set of 1.5 mL tubes with the accession number of all the samples (include controls) and the date.

20. Aliquot 1.0 mL of the pooled allantoic fluid samples into their corresponding sterile microfuge tubes. (1 tube per sample, change tip between samples and rinse in 10% bleach beaker before ejecting into sharps container).
21. Using the mini centrifuge in the hood, centrifuge each sample at 2,000 x g for 15 minutes.
22. During this spin, bring the sealed bags of the eggs downstairs and place them in the hallway between the necropsy rooms. Let an employee in accessioning know there are eggs to be thrown out.
23. Once the forceps have sat in the 10% bleach solution for at least 20 minutes, they should be rinsed with distilled water and laid out to dry on new paper towels next to the sink.
24. Label another batch of 1.5 mL tubes with the accession labels and place in a rack in the hood.
25. After centrifuging, make sure not to disturb the pellet and aliquot 0.5 mL of the supernatant into the sterile microfuge tubes with the accession labels. Place these samples in a colored 100 well box. These samples are for PCR, and should be placed in the refrigerator until a Molecular technician picks them up the next morning for PCR testing.
26. Place the remaining supernatant and the pellet and the 15 mL conical tube of allantoic fluid in a cardboard box and put in the refrigerator at 4°C until the testing is complete. *Once PCR testing is complete and results are reported as negative, these samples can be thrown away in a biohazard bag.
27. Wipe the hood with 10% bleach, followed by 70% ethanol before turning the hood off. Wipe the pipetters, tip boxes, and centrifuge with 70% ethanol after use.
28. Rinse the used bleach beakers and racks with distilled water and spray them down with 10% bleach and 70% ethanol. Place the beakers on paper towels next to the sink and hang the racks above the sink.
29. Bring the sharps container (s), and autoclave bags down to the basement autoclave room. These should be autoclaved the next day by the same technician who performed the virus isolation testing. If this technician is unavailable or untrained, make plans to have this done by a trained coworker.
30. Make sure the paperwork is completed and placed on the desk. This will be picked up the next day along with the PCR samples.
31. When the samples are picked up the next day, a copy of the submission form should be made. The original submission form should go to PCR, while the copy should go to the technician in charge of Virus Isolation.

Quality Control:

For every batch:

1. Negative control
2. Antibiotic control
3. Temperature recordings of 37°C incubator and 4°C refrigerator

Interpretation of Test:

1. Embryos that die within 24 hours of inoculation are discarded and called "incidental".
2. Embryos that die after 24 hours of inoculation are refrigerated at 4°C and are harvested with the remaining viable embryos.
3. If all the eggs for a sample die within 24 hours of inoculation, the sample must be re-inoculated into a fresh set of eggs.
4. Allantoic fluid harvested from embryos that live until day 4 post inoculation or that die within 24 hours of the harvest are considered complete.

Reporting of Results:

Refer to SER0018 Procedure for Entering and Reporting Results Using ATI LIMS-PRO

1. In LIMS, go to Results tab and choose Avian Serology Results
2. For each sample harvested choose "Complete" from the drop down menu
3. Choose "Test Table" then hit "Generate"
4. Hit Release report

Samples testing PCR negative may be reported as follows:

1. Enter PCR test results in ATI LIMS Pro under the Molecular Diagnostics section
2. Click Negate all and then click Test Table
3. Click Generate text results
4. Click Release results
5. Click on reports
6. Click on Generate report—a report should come up with the PCR results listed first, followed by the virus isolation results. Check to make sure all information is correct.
7. Under Date Completed, check off Final report
8. Print off two copies of the report to the Third Party
9. Fax results to the State vet and to the person listed under the third party
10. Ensure all faxes were successful.
11. The Molecular Diagnostics lab will file the submission form with a copy of the report in their Avian Influenza monthly binder. The technician in charge of the VI testing will put their copy of the submission form, report, and VI paperwork in the current VI binder (in either Room 200 or 208).

Samples testing positive must be sent to NVSL for confirmatory testing, See QA0001

Associated SOP's:
SER0018 Procedure for Entering and Reporting Results Using ATI LIMS-PRO
AVI0022 TBTB preparation
QA0001 Samples Requiring Confirmatory Testing

Associated Forms, Records or Instruction Sheets:
Live Bird Market -Avian Influenza Virus Isolation Batch Record
Egg Ordering Schedule form

References:
National Veterinary Services Laboratories Standard Operating Procedures for Avian Influenza Virus Isolation in Embryonated Eggs

G. Procedure 7: Guidelines for In-House Composting of AI Carcassas

Guidelines for In-House Composting of AI Carcasses

Guidelines for In-House Composting of AI Carcasses
(Developed by Lew Carr and Bud Malone, February 2004; edited by Nat Tablante, April 2004; revised by Joseph Wettemann, DEEP and Frank Gagliardo, DEEP December 2015)

A. Supplies

1. Procure all necessary personal, equipment, supplies, and PPE to implement an in-house composting operation. Biosecurity items will include but not be limited to; rubber boots, Tyvek or breathable coveralls (depends on weather conditions) of different sizes, hair nets, good quality disposable mask for dust, rubber gloves, safety goggles, Lysol, sprayer and bucket/brush with approved disinfectant, and large heavy guage plastic garbage bags.

2. A carbon source for indoor composting shall be procured. The ideal carbon source to be used for composting shall be ground yard waste to a two inch (2") minus chip size, bark mulch or coarse wood chips, wood shavings, poor grade sawdust, wet or hardwood sawdust or a mixture of the above materials, as directed by the Subject Matter Expert (SME) provided by the USDA.

B. Composting Procedures

1. In addition to the SME, references shall also include the USDA HPAI Outbreak 2014-2015 Mortality Composting Protocol for Avian Influenza Infected Flocks, September 24, 2015.

2. One day prior to starting the in-house composting, an assessment shall be made in each house to determine if composting is an option and if additional carbon source material will be needed. The composting operator shall be responsible for the procurement of the carbon source and shall facilitate delivery for the next day. If in-house composting is not an option, alternative disposal method(s) of off-site composting and incineration shall be established the day prior to depopulation.

3. Farm personnel shall confirm if birds are to eat all feed from the pans before depopulation.

4. Manure shall be relocated to one side of the building as soon as it is safe to enter the house after euthanizing the birds.

5. A plan of action that meets the composting needs while involving the least material handling and supplemental carbon source shall be developed.

6. Composting plan actions shall consider all of the following: bird age, manure depth in each part of the house, manure moisture and condition, location of the carcasses, access to end door for carbon, ability to turn piles, and house ceiling height.

7. A base layer shall be constructed that is minimum of twelve inches (12") deep and seven feet (7') wide of yard waste/wood shavings in the aisles that will be used for composting. Next, add an eight inch (8") layer of carcasses, then an eight inch (8") layer of manure, then cover with an eight inch (8") layer of yard waste/wood shavings or other carbon source.

8. If there is more manure than needed, the excess manure shall be windrowed in the house to allow it to go through the composting process. This can be used if necessary to cap the windrows following turning.

9. Entry doors to each house shall be posted with warning signs that read, for example, "DANGER, DO NOT ENTER" since there is a potential for toxic gas build-up inside these houses. For safety reasons, two (2) people shall be involved when taking temperature readings. One person will enter the house while the other stands on the outside to assist in the event of an emergency.

10. Under the guidance or directive(s) of the SME, temperature monitoring shall be conducted in the following way:
    a. Monitor temperatures of each windrow daily at flagged fifty (50) foot intervals;
    b. Take two (2) temperature readings daily at each flagged location halfway up the pile from the toe of slope; one reading at eighteen (18) inches and one reading at thirty six (36) inches;
    c. To ensure consistent temperature monitoring to the same depth, mark the thermometer probe at eighteen (18) inches and thirty six (36) inches;
    d. Place the stem of the thermometer in at a forty five (45) degree angle.
    e. Leave the thermometer at each depth and point for at least sixty (60) seconds;
    f. Log the reading from the thermometer from each flag at both depths;
    g. Compare readings to previous day's readings;
    h. Complete the average temperature for each pile and note it on a Composting Temperature log;
    i. Temperature should reach an average of one hundred thirty one (131) degrees F for a minimum of seventy two (72) hours or be assessed for corrective measure;
    j. Disinfect the thermometer and return it to its protective case;
    k. If three days after the initial windrow construction, compost temperature averages are consistently below one hundred (100) degrees F or greater than one hundred sixty (160) degrees F, the SME should be consulted immediately;
    l. Monitor that temperatures reach a minimum of one hundred thirty one (131) degrees F for fourteen (14) days;
    m. The e Incident Commander or APHIS official, the SME, and the Connecticut Department of Agriculture official shall be consulted with to determine if the windrow is eligible for turning for a second fourteen (14) day composting phase.
    n. During the second fourteen (14) day composting phase, the SME should immediately be consulted if compost temperature averages are consistently below one hundred (100) degrees F or greater than one hundred sixty (160) degrees;

11. It is important to mix the compost as much as possible during the turning process. It will be necessary for the operator to scrape along the edge of the windrow for any partially composted carcasses that roll off the pile. Additional carbon source may be required to cap the piles after turning.

12. Compost and environmental VI samples will be required at the first turning and prior to compost removal. Destination of the compost upon removal will be determined on an individual basis.

D. Biosecurity Measures

1. Any equipment transport vehicle should be parked outside the farm entrance. All other workers will park at a remote location and be taken to farm by a van (arranged by sanitation team). Protective apparel is to be used inside the farm entrance and removed at the C&D station upon exit. All supplies, tools, and reusable personal items are to be cleaned and disinfected at the station and placed in a clean environment (i.e. plastic bags). Dispensable items are to be bagged and left at the C&D station.

2. The cleaned dead bird compost bins should be disinfected by the C&D team.

3. The van and any other personal vehicles are to be cleaned and disinfected at the farm entrance station prior to leaving.

4. Any equipment (skid steer, compost turner, etc.) will be thoroughly cleaned and disinfected and air filters bagged and left at the farm entrance area when leaving the farm.

5. The interior floor area of personal vehicles should be sprayed with disinfectant and the vehicles washed after leaving the farm (or washed at the farm at the C&D station area)

6. After being on an exposed farm, wash all clothing and shower upon arrival home.

7. Based on individual circumstances, personnel will be instructed on the amount of time before they can come in contact with other growers or poultry operations.

NOTE: During the last LPAI event in Connecticut, the State Department of Environmental Protection rehearsed composting procedures on a poultry farm to gain an understanding of how the process should be performed in a large-scale event.

H. Procedure 8: Guidelines for Off-Site Composting of AI Carcasses

Guidelines for Off-Site Composting of AI Carcasses

Guidelines for Off-Site Composting of AI Carcasses consists of the following sections:

A. Site Selection for Composting Operations
B. Compost Pad Preparation and Ground and Surface Water Protection
C. Windrow Construction
D. Windrow Monitoring
E. Maintenance of Compost Site and Windrows
F. Close Out of Compost Sites

A. SITE SELECTION FOR COMPOSTING OPERATIONS

The HPAI Working Group shall meet to discuss potential funding to support the pre-incident preparations described below. Within available funding, the following will occur:

1. The identification of potential off-farm composting sites for poultry carcasses shall be conducted in advance of an incident.

2. All existing conditions of the chosen site before the start of site preparation and composting operations shall be documented.

3. Site selection criteria shall assure that the site selected is:
   a. As close as possible to the affected chicken farm to minimize the potential for the spread of HPAI;
   b. Situated so that the prevailing winds do not carry potential odors from the site to residential neighborhoods;
   c. Situated on grassed or cropped fields where no clearing and grading or minimal clearing and grading will be necessary;
   d. As high on the landscape as possible.
   e. Clear of underground and/or overhead utilities or can be utilized without affecting such utilities;
   f. A minimum of one acre in size per 121,500 carcasses, also taking into consideration stockpile areas for carbon sources;
   g. Not in a floodplain;
   h. Not within an area where bedrock lies less than forty eight inches (48") below the ground surface unless provisions can be made to protect groundwater quality and with at least twenty four inches (24") between the ground surface and the seasonal high groundwater table;
   i. One thousand (1,000') feet from a water supply well used for drinking water;
   j. At a distance of two hundred feet (200') from surface and water bodies and two hundred feet (200') from wetlands;
   k. Situated in an area having moderate to well-drained, hard packed soils;
   l. Situated in an area with a slope range of no less than two percent (2%) and no greater than five percent (5%);
   m. Two hundred feet (200') from a drainage swale that leads to a water body;
   n. Twenty five feet (25') from a drainage swale that does not lead to a water body;
   o. A minimum of one thousand feet (1,000') from the nearest residence, school, hospital or other institution housing a human population;

p. Situated with an existing vegetated buffer, forested or other approved area downslope from the compost pad to receive and treat any leachate or runoff that might be generate; and.
q. Situated preferably with a natural hedge row, trees, or other vegetation that can help to filter the air between the compost piles and neighbors.
r. Existing groundwater conditions of the chosen site(s) shall be evaluated before the start of site preparation and composting operations as directed by DEEP. The groundwater quality shall be assessed via monitoring wells. Groundwater **monitoring parameters shall consist of** Ammonia, Dissolved Oxygen, Specific conductance, Oxidation Reduction Potential, pH, Iron, Manganese, Hardness, Odor, Arsenic, Nitrates, Nitrites, at a frequency to be determined after consultation with DEEP

B. COMPOST PAD PREPARATION AND GROUND AND SURFACE WATER PROTECTION

1. The compost pad shall be sized large enough for the construction of windrows, storage of carbon sources and bulking materials, and placement and storage of equipment and vehicles.

2. The site shall be prepared and access into the site from the roadway upgraded, as necessary.

3. For non-agricultural compost pads only, the grade of the pad area shall be constructed to a desired slope range, between two percent (2%) and five percent (5%), graded to minimize ponding, and soil compacted to accomodate vehicular movement on-site.

4. The pad surface shall be covered as necessary with crusher run gravel to support transport and composting of source materials.

5. All appropriate sedimentation and erosion control measures shall be implemented and designed in accordance with the 2002 CT Guidelines for Soil Erosion and Sediment Controls, as amended.

6. All drainage swales/ditches and stormwater ponds shall be sufficient distance from the windrow to prevent absorption of water by compost windrows.

7. All interceptor berms, ditches, and swales shall be up-gradient of the compost pad when the compost pad is located down gradient of a slope. Surface drainage shall be diverted away from the compost pad.

8. Drainage control measures shall be implemented, including but not limited to wood chip/compost berms, and prevent run-off from the compost pad from entering surface water.

C. WINDROW CONSTRUCTION

1. Before beginning windrow construction, a determination of the estimated amounts of carbon necessary for composting operations and identification of sources for procuring the necessary carbon for windrow construction shall be made.

2. No mortalities are to be delivered to the composting site until adequate quantities of carbon source, manure, and windrow forming equipment are delivered and available for constructing windrows on the site. **The prepositioning of carbon sources and other necessary materials and equipment is critical to mission and response plan success.**
3. Mortalities shall be incorporated into windrows immediately upon arrival at the site under the direction of the Subject Matter Expert (SME) provided by the USDA and never stockpiled or stored.

4. The following composting guidelines shall be followed unless instructed by the on-site SME to implement alternate composting guidance:
   a. Average weight in lbs. of broilers and layers = three and one quarter pounds (3.25 lbs);
   b. Minimum of 1.5 lbs. of carbon material (based on the bulk density of 30 lbs. per cubic foot material) required per pound of bird;
   c. "toe" or base of windrow should be no more than twelve feet (12') wide;
   d. Windrow height should be no more than six feet (6') high;
   e. Allow twenty feet (20') between windrows to allow tractor and turner to operate (width of tractor is ten feet (10') to twelve (12') feet;
   f. The carbon source to nitrogen ratio in the compost media shall be between twenty five to one (25:1) and fifty to one (50:1), with a preferred range of between twenty five to one (25:1) and forty to one (40:1).

5. Windrow base construction shall be as follows:
   a. Constructed on the compost pad perpendicular to the contours of the ground surface;
   b. To be at a depth of twelve inches (12") to fifteen inches (15");
   c. With Carbon material for the base that is porous and bulky;Ideal base material to be used shall be ground yard waste two inch (2") minus, bark mulch or coarse wood chips, wood shavings, corn stover or a mixture of the above materials, or as directed by the SME; and

6. Unless otherwise directed by the SME, the layering method shall be utilized for windrow construction whereby the windrow core can be constructed by layering chicken carcasses, poultry manure, and carbon material. Using this method, the composter shall
   a. Add a ten inch (10") layer of carcasses, then a ten inch (10") layer of manure, then cover with a ten inch (10") layer of wood chips or other carbon source.; and
   b. Then add another layer of carcasses and manure so the windrow is two (2) layers high and as long as needed.
   c. Construct the core such that one foot (1') of the previously built layer of carbon material is left uncovered on both sides of the windrow.

7. The windrow shall be capped:
   a. So that any carcasses that are near the edge of the windrow base shall be removed and placed in the core of the windrow;
   b. With ten inches (10") to twelve inches (12") of a suitable carbon material. Carbon material for the cap shall prevent flies from contacting carcasses, serve as an insulating blanket, and allow air to flow out of the piles. This material shall be finer in texture than the base. Suitable material includes small grain hulls, sawdust, new bedding and wood chips. Cap material shall not be light enough that it will blow off the windrow;
   c. Ensuring that the entire core is uniformly covered with cap material with no exposed carcasses;
   d. To avoid compacting the windrow and take care to not operate the loader's tires or tracks onto the sides of the windrow while capping; and
   e. Ensuring the finished pile is no more than six feet (6') high.

D. WINDROW MONITORING

1. The composter under the guidance or directive(s) of the SME shall conduct the following visual monitoring:
   a. Inspect for disturbance of windrows from animals or other vectors.
   b. Inspect the compost site for security breaches;
   c. Observe and maintain, as necessary site erosion and sediment controls in a manner consistent with the Guidelines, or as approved by the Department;
   d. Check the compost pad for surface degradation, and maintain as necessary to ensure pad integrity; and

e. Observe for conditions that may impact groundwater and surface water quality.

2. The composter under the guidance or directive(s) of the SME shall conduct the following temperature monitoring:
   a. Monitor temperatures of each windrow daily at flagged fifty foot (50') intervals;
   b. Take two (2) temperature readings daily at each flagged location halfway up the pile from the toe of slope; one reading at eighteen inches (18") and one reading at thirty six inches (36");
   c. To ensure consistent temperature monitoring to the same depth, mark the thermometer probe at eighteen inches (18") and thirty six inches (36");
   d. Place the stem of the thermometer in at a forty five (45) degree angle.
   e. Leave the thermometer at each depth and point for at least sixty (60) seconds;
   f. Log the reading from the thermometer from each flag at both depths;
   g. Compare readings to previous day's readings;
   h. Complete the average temperature for each pile and note it on a Composting Temperature log;
   i. Temperature should reach an average of one hundred thirty one (131) degrees F for a minimum of seventy two (72) hours or be assessed for corrective measure;
   j. Disinfect the thermometer and return it to its protective case;
   k. If three days after the initial windrow construction, compost temperature averages are consistently below one hundred (100) degrees F or greater than one hundred sixty (160) degrees F, the SME should be consulted immediately;
   l. Monitor that temperatures reach a minimum of one hundred thirty one (131) degrees F for fourteen (14) days;
   m. The composter shall then check with the Incident Commander or APHIS official, the SME, and the Connecticut Department of Agriculture official to determine if the windrow is eligible for turning for a second fourteen (14) day composting phase.
   n. During the second fourteen (14 day) composting phase, the SME should immediately be consulted if compost temperature averages are consistently below one hundred (100) degrees F or greater than one hundred sixty (160) degrees;
   o. Winter composting considerations:
      i. Windrows must never be allowed to go cold.
      ii. New carcasses should not be allowed to freeze and should not be added to a pile that has dropped below sixty (60) degrees F which is too cool for microbial activity to start.
      iii. Windrows must be large enough to provide self-insulation.
      iv. A thicker layer of bulking agent may be needed on outside of windrow.
      v. Do not turn on extremely cold days.

E. MAINTENANCE OF COMPOST SITE AND WINDROWS

1. The composter shall maintain the site and compost windrows under the guidance and directives of the SME and shall ensure that the compost facility is operated so as to prevent adverse impacts to public health, safety, welfare, and the environment.

2. The composter shall maintain the site and compost windrows in such a manner as to prevent the creation of litter and the harboring, feeding or breeding of vectors.

3. The Composter shall ensure that security measures are in place, adequate, and maintained to prevent unauthorized dumping and vandalism.

4. The Composter shall maintain an access way to the compost site from the roadway that permits orderly entry and egress at all times.

5. The Composter shall use a straddle-type windrow turner [11] or alternate equipment recommended by a Subject Matter Expert in composting . Windrows shall be constructed with a minimum of twenty feet (20') between windrows and adequate space to turn at the end of each run.

6. The Composter shall ensure that plastic lining from truck or container beds and empty nylon mesh supersacks containing poultry carcasses is not mixed into constructed windrows and is properly disposed of so as to prevent adverse impacts to public health, safety, welfare, and the environment.

7. The Composter shall visually inspect turned windrows for exposed carcasses and/or soft tissue and apply cover material as necessary to a depth of ten inches (10") to twelve inches (12").

8. The Composter shall maintain and monitor compost windrows through a minimum of two heat cycles where the temperature has reached one hundred thirty one (131) degrees F.

9. The Composter shall assure that the compost end product does not contain any visible pieces of soft tissue; if visible; then the Composter shall again turn the windrow.

10. Once the composter determines there are no visible pieces of soft tissue, the Composter shall confirm that the compost end product is humus-like with very little odor. The composter will then handle and store the compost end product according to DEEP and the Department of Agriculture directives.

11. The Composter shall ensure that compost end products being transported off-site are first analyzed for the following parameters:

   a. Ammonium nitrogen
   b. Total kjeldahl nitrogen
   c. Nitrate nitrogen
   d. Phosphorus
   e. Potassium
   f. pH

F. **CLOSE-OUT OF COMPOST SITES**—once DoAg has determined that the AI virus has been deactivated and the compost is virus-free, the remaining compost is suitable for land application and will most likely remain onsite until it is applied.

1. The Composter shall take direction from the DEEP on the testing and closure of compost sites. The testing and closure shall be undertaken in accordance with all requirements of Connecticut statutes and regulations and federal laws. The Composter shall take note of the following broad guidelines to be applied to the closure of compost sites:
   a. Closure of the site shall be in accordance with the DEEP and/or Department of Agriculture requirements, including environmental sampling, if needed;
   b. All compost shall be removed by the expiration of the Emergency Authorization unless otherwise authorized by the DEEP;
   c. Mulch, wood, and other carbon sources may be left on-site if prior approval is obtained from the DEEP. DEEP will consider these requests on a case-by-case basis;

[11] Specific equipment may depend on what is eligible for funding and/or required by APHIS or other authority at the time of the incident.

d. Areas that were only used to stage carbon sources will not require any environmental sampling after the materials is removed unless there is reason to believe that the area may have become contaminated (e.g., significant visible staining or known contaminant releases in the area.);
e. Sampling of soils and groundwater at closure should include at least four soil samples and groundwater samples collected from monitoring wells and direct sampling in areas showing significant visible staining or areas believed to be impacted by the staged waste. At the time of sampling, the DEEP will dictate the locations and parameters for testing;
f. The DEEP may also require other approaches to conducting environmental sampling at staging areas on a case-by-case basis, such as requiring that the site meet the criteria of the Remediation Standard Regulations, RCSA Connecticut State Agencies (RCSA) 22a-133k-1 through 22a-133k-3; and
g. Soils shall be tested for the presence of volatile hydrocarbon contamination. Samples shall be taken immediately below the surface. This testing should be done if it is suspected that they were hazardous materials, such as oil or diesel fuel spills, dumped on the site. This phase of the testing should be done after the stockpiles are removed from the site.

2. As directed by DEEP, the Composter shall follow these surface and groundwater testing requirements:
   a. Groundwater should be tested on selected sites to determine the probable effects of rainfall leaching through the compost windrows;
   b. Runoff from compost windrows and stockpiled carbon sources has the potential to contaminate surface and groundwater;
   c. Groundwater monitoring wells or temporary sampling points should be located down gradient of compost windrows prior to any point of concern (wetlands, surface waters, property boundaries, etc.) if the composted material remained for an extended period of time prior to final removal to determine if there is any type of contamination;
   d. Testing of groundwater shall occur at selected sites reviewed and approved by the DEEP after all compost material has been removed. Groundwater quality shall be assessed via monitoring wells post composting. Groundwater monitoring parameters shall consist of Ammonia, Dissolved Oxygen, Specific conductance, Oxidation Reduction Potential, pH, Iron, Manganese, Hardness, Odor, Arsenic, Nitrates, Nitrites.

   e. If applicable, results should also be compared to Drinking Water Action Levels as identified by the Drinking Water Section of the DPH.

3. The following generic checklist for Quality Assurance (QA) shall be considered at the close-out of each compost site. The generic checklist includes, but is not limited to the following:
   a. Lease special conditions met?
   b. Compost piles removed?
   c. Illegally filled or disturbed wetlands as a result of the operation are restored and locations noted on appropriate State and municipal maps?
   d. Chain of custody records complete for the site?
   e. Location of storage area stockpiles marked on plans?
   f. Petroleum and HHW spills remediated?
   g. Perimeter berms leveled and topsoil restored?
   h. Agricultural fields restored to crop growing conditions?
   i. Existing groundwater monitoring wells identified on map, secured and restored?
   j. Environmental records submitted (contractor groundwater and air quality monitoring if any, other state approvals)?
   k. Site secured wherever stockpiles (carbon sources, compost piles) do remain, to discourage illegal dumping?
   l. All contractor equipment and temporary structures removed?

m. Compare baseline data of the temporary site to conditions after the stockpile is removed and the contractor vacates the site.
n. Use GPS to locate the sites for future reference needs.

4. The DEEP and DoAg shall be informed in writing when all closure activities at the compost site are completed. If environmental sampling was conducted as part of the closure activities, then the closure notice shall include the results of this sampling, unless otherwise approved by DEEP.

DOAG and DEEP answers to questions regarding Voluntown HPAI composting site
April 24, 20023

1) *What is the minimum acreage required for a composting site?*
   - The minimum acreage required for a "worst-case scenario" HPAI outbreak would be approximately 48 acres. This would include approximately 20.6 acres for on-farm composting and 27.7 acres of off-farm composting. There is a minimum requirement of one (1) acre per 121,500 carcasses per the 2017 Avian Influenza Monitoring and Response Plan pg. 133 ("2017 HPAI Plan" EHSP0001-AIMRP2018.pdf (ct.gov)). Consideration must also be given for stockpile areas of carbon sources. These numbers take into account the aisle space that is needed to allow access by emergency response personnel and equipment.
   - Compost sites, both on-farm and off-farm, would be managed by USDA and subject matter experts.

   a. *Dimensions of compost windrows.*
   - The length of compost windrows would vary based on the layout of each specific compost site. Windrow height is limited to six feet (6 ft.) as specified in the Avian Influenza Monitoring and Response Plan. The base or width of a windrow would be between twelve feet (12 ft.) and sixteen feet (16ft). There shall be twenty feet (20 ft.) between windrows to allow for proper management. Windrows shall be constructed perpendicular to the contours of the ground surface. These values are found in the 2017 HPAI Plan pg. 135 and from experience Hillandale has with handling mortalities via composting.

   b. *Based on what volume?*
   - There is an approximate total volume of 12,570 cubic yards of birds in Connecticut that would need to be composted in a "worst-case scenario" (approximately 5.8 million birds).

2) *What are the other site criteria that DEEP staff used for site analysis?*

   The Regulations of Connecticut State Agencies Section 22a-208i(a)-1 provides the siting requirements for leaf composting facilities that DEEP applies to all composting facilities.

   a. *Wetlands*
   - Two hundred feet (200 ft.) from wetlands

   b. *Slopes*
   - Slope range of no less than two percent (2%) and no greater than five percent (5%).

   c. *Ownership*
   - If the proposed site for composting is privately held, then a lease agreement must be submitted as a requirement of solid waste authorization.

   d. *Minimum acreage*
   - See #1 above, first bullet.

   e. *Property restrictions*
   - Some properties have federal funding restrictions such as Franklin Wildlife Management Area and Quinebaug Wildlife Management Area. Environmental restrictions – some areas may not be suitable due to not meeting the metrics outlined here. There may be transportation restrictions based on biosecurity measures.

   f. *Buffer distances from populations, other poultry operations, etc.*
   - Not in a floodplain
   - Not within an area where bedrock lies less than forty-eight inches (48") below the ground surface
   - One thousand feet (1,000 ft.) from a water supply well
   - 200 ft. from surface and water bodies
   - 200 ft. from a drainage swale that leads to a water body
   - Twenty-five feet (25 ft.) from a drainage swale that does not lead to a water body

- A minimum of 1,000 ft. from the nearest residence, school, hospital or other institution housing a human population.
  - It was identified in the 2017 HPAI Plan, pg. 133, that the site(s) selected should be as close as possible to the affected chicken farm to minimize the potential spread of HPAI.

RCSA Sec. 22a-208i(a)-1 is the DEEP regulation that governs siting of composting sites.

3) *Have the Hillandale Farm facilities demonstrated they DO NOT have sufficient space? (see attached GIS sketches)*
   - Hillandale has identified they are able to complete on-farm composting at Bozrah Schwartz Road, Brush Hill Road, Lebanon Mack Road and Goshen Hill Road. They can account for approximately 11,620 total feet of windrows, which could hold approximately 2.5 million carcasses.
   - There is a remaining approximately 14,910 feet of windrow composting that would need to be accounted for at off-farm locations to handle the remaining approximately 3.4 million carcasses.

4) The plan mentions compensation to the farm, but nothing regarding compensation for any impact on the Town of Voluntown (roads, transfer station usage, access to public works area). What will that compensation be?
   - There are not currently any state funds identified for this purpose. It is possible that should any damage occur due to the truck traffic, that a town could apply for a STEAP Grant at that time.

5) Why can't DOAG require the commercial producer to do composting on their site rather than in our state forest?

   Please see our response to question 3.