National Air Quality Site Assessment Tool (NAQSAT) Inventory Jobsheet
General Instructions - Laying Hens

Inventory Sheets have been developed for each species listed in NAQSAT.

- Swine
- Beef - excluding pasture situations
- Dairy Cattle
- Horses
- **Laying Chickens**
- Broiler Chickens
- Turkeys

Requirements for Completing NAQSAT Reports

- AFOs with 300 animal units and greater that are requesting EQIP assistance (CAP and/or Practice) must complete and provide two NAQSAT reports to the field office. Reports include 1) Baseline (for current management conditions) and 2) Planned practices (for operation with the planned management/practice changes, i.e. planned construction of building and elimination of open lots, etc.).

- How to calculate total Animal Units?

  Option 1: Animal Units = (Average weight of the animal in pounds divided by 1,000 pounds) multiplied by the total one-time animal type. Repeat for each type of animal; combine totals.

  Option 2: If you don't know the average weight for each species - Use the following Species Specific Conversion factors to Animal Units (Head Count x Conversion Factor = AU)

Animal Type	No. of Animals	Multiply by	Conversion factor	Equals	A.U. by Type
Dairy Mature Cow (≤ 1000 lbs.)		multiply by	1.0	equals	
Dairy Mature Cow (> 1000 lbs.)		multiply by	1.4	equals	
Dairy - Heifer		multiply by	0.7	equals	
Dairy - Calf		multiply by	0.2	equals	
Beef - Cow/Calf Pair		multiply by	1.2	equals	
Beef - Finishing Cattle		multiply by	1.0	equals	
Beef Feeder Cattle - backgrounding, heifer development		multiply by	0.7	equals	
Swine (>300 lbs.) Sows, boars		multiply by	0.4	equals	
Swine (55-300 lb.) Gilts, feeder, finishing		multiply by	0.3	equals	
Swine (<55 lb.) Nursery		multiply by	0.1	equals	
Horse		multiply by	1.0	equals	
Sheep. Lambs, Goats		multiply by	0.1	equals	
Chickens, Over 5 lbs.		multiply by	0.005	equals	
Chickens, Under 5 lbs.		multiply by	0.003	equals	
Turkeys, Over 5 lbs.		multiply by	0.018	equals	
Turkeys, Under 5 lbs.		multiply by	0.005	equals	
Ducks		multiply by	0.01	equals	

TOTAL A.U. for all Animals types	

Completing Inventory Sheet

- Separate inventory sheets will need to be completed for each species.
- Separate inventory sheets will need to be completed for species of different housing, i.e. beef feeding operation with open lots and confinement barns requires two different NAQSATs reports.
- **All possible questions in NAQSAT have been listed in the inventory sheets, only answer the questions that apply to the operation requesting assistance.**

Entering inputs in NAQSAT:

- Click on the management category of interest - start at the top with animals and housing and work down the list to perception.
- Only questions that pertain to the user's operation will be asked.
- All questions that appear need to be answered.
- The program is set up to include or remove questions from view on the basis of user input. Answers to some questions will generate additional questions to be answered. The program may pause momentarily while those questions are populated.
- Pictures are used when a visual appraisal of current practices is most appropriate. Placing the cursor over the picture will generate a text description of the management practice. Clicking on the green X in the top right-hand corner of the picture will generate a larger view. Click the red X or outside of the photo to return to the data input screen.
- Save data after completing each category by clicking on the "Save Progress" button at the bottom of the page. Each NAQSAT session is assigned a unique URL. Bookmark the URL to facilitate easily returning to the NAQSAT session at a later date. Click on the red X to return to the input section and move to a new management category.
- Do not use the browser "back" button. Clicking on the browser "back" button will return you to the NAQSAT home page, and all unsaved inputs will be lost.

Generating output:

- Before getting results, click on the "Save Progress" button to ensure that all inputs are saved.
- To generate results, click on the "Get Results" button at the bottom of the page.

Interpreting results:

- The effectiveness of current practices for each management category and each emission of concern is reflected by the percentage of green in the boxes under each emission. The larger the green area in each box, the more effective current management practices are and the fewer the opportunities to reduce emissions of that constituent in that management category.
- If all boxes are completely green, it does not mean there are no emissions. Fully green boxes simply indicate that the current management practices for the existing structural facilities provide few or no opportunities to reduce the emissions of that constituent in that management category.

- “Sheet not complete” identifies some questions required to complete the analysis that were not answered in that management category.
- N/A (Not Applicable or Not Available) – Sufficient data was not available at the creation of this tool to provide the impact of a practice on emission of a specific constituent, or a selected answer in a sheet does not have an impact on emissions of a specific constituent.

Returning to inputs:

- Clicking on the red X in the upper right-hand corner will take users back to the input section.
- Return directly to a management category by clicking on that category on the “Effectiveness Results” page.
- Do not click on the browser “back” button.

Exiting NAQSAT:

- Save all inputs before exiting NAQSAT.
- All scenarios will remain active on the NAQSAT site for 30 days.
- If you re-access the data, the 30-day period starts over again.

Printing Reports:

- The “Effectiveness Results” screen contains a print button in the lower left-hand corner as well as the saved session URL (Figure 5). All inputs are printed as well as the “Effectiveness Results” page.

LAYING HENS - BIRD SIZE & HOUSING TYPE

1.0 What type of birds - light or heavy?

- ○ **Light** - If checked, answer the following question:
  a. What is the average feed conversion for the year? (lb. feed to dozen eggs)
     - ○ Unknown
     - ○ < 2.7
     - ○ 2.7 to 2.9
     - ○ 2.9 to 3.2
     - ○ 3.2 to 3.4
     - ○ > 3.4
- ○ **Heavy** - if checked, answer the following question:
  a. What is the average feed conversion for the year? (lb. feed to dozen eggs)
     - ○ Unknown
     - ○ < 2.7
     - ○ 2.7 to 2.9
     - ○ 2.9 to 3.2
     - ○ 3.2 to 3.4
     - ○ > 3.4

2.0 Housing Type

- ○ **Mechanically Vented** - if checked, answer the following questions:
  a. What mitigation strategies are used with the housing? Check all that apply
     - ☐ Vegetative Buffer
     - ☐ Exhaust Ducting
     - ☐ Scrubber
     - ☐ Dispersion walls
     - ☐ Attic Inlets
     - ☐ Ceiling fans
     - ☐ Liter Amendments
     - ☐ None
  b. Does the operation fog or sprinkle?
     - ○ No
     - ○ Yes
       1) When fogging, does the floor get wet?
          - ○ Yes
          - ○ No
- ○ **Natural (Outside access)** - if checked, answer the following question:
  a. Is there bare ground?
     - ○ Yes
     - ○ No

LAYING HENS - FEED & WATER

1.0 Does the operation have control or input into diet formulation?

- ○ No
- ○ Yes If yes, complete the following questions:
  - a. Number of rations or phases formulated:
    - ○ < 4
    - ○ 4 to 7
    - ○ > 7
  - b. How many supplemental amino acids included?
    - ○ 1
    - ○ 2
    - ○ 3 or more
    - ○ I don't know
  - c. How often are feed ingredients analyzed?
    - ○ Weekly
    - ○ Twice monthly
    - ○ Monthly or less frequently
    - ○ Never
    - ○ Don't know
  - d. Is there a sulfur odor (rotten eggs) in your water?
    - ○ No
    - ○ Yes

      Is sulfur from water supply considered in feed ration?
      - ○ Yes
      - ○ No

2.0 Is feed made or processed on site?

- ○ No
- ○ Yes - If checked, answer the following question:
  - a. Which best describes grain delivery to the feedmill?
    - ○ Choke flow (reduces free fall distance during hopper car unloading).
    - ○ Free flow
    - ○ Don't know

3.0 How is water supplied to the animals in the facility?

- ○ Nipple drinkers
- ○ Trough, cup, bowls, or belts

4.0 How often are all waterers checked then repaired for leaks?

- ○ Daily
- ○ At Least weekly
- ○ Weekly or less

5.0 How often are the waterers flushed?

- ○ End of flock or between flocks
- ○ More than once per flock
- ○ Less than once per flock

LAYING HENS - COLLECTION AND TRANSFER

1.0 Which best describes the manure handling system? Check all that apply

☐ Flush - if checked, complete the following questions:

a. Is there an "odor burst" when flushing occurs?
- ○ No - if checked, complete the following question:
1) How often does flushing occur? Assumes no drying between flushes
   - ○ Weekly
   - ○ 2 to 3 times per week
   - ○ Once Daily
   - ○ More than once daily
- ○ Yes - if checked, complete the following question:
1) How often does flushing occur? Assumes no drying between flushes
   - ○ Weekly
   - ○ 2 to 3 times per week
   - ○ Once Daily
   - ○ More than once daily

☐ Solid Removal - if checked, complete the following questions:

a, What type of housing system is used?
- ○ Belt
- ○ Deep Pit
- ○ Floor (Aviary)

b. How often is manure removed from the production facility?
- ○ Less than once per year
- ○ Yearly
- ○ More than once per year but less often than daily
- ○ Daily

2.0 What method is used to transfer the majority of manure from storage to the field?

- ○ Does not apply
- ○ Open spreader or truck - if checked, complete the following question:

a. If a truck or spreader is used to transport manure to fields, is it covered (whether the truck leaves the farm and goes on a public road or not)?
- ○ Yes
- ○ No

LAYING HENS - MANURE STORAGE

1.0 What percent of the farm's manure is stored as a liquid or slurry (does not stack) in the predominant housing type?

_____ % If 0% - Complete Sections 2.0 and 3.0; skip Section 4.0

If 1% or greater - Complete Sections 2.0, 3.0 and 4.0 as applicable to the operation

If 100%, Complete Section 3.0 only.

2.0 Do any of the process occur onsite? Check all that apply

- ☐ Storage / Stockpile - complete additional question below
- ☐ Composting - complete additional questions below
- ☐ Pelletizing - no additional questions
- ☐ Gasification - no additional questions
- ☐ Incineration / burn - complete additional questions below

Complete additional questions based on what processes were selected above.

☐ Storage / Stockpile - if checked, complete the following questions:

a. How often is seepage noticed?
   - ○ Rarely
   - ○ Commonly

b. Does water pond around the base of compost piles (from rainfall events or leachate) for greater than 24 hours?
   - ○ Ponding or standing water is not present more than 24 hr. after a rainfall event
   - ○ Ponding or standing water is present more than 24 hr. after a rainfall event

c How often are maggots noticed?
   - ○ Rarely
   - ○ Commonly

d. How often are flies noticed?
   - ○ Rarely
   - ○ Commonly

☐ Composting - if checked, complete the following questions:

a. How often is seepage noticed?
   - ○ Rarely
   - ○ Commonly

b. Does water pond around the base of compost piles (from rainfall events or leachate) for greater than 24 hours?
   - ○ Ponding or standing water is not present more than 24 hr. after a rainfall event
   - ○ Ponding or standing water is present more than 24 hr. after a rainfall event

c. What is average of the highest two consecutive weekly temperature readings of your compost pile?
   - ○ Doesn't know
   - ○ 120 to 140 F
   - ○ < 120 F
   - ○ > 140 F

d. How often are maggots noticed?
   - ○ Rarely
   - ○ Commonly

☐ Pelletizing

☐ Gasification

☐ Incineration / burn - if checked, complete the following questions:

a. Is there a scrubber in place for gas emission?
   - ○ Yes
   - ○ No

3.0 Is egg processing wastewater collected and transferred? These questions will appear last section of the NAQSAT tool.

- ○ No
- ○ Yes - if checked, complete the following questions:

a. Is the solids content less than 1%?
   - ○ Yes
   - ○ No

b. Do you aerate?
   - ○ Yes
   - ○ No

c. Pick the color that best describes your storage:
   - ○ Black or brown
   - ○ Red

4.0 <u>STAGED STORAGE INFORMATION</u>

For each stage of manure storage present, complete a stage section below. For example, if you have a 2-stage manure storage system, you will need to complete the 2 stage sections. Example: If the operation has underfloor shallow pits and an outside storage pit - this would considered 2-stage system.

For each stage complete the corresponding information as it relates to the nitrogen (N) content of the liquid/slurry. A section is available If you don't know the N and solid content, answer questions based on the consistency of the liquid. *Label each "Stage" with a description of storage unit. Example: Stage one is pull plugs shallow pit and Stage 2 is the storage pit.*

A. ○ *Less than 5 lb. nitrogen (N) / 1000 gallons and be less than 4% solids.*
B. ○ *Greater than 5 lb. N / 1000 gallons and greater than 4% total solids*
C. ○ *Don't know what the N and solid content of liquid / slurry*

STAGE 1 _____ **(i.e. deep pits, shallow pits, debris basin)**

Complete Section A, B or C - based on nitrogen content of liquids or slurry.

A. ○ **Less than 5 lbs./1000 gallons (or 600 mg/kg) and be less than 4% total solids - if checked, complete the following questions:**

a. Pick the color that best describes your storage during late summer:
   - ○ Red / Maroon to Purple
   - ○ Black or brown - if checked, complete the following questions:
     1) Describe the type of cover on the manure storage structure.
        - ○ No Cover
        - ○ Natural crust
        - ○ Permeable cover (such as straw, stalks, geotextile material)
        - ○ Impermeable cover, i.e. plastic - If checked, answer following:
          a) How is vented air treated?
             - ○ No treatment
             - ○ Combusted
             - ○ Flared
             - ○ Converted to pipeline quality gas
     2) What percent of the surface is exposed or uncovered?
        - ○ < 25%
        - ○ 26 to 40%
        - ○ 41 to 60%
        - ○ 61 to 85%
        - ○ > 85%

B. ○ **Greater than 5 lb. N / 1000 gal and greater than 4% total solids - if checked, complete the following questions:**

a. Describe the type of cover on the manure storage structure.
   - ○ No Cover
   - ○ Natural crust
   - ○ Permeable cover (such as straw, stalks, geotextile material)
   - ○ Impermeable cover (such as plastic) - if checked, answer the following:
     1) How is vented air treated?
        - ○ No treatment
        - ○ Combusted
        - ○ Flared
        - ○ Converted to pipeline quality gas

b. What percent of the surface is exposed or uncovered?
   - ○ < 25%
   - ○ 26 to 40%
   - ○ 41 to 60%
   - ○ 61 to 85%
   - ○ > 85%

C. ○ **Don't know the nitrogen content of the manure - if checked, complete the following questions:**

Which best describes the consistency of the liquid in the storage structure?
Water (thin) or Motor Oil (thick)

○ **Water - if checked, complete the following questions:**

a. Pick the color that best describes your storage during late summer:
   - ○ Red / Maroon to Purple
   - ○ Black or brown - if checked, complete the following questions:
     1) Describe the type of cover on the manure storage structure.
        - ○ No Cover
        - ○ Natural crust
        - ○ Permeable cover (such as straw, stalks, geotextile material)
        - ○ Impermeable cover, i.e. plastic -If checked answer the following:
          1) How is vented air treated?
             - ○ No treatment
             - ○ Combusted
             - ○ Flared
             - ○ Converted to pipeline quality gas
     2) What percent of the surface is exposed or uncovered?
        - ○ < 25%
        - ○ 26 to 40%
        - ○ 41 to 60%
        - ○ 61 to 85%
        - ○ > 85%

○ **Motor Oil - if checked, complete the following questions:**

a. Describe the type of cover on the manure storage structure.
   - ○ No Cover
   - ○ Natural crust
   - ○ Permeable cover (such as straw, stalks, geotextile material)
   - ○ Impermeable cover (such as plastic) - If checked answer the following:
     1) How is vented air treated?
        - ○ No treatment
        - ○ Combusted
        - ○ Flared
        - ○ Converted to pipeline quality gas

b. What percent of the surface is exposed or uncovered?
   - ○ < 25%
   - ○ 26 to 40%
   - ○ 41 to 60%
   - ○ 61 to 85%
   - ○ > 85%

STAGE 2 _____ **(i.e. deep pits, shallow pits, debris basin)**

Complete section A, B or C - based on nitrogen content of liquids or slurry.

A. ○ **Less than 5 lbs./1000 gallons (or 600 mg/kg) and be less than 4% total solids - if checked, complete the following questions:**

a. Pick the color that best describes your storage during late summer:
   - ○ Red / Maroon to Purple
   - ○ Black or brown - if checked, complete the following questions:
     1) Describe the cover on the manure storage structure.
        - ○ No Cover
        - ○ Natural crust
        - ○ Permeable cover (such as straw, stalks, geotextile material)
        - ○ Impermeable cover (such as plastic) - If checked answer the following:
          a) How is vented air treated?
             - ○ No treatment
             - ○ Combusted
             - ○ Flared
             - ○ Converted to pipeline quality gas
     2) What percent of the surface is exposed or uncovered?
        - ○ < 25%
        - ○ 26 to 40%
        - ○ 41 to 60%
        - ○ 61 to 85%
        - ○ > 85%

B. ○ **Greater than 5 lb. N / 1000 gal and greater than 4% total solids - if checked, complete the following questions:**

a. Describe the cover on the manure storage structure.
   - ○ No Cover
   - ○ Natural crust
   - ○ Permeable cover (such as straw, stalks, geotextile material)
   - ○ Impermeable cover (such as plastic) - If checked, answer the following:
     1) How is vented air treated?
        - ○ No treatment
        - ○ Combusted
        - ○ Flared
        - ○ Converted to pipeline quality gas

b. What percent of the surface is exposed or uncovered?
   - ○ < 25%
   - ○ 26 to 40%
   - ○ 41 to 60%
   - ○ 61 to 85%
   - ○ > 85%

C. ○ **Don't know the nitrogen content of the manure. - if checked, complete the following questions:**

Which best describes the consistency of the liquid in the storage structure?

○ **Water (thin) - if checked, complete the following questions:**

a. Pick the color that best describes your storage during late summer:
   - ○ Red / Maroon to Purple
   - ○ Black or brown - if checked, complete the following questions:
     1) Describe the cover on the manure storage structure.
        - ○ No Cover
        - ○ Natural crust
        - ○ Permeable cover (such as straw, stalks, geotextile material)
        - ○ Impermeable cover, i.e. plastic - if checked, answer the following:
          1) How is vented air treated?
             - ○ No treatment
             - ○ Combusted
             - ○ Flared
             - ○ Converted to pipeline quality gas
     2) What percent of the surface is exposed or uncovered?
        - ○ < 25%
        - ○ 26 to 40%
        - ○ 41 to 60%
        - ○ 61 to 85%
        - ○ > 85%

○ **Motor Oil (thick) - if checked, complete the following questions:**

a. Describe the cover on the manure storage structure.
   - ○ No Cover
   - ○ Natural crust
   - ○ Permeable cover (such as straw, stalks, geotextile material)
   - ○ Impermeable cover (such as plastic) - If checked, answer the following:
     1) How is vented air treated?
        - ○ No treatment
        - ○ Combusted
        - ○ Flared
        - ○ Converted to pipeline quality gas

b. What percent of the surface is exposed or uncovered?
   - ○ < 25%
   - ○ 26 to 40%
   - ○ 41 to 60%
   - ○ 61 to 85%
   - ○ > 85%

LAYING HENS - LAND APPLICATION

1.0 Where does manure go? Check all that apply

- ☐ Moved off-site (sold or given away) directly from the housing - no additional questions
- ☐ Composted or stockpiled, then sold or given away - no additional questions
- ☐ Land applied - If checked, please complete the questions in Section 2.0

2.0 What form of manure is land applied?

Check all that apply - Solid and/or Liquid; and complete associated questions.

☐ **Solid - if checked, complete the following questions:**

a. How long are solids piled, or staged, on the field prior to application?
- ○ Directly land applied; not piled or staged
- ○ < 3 days
- ○ >= 3 days - If checked, answer the following:
  1) Are solids covered?
     - ○ Yes
     - ○ No
  2) Is there ponded leachate?
     - ○ Yes
     - ○ No

b. Are the majority of the solids composted prior to land application?
- ○ Yes
- ○ No - if No, answer the following:
  1) When are solids incorporated?
     - ○ At time of application
     - ○ < 24 hours after application
     - ○ 24 hours to 3 days following application
     - ○ More than 3 days after application or not incorporated

☐ **Liquid - if checked, complete the following questions:**

a. Select the predominant application method and answer any questions
- ○ Surface applied and not incorporated
- ○ Injection - if checked, answer the following question:
  1) What portion of the field is manure left exposed on the surface?
     - ○ 100% of the manure is covered
     - ○ All manure is covered except on the headlands where manure is left exposed
     - ○ Manure is left exposed in the injection slot
     - ○ Manure is left exposed in the injection slot and the headlands
- ○ Incorporate within 24 hours
- ○ incorporate 24 hours or greater following application
- ○ Irrigation - if checked, answer the following question:
  1) Choose predominant irrigation method for liquids
     - ○ Flood or furrow irrigation

continued . . .

- ○ High pressure sprinkler or gun
- ○ Low pressure sprinkler (drop drag line
- ○ Low pressure sprinkler (low canopy system)

2) Does ponding occur following irrigation?
   - ○ Yes
   - ○ no

LAYING HENS - MORATALITIES

1.0 How long before carcasses are picked up or put into the disposal system?

- ○ Daily
- ○ Less Frequently

2.0 How is mortality handled? <u>Check all that apply and complete additional questions</u>

- ☐ Managed off-site (such as rendered or landfilled, or offsite composting)
- ☐ Buried onsite
- ☐ Composted onsite
- ☐ Contained (in-vessel) incinerated onsite

<u>Complete the following questions based on how mortality is handled (Section 2.0)</u>

☐ <u>Managed off-site</u> (such as rendered or landfilled, or offsite composting) - if checked, answer the following question:

a. Are temporarily stored carcasses treated (fermentation, etc.) or protected (freezer, etc.)?
   - ○ Always
   - ○ Never
   - ○ Most of the time

☐ <u>Buried on-site - if checked, answer the following questions:</u>

a. Is cover added to the burial pit or pile every time mortality is added?
   - ○ Yes
   - ○ No

b. Is a temporary cover adequately sealed?
   - ○ Always
   - ○ Never
   - ○ Most of the time

☐ <u>Composted on-site- if checked, answer the following questions:</u>

a. How often is seepage noticed?
   - ○ Rarely
   - ○ Commonly

b. Does water pond around the base of compost piles (from rainfall events or leachate) for greater than 24 hours?
   - ○ Ponding or standing water is not present more than 24 hr. after a rainfall event
   - ○ Ponding or standing water is present more than 24 hr. after a rainfall event

c. Are you following a specific compost recipe?
   - ○ No
   - ○ Yes
     1) What is the recipe?
        - ○ > 3:1 parts litter: bird
        - ○ < 3:1 parts litter: bird

d. What is average of the highest two consecutive weekly temperature readings of the compost pile?
   - ○ The operation doesn't know
   - ○ < 120 F
   - ○ 120 to 140 F
   - ○ > 140 F

e. How often are maggots or flies noticed?
   - ○ Rarely
   - ○ Commonly

f. How often are uncovered carcass parts visible or noticed?
   - ○ Rarely
   - ○ Commonly

g. How often is compost cover added?
   - ○ Immediately after each carcass addition
   - ○ At least once daily
   - ○ Less frequently than each carcass addition

☐ Contained (in-vessel) incinerated on-site - if checked, answer the following questions:

a. Does the operation have a functioning secondary burner?
   - ○ Yes
   - ○ No

b. Does the operation monitor and record temperature of the incinerator to verify that targeted operating conditions are met?
   - ○ Yes
   - ○ No

LAYING HENS - ON-FARM ROADS

1.0 Are unpaved roads used for any of the following activities? Check all that apply

- ☐ Routine service traffic (bird in/out trucks, feed delivery, rendering, etc.) - additional questions below
- ☐ Less frequent service traffic (manure handling) - additional question below
- ☐ General transportation (veterinarians, maintenance, nutritionists, managers, employees, farm tours) - additional questions below
- ☐ Does not apply: no additional questions

If you checked any one of the first three activities above or combination of, then complete the

2.0 Unpaved roads are surfaced with: (Check all that apply)

- ○ Caliche/limestone - Caliche is a sedimentary rock, a hardened natural cement of calcium carbonate that binds other materials—such as gravel, sand, clay, and silt. Found in the western USA in dry and arid regions.
- ○ Unimproved dirt road
- ○ Washed gravel
- ○ Gravel

3.0 Which is the predominant road-surface treatment used?

- ○ Petroleum products, resins, emulsions as per manufacturer recommendations
- ○ Salts or hygroscopic materials (e. g., magnesium chloride)
- ○ Fresh water
- ○ Holding pond wastewater
- ○ None

4.0 Are speed limits strictly enforced, or is speed controlled by passive means (e. g., speed

- ○ Speed limits are not present or are not enforced by management
- ○ Speed limits are enforced by management
- ○ Speed is controlled by speed bumps or other passive means

5.0 Does the operation restrict public access to private roads?

- ○ Yes
- ○ No

6.0 Are most roads lined with windbreaks or shelterbelts?

- ○ No
- ○ Some or all roads are lined with vegetation

LAYING HENS - PERCEPTION

1.0 Do you employ the following to reduce nuisance issues? Check all that apply

- ☐ Property line vegetative buffers
- ☐ Cleaning up spilled manure from roads
- ☐ None of the above

2.0 Do you practice "track-out control" (manure on tires) of manure or mud on vehicles leaving the property? (Does the operation have a means of controlling how much manure/mud leaves their property on the tires of all vehicles leaving their property?)

- ○ Yes
- ○ No

3.0 Are most roads lined with windbreaks or shelterbelts?

- ○ None
- ○ Some or all roads are lined with vegetation

4.0 Are you mindful of neighbors when timing manure removal from housing or storage?

- ○ Yes
- ○ No

5.0 Do you consider how the following impact nuisance conditions when planning manure applications? Check all that apply

- ☐ Timing relative to neighbor activities
- ☐ Time of day
- ☐ Season
- ☐ Weather forecasts (wind direction relative to neighbor location)
- ☐ None of the above

6.0 Are compost piles, mortalities, or manure storage visible from public roads?

- ○ Yes
- ○ No

6.0 Are efforts made to ensure a pleasing roadside appearance?

- ○ Yes
- ○ No