**Points to Consider**

Does the biosecurity plan make sense?

 Cookie-cutter approach doesn’t work

 *Say what you’ll do and do what you say*

Is the operating plan feasible under all working conditions (summer, winter, rain, snow)?

Does everyone understand their role in keeping out disease?

“Farm biosecurity isn’t about what happens when everyone is watching. It’s about what happens when no one is watching.”

-WattAgnet.com

What happens when nobody is watching?

Be “biosecurity-minded” – continually look for weak links in disease prevention and then use common sense feasible methods to solve the problem.

**HIGH PATH AVIAN INFLUENZA Biosecurity Plan**

**XYZ LOWER FORTY ACRES**

**14000 West Quicksand Rd**

**Muddy Slough, UT 84000**

Prepared by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Updated by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_on \_\_\_\_\_\_\_\_\_\_\_\_

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 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_on \_\_\_\_\_\_\_\_\_\_\_\_

GPS Coordinates of Premises Entrances: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Biosecurity Coordinator***

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone (Office): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone (Home): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone (Cell/Mobile): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_

***Description of Business***

XYZ Lower Forty Acres is owned by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. We raise approximately \_\_\_\_\_\_ pheasants and \_\_\_\_\_\_\_ chukars to maturity. In addition, we have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. We own \_\_\_\_\_ acres at this location. There are \_\_\_\_\_\_\_ acres used as a hunting preserve. We have approximately \_\_\_\_\_ clientele coming at \_\_\_\_\_\_\_\_ during the year. Our farm sells \_\_\_\_\_\_\_\_\_\_\_\_. We provide \_\_\_\_\_\_\_\_\_\_ . Mature birds are sold from \_\_\_\_\_\_\_\_\_\_. Young birds usually stay in buildings for six weeks and then in outside flight pens for another 18 weeks until sold.

***Emergency Contact List***

State Veterinarian…………………………………… Dr. Barry Pittman (801) 538-7162

Central Utah Veterinary Diagnostic Laboratory……. Dr. Jane Kelly (801) 798-5435

USU Extension Poultry……………………………. Dr. David D. Frame (435) 851-2233

Employees……………………………………………………………….

 ………………………………………………………………..

 ………………………………………………………………..

Feed delivery…………………………………………………………….....

 Clientele ……………………………………………………..

 ………………………………………………………

 ………………………………………………………

 Utilities………………………………………………………………….

 …………………………………………………………………

 Other…………………………………………………………………….

**Additional Information:**

***General Biosecurity Protocol***

**Employees**

1. No persons living in employees’ household shall own or keep any other birds at home.
2. Freshly laundered clothing is to be worn to work daily.
3. Change into work gear at assigned location. This location is [**building, room**].
4. Do not visit younger birds after visiting older birds, unless shoes and clothing are adequately cleaned and disinfected.
5. When leaving the farm, all work gear is left at [**building, room**].

**Visitors**

1. All visitors must report to the main office, disinfect shoes, and sign in.
	1. Main office is located [**description of location**].
	2. Footwear is disinfected in pan located \_\_\_\_\_\_\_\_\_\_\_\_ containing [**trade name and chemical name (if available and concentration**] disinfectant.
	3. Visitors’ log is maintained at [**building, room**].
2. Visitors’ vehicles to be parked in designated area away from bird pens.
	1. Parking area is located [**description of location**].
3. No visitor shall enter any building or pen without wearing disposable boots.

**Animal Control/Movement Practices**

1. Employees and workers are to avoid contact with waterfowl, wild birds, and wild or feral animals
2. Wild birds are to be discouraged from flocking around and entering pens.
3. Rodents and insects are to be controlled both inside and outside buildings and pens.
4. New replacement game birds are to be housed in a clean and disinfected building or pen.
5. Dispose of dead birds in the designated disposal facility in a timely manner.
6. Hunting dogs and pets are to be kept away from captive bird areas.

**Emergency Biosecurity Procedures**

Upon suspicion of a serious disease problem that could be HPAI, these steps will be immediately implemented to minimize the potential spread to other locations:

1. All vehicles, equipment, and clothing are quarantined to the farm. Nothing can leave until given permission by proper regulatory authorities.
2. No clients are allowed on premises.
3. All dogs are to be kenneled.
4. State veterinarian’s office is immediately contacted further instructions.

***Specific Plan of Action***

**Biosecurity Responsibility**

1. Biosecurity Coordinator will communicate with everyone on the emergency contact list.
	1. The Biosecurity Coordinator is responsible for training and documentation of site-specific training for all production personnel and suppliers. Training is to be done at time of hire and at least once per calendar year. This training documentation is kept at [**building, cabinet, and drawer**].
2. This Biosecurity Plan will be reviewed internally at least annually and revised if needed. Record of these reviews are kept at [**building, cabinet, and drawer**].

**Physical Biosecurity Designations**

1. Line of Separation (LOS)
	1. Brooder buildings: The walls of each building act as the LOS. Only one or two entrances are designated for entering and leaving. An area for footwear change and outerwear change (if necessary) will be provided at each entrance.
		1. Building #1
			1. LOS description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
			2. Changing area description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		2. Building #2
			1. LOS description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
			2. Changing area description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. Pens: The containment wire surrounding each pen acts as the LOS. Only one or two entrances are designated for entering and leaving. An area for footwear change and outerwear change (if necessary) will be provided at each entrance.
2. Perimeter Buffer Area (PBA) The perimeter buffer area entrance should be clearly indicated, located and marked with signage. Visitor's access should be controlled at all times.
	1. Brooder building:
		1. Building #1
			1. PBA description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
		2. Building #2
			1. PBA description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
	2. Pens:
		1. Pen #1
			1. PBA description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
		2. Pen #2
			1. PBA description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
		3. Pen #3
			1. PBA description\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Personnel**

Personnel are to change into designated premises clothes and footwear prior to crossing into PBA. Personnel should not come into contact with other poultry or poultry premises unless having followed company established protocols.

1. Employees are to park private vehicles in designated parking area away from live birds and pens. This designated parking area is located at [**description of location**]
2. Persons entering PBA are to be wearing premises-specific outer clothing and footwear before crossing PBA. If building/pen-specific clothing and footwear are available, these are donned before crossing the LOS.

**Wild Bird, Rodent, and Insect Control**

1. Reduce harborage in and around poultry houses.
	1. Removal of unwanted debris in and around the outside of poultry buildings. This includes; trash, equipment, lumber, containers, and non-essential litter.
	2. Grass and weeds outside buildings will be mowed, removed, and / or chemically treated with herbicides to keep a no cover zone of 16 feet or greater around the buildings.
2. Feed management
	1. Spilled feed is cleaned and removed from area as soon as it is identified.
	2. Unused feed is removed from buildings after a flock is marketed.
	3. Tanks and feed equipment are also cleaned of feed after flocks are marketed.
3. Rodent control
	1. Entry ways if present, are baited around doors and walls
	2. Outside the buildings any open rodent holes are covered and if they become active, are baited.
	3. Rodenticides will be rotated by active ingredient one to two times a year.
		1. Monthly record of bait type and quantity and the quantities used are recorded and kept at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		2. Log of rodent monitoring results is kept at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	4. If rodent activity is noticed, bait will be replaced and if necessary one or two additional bait stations will be placed in the vicinity.

**Equipment and Vehicles**

1. Do not borrow or loan equipment unless thoroughly cleaned and disinfected.
	1. If equipment must be shared, a plan for cleaning, disinfecting, and inspecting equipment between farms needs to be in place as well as a plan of how equipment and vehicles will enter the PBA/LOS. When delivering to a high risk customer, vehicles and crates must be cleaned and disinfected off-site before re-entering the farm.
	2. This plan consists of a recording log containing:
		1. Where is equipment coming from or going to?
		2. To who was it loaned or from whom was it borrowed?
		3. Off-site location where equipment will be cleaned and disinfected.
		4. Type of disinfectant used.
		5. Who is responsible for final inspection and allowance of equipment back onto premises to re-enter PBA/LOS?
		6. Log is kept at [**building, cabinet, drawer**].

**Dead Bird Disposal**

Dead birds should be disposed of in a manner that does not attract wild birds, rodents and other animals and avoids the potential for uncontrolled cross-contamination from other facilities or premises.

1. How often? [**once per day, once per month, twice per year, etc.**]
2. Where kept until disposed of [**in open buckets at side of building, in closed containers next to road, taken directly to disposal area in open bed of pickup truck, etc.]**
3. How disposed of and location of disposal area [**dead pit, taken to local landfill, burned, etc.**]

**Manure and Litter Management**

Manure and spent litter should be removed and disposed of in a manner to prevent exposure of susceptible game birds (either on or off the farm of origin) to disease agents and to not attract wild birds, rodents and other animals.

1. How often?
2. Where stored? [**covered pile ½ mile south of brooder, etc.**]
3. How disposed of? [**spread on agricultural fields, composted, etc.**]

**Replacement Birds**

Keep a record of sources, placement dates, and flock movements.

This record is located at [**building, cabinet, drawer**].

**Water Supply**

Drinking water and water for evaporative cooling should come from sources that have been treated to eliminate any potential contamination with disease agents. If such water comes from a surface water source, experts in water treatment should be consulted on how to continuously treat the water to eliminate disease agents. If surfaces have been cleaned or flushed with surface water, subsequent disinfection should be employed to prevent disease transmission. Pens should be maintain so that water from rain or snow drains away as quickly as possible.

1. Buildings #[**if all the same protocol, list buildings here**]
	1. Drinking water source comes from [**closed culinary source, surface water**]
	2. If surface water, the water is treated with [**household bleach, concentrated chlorine, hydrogen peroxide**] at so that water within drinkers is a minimum of \_\_\_\_ ppm [chlorine or H2O2].
	3. Monitoring of the surface-derived drinking water disinfectant properties is done by [**sending to lab, etc.**].

2. Pens #[**if all the same protocol, list pens here**]\_\_\_\_\_

* 1. Drinking water source comes from [**closed culinary source, surface water**]
	2. If surface water, the water is treated with [**household bleach, concentrated chlorine, hydrogen peroxide**] at so that water within drinkers is a minimum of \_\_\_\_ ppm [chlorine or H2O2].
	3. Monitoring of any surface-derived drinking water disinfectant properties is done by [**sending to lab, etc**.].

If surface water is used for drinking or cleaning purposes, how is it sanitized and/or disinfected?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Pen drainage plan:

 Pen #1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 Pen #2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 Pen #3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 Pen #4: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Feed Storage and Transport**

Feed is stored in closed bin(s) located [**physical location description**].

The feed is transported to buildings and pens via [**open bed pickup, tarped truck bed, etc.**].

**Replacement Litter**

Replacement litter is stored at [**physical location description**].

This storage is protected from wild birds and rodents by [**stored inside a building, covered pile, etc.**].

**APPENDIX A**

**Cleaning and Disinfecting**

The following four steps are to be followed where applicable for the time of year:

1. Dry clean building, including removal of all litter from previous flock.
	1. Allow outside pens to sit idle exposed to sunlight and warm temperatures for 90-120 days, depending on the time of year.
2. Wash down building and apply disinfectant [if building construction permits].
3. Wash and disinfect all equipment within the building or pen.

**Building Cleanout/Disinfection (Floor Birds)**

1. Pre-Clean
	1. Intensify rodent control on the outside of the building.
		1. Include entry way if present
		2. Include the outside of adjacent buildings if present

 b. Remove all feed from feeders, feed lines and from the feed tank

 c. Remove all live & dead birds from the building & properly dispose

 d. Cover all exposed electrical devises and sensors.

 e. Flush, clean and disinfect water lines

 f. Remove equipment if necessary

1. Clean
	1. Push out litter and sweep the floor
	2. Brush free any debris form floor, wall and ceiling
	3. Load litter on truck, properly cover litter and transport off site
	4. Wash down all surfaces with high pressure water
		1. Ceilings, walls, feeders, water lines, curtains, feed tanks, floor, brooder stoves, inlets, fans, shutters, and fan boxes
		2. Pay close attention to cracks in the floor, corners, building seams and around posts
	5. Remove all excess debris and water caused by the wash down. Remove all litter, feathers and other organic debris
	6. Clean and wash down area where litter was pushed out.
	7. Clean and wash entry way / service rooms
	8. Soak all surfaces with soap / Quat disinfectant with high pressure washer
	9. If necessary rinse all equipment with fresh water
2. Disinfection
	1. Using a company-approved disinfectant, to all building surfaces and equipment using the orchard sprayer (apply product per label instructions)
		1. Ceilings, walls, feeders, water lines, curtains, feed tanks, floor, brooder stoves, inlets, fans, shutters, and fan boxes
	2. Close up building, post and lock building for 24 hours.
	3. Ventilate building before entering.

**Disinfection of Water Lines Between Flocks**

The following is an outline for general disinfection of a watering system between flocks at the farm.

Three-step sanitation procedure (Citric Acid – Chlorine – Citric acid)

1. Step 1: Citric acid treatment
	1. Drain all water lines
	2. Mix 4-5 packs of 205 gm citric acid in 128 gallons of water
	3. Fill all water lines with citric acid mix solution
		1. Let it stand for twenty-four (24) hours.
		2. Flush system with plain water to get rid of “crud”.
	4. Drain water lines.
	5. Check filters and valves. Cleaning and disinfecting the water lines may break loose deposits that can clog in-line filters and valves.
2. Step 2: Chlorine treatment
	1. Drain all water lines
	2. Mix 2.5 fluid oz of a 12.5 % liquid chlorine solution in two gallons [256 ounces] stock solution. This will provide approximately 10-ppm chlorine. OR
	3. Mix 6.5 fluid oz of a 5.0 % liquid chlorine solution in two gallons [256 ounces] stock solution. This will provide approximately 10-ppm chlorine.
	4. Fill all water lines with chlorine solution
	5. Let it stand for two hours
	6. Flush system with plain water to get rid of organic debris.
	7. Drain water lines.
3. Step 3: Citric acid treatment
	1. Repeat Step 1; a - f