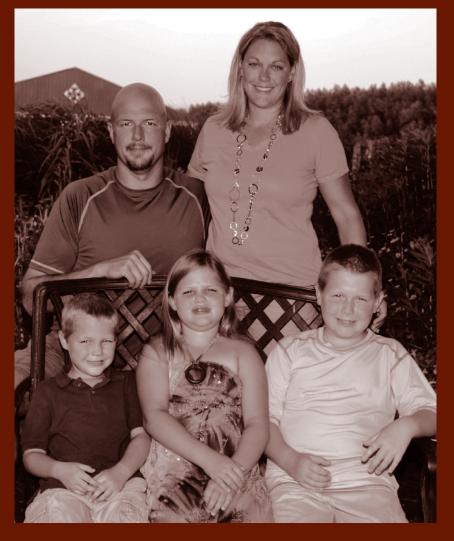


## SITE ASSESSMENT GUIDE 2.0







#### **GLOSSARY**

**Assessment:** (may also be referred to as a *Site Assessment* or *On-Farm Site Assessment*) The functions of an assessment are descriptive and educational. Site assessments provide a mechanism, based upon past assessment results, for review of past concerns and the success of corrective activities. This process enables an operation to benchmark its activities based on past performance and to identify areas of immediate and future concerns. A site assessment should include physical evaluation of facilities, a review of appropriate documentation and an assessment of the animals directly. The assessment should include educational and informational aspects to help an operation improve where required or noted during the site assessment. Routine use of an assessment instrument provides a useful documentation of unit progress and map for future areas of emphasis. An assessment can be completed by a first-party such as a farm employee or a second-party such as a PQA Plus Advisor.

**Assessment Form**: This form will be where results of each of the Assessment criteria (and individual measures where specified) and notes/comments will be recorded.

**Assessment Guide:** A guide that will help the Site Assessor while preparing for and conducting an on-farm site assessment. It includes sample calculations and copies of the assessment form and benchmarking appendix.

**Assessment Criteria**: This relates to the criteria that are measured and recorded on the Assessment Form. For example: recording Body Condition Scores, the ammonia levels and presence of a Veterinarian/Client/Patient Relationship (VCPR) are all considered assessment criteria.

**Caretaker:** A caretaker is any person involved with the daily care of the pigs. This would include feeding, treatment, daily observation, moving, routine husbandry procedures and euthanasia. Other terms which have been used to designate this role are stockman, stockperson, animal handler and barn worker.

**Corrective Action Report:** A corrective action report document is completed at the end of an assessment or third-party verification and has two sections. The first section identifies and describes any criteria that were found to be unacceptable during the assessment or verification. The second section is completed by the producer and their PQA Plus Advisor describing how the issue has been corrected or the plan and timeline that is in place to correct the issue.

**PQA Plus Advisor:** The PQA Plus Advisor is a qualified individual who has been trained by a PQA Plus Trainer and is certified by the National Pork Board to conduct PQA Plus producer training and site assessments. This person can provide advice on how to improve the food safety, animal well-being and animal handling while conducting an on-farm site assessment.

- **PQA Plus Site Status:** The designation of a site which has been assessed by a PQA Plus Advisor or a producer with a current PQA Plus Site Self- Assessment Endorsement and has been properly trained to conduct a site self-assessment by an Advisor. Site Status is granted for a 3-year period at which time it must go through the assessment process again.
- **PQA Plus Trainer:** The PQA Plus Trainer is a qualified individual who is certified by the National Pork Board to train PQA Plus Advisors. A Trainer may also serve in the Advisor role.
- **Site Assessor:** Another name for the individual conducting an on-farm site assessment. This person must either be a PQA Plus Advisor or a producer with a current PQA Plus Site Self-Assessment Endorsement who is associated with the site and has been properly trained to conduct a site self-assessment by an Advisor.
- **Third-Party Verification:** Third party verifications, or audits, are a widespread, recognized, and valued practice within the food production industry to bring transparency, credibility, assurance of process compliance, and validity to production units. This is a systematic and uniform evaluation method based on a prescribed set of criteria. The effectiveness of the educational and assessment components of the PQA Plus program will be measured by verifying a statistically valid sample of sites each year. Once a site completes the assessment and achieves PQA Plus site status, it will enter the pool of sites eligible to be selected for participation in the third-party verification process.
- **Third-Party Verifier:** The individual conducting the third-party verification. This person should be independent of the customer-supplier relationship and does not have a personal, professional or economic relationship with the site or its employees that would lead to a potential or perceived conflict of interest.
- **Verification Contact:** This is the individual associated with the site that should be contacted if the site is randomly selected to participate in the third-party verification process.

#### **OVERVIEW**

This resource is designed for the Site Assessor conducting a PQA Plus Site Assessment and accompanies the PQA Plus Certification Manual. It provides additional information and highlights critical discussion points. This guide contains language for both the PQA Plus Advisor and for properly trained and certified individuals who are conducting a site self-assessment.

#### **PQA Plus – Site Assessment Introduction**

- PQA Plus is an on-farm educational assessment tool for all pork producers to objectively assess the well-being of their pigs.
- Because it focuses on the animal and evaluating the care and well-being of the animal, it is independent of housing designs and size of operation.
- PQA Plus can help in the evaluation and tracking of an operation's performance over time. This can further help to identify weaknesses in management, nutrition or health programs before they become production problems.
- Retailers and restaurants may ask for assurances about animal well-being from their suppliers and the packers. This may cause packers to require verification of on-farm well-being practices from their suppliers, the producers.

#### What does a PQA Plus Site Assessment cover?

PQA Plus assesses 16 aspects of animal care and well-being through all phases of production including:

- Gilts, sows, boars and neonatal piglets
  - The lactating sow and her neonatal piglets are evaluated as a unit rather than individual piglets. For example, if two piglets in the litter have a deep wound, the sow/litter unit is recorded as 1 occurrence. Specific details should be recorded in the comment section.
- Nursery and finisher pigs

Three areas of animal care and well-being will be reviewed during the site assessment:

- Records
- Animals
- Facilities

#### Scheduling an Assessment Visit

If you are a PQA Plus Advisor and are also providing PQA Plus education for a producer, there may be scheduling and educational advantages to doing PQA Plus education at the same time you do the PQA Plus Site Assessment.

An on-farm assessment should take place under normal operating conditions. It is not recommended to conduct a site assessment during a disease outbreak. Site Assessors should pick a time when the barn/pasture/lot is quiet. Generally this is a period of a few hours post-feeding when sows and pigs are resting and there is limited other activity by caretaker personnel. If it is necessary to conduct a Site Assessment during a period of disease outbreak that seriously affects the majority of results so they are not an objective indication of the status of the animals, the assessment should be repeated when appropriate.

If multiple sites of the operation are to be assessed, review the sequence of the assessments in order to maintain biosecurity for the operation. It will be helpful to have the caretakers that know the information for each assessment criteria available during the assessment. For example, you may need the site manager available to review the farm's emergency action plan.

#### **Explanation of PQA Plus Site Assessment Process**

Italicized, blue comments are additional elements written for the Site Assessor's reference during the assessment.

#### Preparing for a PQA Plus site assessment

- 1. Contact your PQA Plus Advisor to schedule a PQA Plus site assessment.
- 2. Prior to meeting with your PQA Plus Advisor, you can review the PQA Plus educational program either by accessing it on-line at www.pork.org or by using printed books supplied by the National Pork Board.
- 3. PQA Plus Terms and Conditions are found at the bottom of the Assessment Form. These should be reviewed prior to meeting with your Advisor and accepted prior to the end of the assessment process.
- 4. To prepare for the site assessment, your PQA Plus Advisor should confirm the biosecurity protocols for your site. They also may ask for the current animal inventory by phase of production and housing type and a site map of the facilities.
- 5. Records may be kept on each individual site, at a central location or in some combination of the two. Locate the records the PQA Plus Advisor will need to review during the site assessment.

#### Conducting a PQA Plus site assessment

- 1. The PQA Plus Advisor will conduct the site assessment using the PQA Plus Assessment Guide. They will review records, evaluate the facilities and observe the animals on the farm.
- 2. A representative from the farm should accompany the PQA Plus Advisor during the site assessment. This allows the PQA Plus Advisor to share specific examples and for you to ask questions as the site assessment is completed.

#### Completing a PQA Plus site assessment

- 1. Review the results of the site assessment with your PQA Plus Advisor.
- 2. Work with your PQA Plus Advisor to develop and implement a corrective action plan for those assessment crieteria that need improvement. A corrective action plan documents what actions have been or will be taken to correct the issue(s) identified during the assessment.
- 3. With your PQA Plus Advisor, register your operation with the National Pork Board as a PQA Plus Assessed Site resulting in the site achieving PQA Plus Site Status.
  - Completing the assessment information form on the password-protected PQA Plus Advisor Web site (located on the National Pork Board's Web site) will register the production site as a PQA Plus Assessed Site. If you are an individual conducting a site self-assessment, your PQA Plus Advisor will register your site during your post-assessment consultation.
- 4. Your PQA Plus Advisor will provide you with a PQA Plus Site Status Certificate. After registration of the production site, a PQA Plus Advisor will be able to download and print a PQA Plus Site Status Certificate suitable for framing and display.
- 5. Keep a record of the assessment to track progress over time. Specific information to keep includes:
  - Advisor's name and contact information.
  - The Site Assessment Form as completed by the Advisor.
  - A record of how you addressed any noted concerns of assessment criteria (if any) that needed improvement.
- 6. To get maximum benefit from your PQA Plus Site Assessment, talk with your PQA Plus Advisor about an appropriate time interval to repeat your PQA Plus Site Assessment and how to track the results. To maintain your PQA Plus Site Status, repeat the process every three years. Although a site needs to be assessed a minimum of once every three years to maintain PQA

#### **TERMS AND CONDITIONS** FOR ASSESSMENT DATA **SUBMISSION:**

The Assessment Form also includes the terms and conditions under which site assessment data is collected and reported. These terms and conditions seek to protect the Producer's data to the fullest extent possible as confidential business information of a proprietary nature. Data provided to the National Pork Board will be aggregate data and will not be provided on an individual producer basis. The Assessment Form is signed by the Advisor and the Producer, or the Producer's authorized designee signifying agreement to the terms and conditions.

#### ASSESSMENT RESOURCES

Plus Site Status, registration is possible at more frequent intervals. The assessments, their results and the registration might be used as a producer or employee incentive tool. In addition, there may be scheduling and educational advantages to do PQA Plus producer education at the same time as an Advisor conducts the PQA Plus site assessment.

#### Assessment Form, Benchmarking Appendix and Assessment Guide:

The Site Assessment Form and Benchmarking Appendix are available to record Assessment criteria and to help benchmark the current Site Assessment and record areas that may need improvement. The Assessment Guide is provided separately and is designed as a supplementary tool to help the Site Assessor complete the Site Assessment. Each section provides specific details for how that assessment point should be evaluated and marked on the Assessment Form. Items that are considered "action items" for the site assessor are noted in blue and are prefaced with a checkmark.

The Assessment Forms and Benchmarking Appendix are also available separate from the PQA Plus Producer Book, allowing a reduction in the number of PQA Plus Producer Books an Advisor needs to order and/or keep on hand.

Each of the Assessment criteria on the Assessment Form will be benchmarked with an Acceptable or Develop and implement an action plan answer.

- Some assessment criteria will have a **measure** allocated to them. The measures beneath an Assessment Point will have an impact on whether that point is marked as acceptable or not. For example, the aerial ammonia concentrations in the facility will be expressed as parts per million (ppm).
- Some assessment criteria will have a **calculation** allocated to them. The result of calculations beneath an Assessment Point will impact whether that point is marked as "acceptable" or "develop and implement an action plan". For example, the percentage of pigs with a body condition score (BCS) of 1.

Example Calculation for BCS	
1. Number of pigs with BCS of 1=	2
2 .Total number of animals observed =	46
$2 \div 46 \times 100 =$	4.3%

The Assessment Guide includes formulas, calculations and tools to help the Site Assessor complete the Assessment.

Once the measure or calculation for the Assessment Point has been determined and entered on the Assessment Form, refer back to the corresponding principle to see if the measure or calculated result falls under:

- Acceptable the value indicates that the measure or calculated result is within an acceptable range. If the value is acceptable, no action is needed at this time.
- **Develop and implement an action plan** the value indicates that the measure or calculated result is outside normal limits and should be addressed.

#### What is a site?

A site is defined by its standard Premises Identification Number (PIN) which is assigned when a producer registers the site through a state, tribal or federal animal health authority who obtains the PIN through the USDA APHIS PIN allocator. A standard premises identification number is made up of seven alphanumeric characters that uniquely identify a specific geographic location. Registration and contact information for each state can be found at: http://www.pork.org.

#### **ASSESSMENT** RESOURCES

The site assessment must include all animals and facilities located at the geographic location identified by the Premises Identification Number. Each site assessment entered into the database must be identified by its unique premises identification number. Only the most recent assessment for a site will be recorded in the database.

#### How do I determine how many animals or pens to assess and record per site?

Use the worksheet below to determine which pigs to observe on the site. This worksheet will help you understand how many animals to observe and how to take a representative sample from the entire site.

**Step 1.** Identify how many pigs are kept in each type of housing.

- Ask the producer for the current animal inventory by phase of production and housing type and a site map of the facilities. Be sure to ask how many rooms/barns are on the site that currently house pigs.
- The lactating sow and her litter are evaluated as a unit rather than individual pigs. Neonatal piglets are not included as part of the animal inventory but are included in the assessment by evaluating litters associated with randomly selected lactating sows.
- Only healthy animals should be included in the evaluation. Treatment pens should not be included in the evaluation (except when evaluating timely euthanasia).

Step 2. Identify the minimum number of pigs you need to observe for each phase based on Table 1.

- Use Table 1 to determine the minimum number of animals to observe per site. Using these minimum sample sizes allow for detection of at least a 1% occurrence at a 95% confidence level.
- If the number of animals on a site doesn't match a number given in Table 1, round up to the closest number on the table. For example, if the producer has 210 pigs round up to 250.
- For sites that have both breeding and non-breeding animals on the site, you will need to refer to Table 1 two times - once for each phase of production - to calculate your total minimum sample size.

**Step 3.** Calculate the percentage of pigs present in each phase (breeding and non-breeding) and housing type.

• For example, the percentage = # sows housed individually in gestation ÷ total number of pigs in breeding.

**Step 4.** Calculate the number of pigs to observe for each phase and housing type.

- For example, the total # of pigs to observe in breeding × the percentage of sows housed individually in gestation = the # of individually housed sows to observe.
- Always round the calculated number up.

**Step 5.** Determine which animals/pens you will be observing before you enter the barn.

- The numbers calculated in Step 4 are a minimum number for each phase of production. Pigs from all rooms/barns must be included in the sample. To accomplish this, you may need to be increase the number of pigs to observe for each phase and housing type.
- Selecting which pigs to observe should be determined prior to entering the barn to reduce the chance of bias in the observed sample. Remember, animals from all rooms/barns must be included in the sample.
- For group housed pigs, divide the number of pigs to observe by the average number of pigs/ pen to determine how many pens should be observed. Remember, animals from all rooms/ barns must be included in the sample.

Table 1. Number of individual pigs to be assessed per phase.

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Total number of pigs per phase	Minimum number of pigs to assess			
50	50			
100	95			
150	129			
250	174			
350	201			
450	218			
600	235			
700	243			
800	249			
1,000	258			
2,000	278			
3,000	284			
4,000	287			
5,000	289			
10,000+	294			

- If you choose to do a sample of pigs from a pen, have someone else randomly mark the number of pigs/pen you need to observe before you enter the barn.
- To select pigs in stalls or pens, divide the total number stalls/pens by the minimum number to evaluate = every Xth stall or pen. If the stall or pen to evaluate is a treatment pen or empty, move to the next stall or pen in line.
- If the sample dictates that only one or two pens are observed per barn/room across several barns/rooms on the site, randomize which pens are observed so that you are observing pigs in different locations throughout the barn. For example, you need to evaluate 1 pen in each of 7 barns. Vary the locations of the sample pens so that the first pen in each of the barns are not the only pens observed.
- Any animals identified with an issue outside of the pre-determined sample size should not be included in the evaluation. However, they should be noted and discussed with the producer.

Always remember to round up!

#### Sample Chart

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Step 1		Step 2	Step 3	Step 4	Step 5
Total Pigs on Site =		# to assess from Table 1	Percentage	# of pigs to assess	Pens to assess
Total Pigs in Breeding =					
# in Gestation housed:					
individually =					
in groups =					
# in Farrowing housed:					
individually =					
in groups =					
Total Pigs in Non-Breeding =					
# in Nursery (pigs <10 wks of age) housed in groups:					
# in Finishing (pigs >10 wks of age) housed in groups:					

# ASSESSMENT RESOURCES

## Example 1: Determining the number of animals to assess with large group and individually housed animals:

**Step 1.** Identify how many pigs are kept in each type of housing

• A producer has a breed-to-wean site with 120 gestating sows in one large group pen and 20 farrowing sows with their piglets housed individually in one room for a total of 140 sows on the site.

**Step 2.** Identify the minimum number of pigs you need to observe for each phase based on Table 1.

• Using Table 1, the verification should be done on a total of 129 sows. Since 140 is not listed in the table, remember that you must round up to the next highest number, 150.

**Step 3.** Calculate the percentage of pigs present in each phase (breeding and non-breeding) and housing type.

These 129 animals should be spread proportionately throughout the gestation and farrowing
phases. Review the worksheet below to see how to achieve good representation throughout all
phases on the site.

**Step 4.** Calculate the number of pigs to observe for each phase and housing type.

• According to the calculations, 111 sows should be observed in gestation and 19 sows should be observed in farrowing, totaling 130 sows observed on the site. Remember to round up in the calculations.

**Step 5.** Determine which animals/pens you will be observing before you enter the barn.

- To select which sows to observe in gestation, divide the number of pigs to observe (111) by the average number of pigs/pen (120) to determine how many pens should be observed. Remember to round up in the calculations. Since all sows in gestation are housed in one pen in one barn, observing every animal in the one pen is sufficient.
- To select which sows to observe in farrowing, divide the total number stalls (20) by the minimum number of pigs to evaluate (19) to determine how many stalls to observe. This means every stall should be observed to achieve the sample.

**Example 1 Chart** 

Step 1		Step 2	Step 3	Step 4	Step 5
Total Pigs on Site =	140	# to assess from Table 1	Percentage	# of pigs to assess	Pens to assess
Total Pigs in Breeding =	140	129			
# in Gestation housed:					
individually =					
in groups =	120		120÷140=0.86	129×0.86=111	111÷ 120=1 pen
# in Farrowing housed:					
individually =	20		20÷140=0.14	129× 0.14=19	20÷19=every stall
in groups =					
Total Pigs in Non-Breeding =					
# in Nursery (pigs <10 wks of age) housed in groups:					
# in Finishing (pigs >10 wks of age) housed in groups:					

## Example 2: Determine the number of pigs to assess on a site with group and individually housed animals:

**Step 1.** Identify how many pigs are kept in each type of housing.

- A producer has a farrow-to-finish site with 6425 pigs of which there are
  - 425 in the breeding herd:
    - 330 sows housed individually in gestation and 45 sows housed as one large gestation group in one room
    - 50 sows housed individually in one farrowing room
  - 6000 in the non-breeding herd:
    - 100 pens of nursery pigs with 20 pigs per pen in one barn
    - 200 pens of finisher pigs with 20 pigs per pen in two barns

**Step 2.** Identify the minimum number of pigs you need to observe *for each phase* based on Table 1.

- Each phase, Breeding and Non-Breeding, is looked at separately on Table 1. Therefore, based on Table 1, a total of 218 pigs in the breeding herd and 294 pigs in the nonbreeding herd should be observed.
- Remember, if the number of animals in a phase of production doesn't match a number given in Table 1, round up to the closest number on the table.

**Step 3.** Calculate the percentage of pigs present in each phase (breeding and non-breeding) and housing type.

• These 425 animals should be spread proportionately throughout the gestation and farrowing phases. Review the worksheet below to see how to achieve good representation throughout all phases on the site.

**Step 4.** Calculate the number of pigs to observe for each phase and housing type.

- According to the calculations, 171 individual and 24 group housed sows in gestation and 27 sows in farrowing, totaling 222 sows observed on the site. Also, 98 nursery pigs and 197 finisher pigs totaling 295 non-breeding animals observed on the site. *Remember to round up in the calculations.*
- Remember that *animals from all rooms/barns must be included* in the sample. You may want to observe more than the minimum number from Table 1 to achieve this.

**Step 5.** Determine which animals/pens you will be observing before you enter the barn.

- To select which sows to observe in gestation:
  - Divide the total number of stalls (330) by the minimum number of pigs to evaluate (171) to determine that every second stall should be observed to achieve the sample size.
  - Divide the number of pigs to observe (24) by the average number of pigs/pen (45) to determine how many pens should be observed. Remember to round up in the calculations. Since all sows in gestation are housed in one pen in one barn, observing every animal in the pen is sufficient.
- To select which sows to observe in farrowing, divide the total number of stalls (50) by the minimum number of pigs to evaluate (27) to determine that every second stall should be observed to achieve the sample size.
- To select which pigs to observe:
  - In the nursery, divide the number of pigs to observe (98) by the average number of pigs/pen (20) to determine that 5 pens should be observed. Divide the total number of pens (100) by the number of pens to observe (5) to determine that every 20th pen should be observed to achieve the sample size
  - In the finisher, divide the number of pigs to observe (197) by the average number of pigs/pen (20) to determine that 10 pens should be observed. Divide the total number of pens (200) by the number of pens to observe (10) to determine that every 20th pen should be observed to achieve the sample size. Remember that *animals from all rooms/barns must be included in the sample* and observing every 20th pen should provide 5 pens per barn.

Always remember to round up!

# ASSESSMENT RESOURCES

#### **Example 2 Chart**

Step 1		Step 2	Step 3	Step 4	Step 5
Total Pigs on Site =	6425	# to assess from Table 1	Percentage	# of pigs to assess	Pens to assess
Total Pigs in Breeding =	425	218			
# in Gestation housed:					
individually =	330		330÷425=0.78	218 x 0.78=171	$330 \div 171 = every 2^{nd} stall$
in groups =	45		45÷425=0.11	218 x 0.11=24	24÷45= 1 pen
# in Farrowing housed:					
individually =	50		50÷425=0.12	218 x 0.12=27	$50 \div 27 = every \ 2^{nd} \ stall$
in groups =					
Total Pigs in Non-Breeding =	6000	294			
# in Nursery (pigs <10 wks of age) housed in groups:	2000		2000÷6000=0.33	294 x 0.33=98	98÷20=5 pens 100÷5=every 20 <sup>th</sup> pen
# in Finishing (pigs >10 wks of age) housed in groups:	4000		4000÷6000= 0.67	294 x 0.67=197	197÷20=10 pens 200÷10=every 20 <sup>th</sup> pen



### Example 3: Determine the number of pigs to assess on a site with group housed animals:

**Step 1.** Identify how many pigs are kept in each type of housing.

- A producer has a wean-to-finish site with 5,000 pigs of which:
  - 2,000 are in the nursery in groups of 25 pigs per pen across 4 rooms
  - 3,000 are in finishing in groups of 1500 pigs per pen in two barns

**Step 2.** Identify the minimum number of pigs you need to observe *for each phase* based on Table 1.

• Using Table 1, the verification should be done on a total of 289 pigs.

**Step 3.** Calculate the percentage of pigs present in each phase (breeding and non-breeding) and housing type.

• These 228 pigs should be spread proportionately throughout the nursery and finishing phases. Review the worksheet below to see how to achieve good representation throughout all phases on the site.

**Step 4.** Calculate the number of pigs to observe for each phase and housing type.

• According to the calculations, 116 pigs in the nursery and 174 pigs in finishing totaling 290 non-breeding animals observed on the site. *Remember to round up in the calculations.* 

**Step 5.** Determine which animals/pens you will be observing before you enter the barn.

- To select which pigs to observe:
  - In the nursery, divide the number of pigs to observe (116) by the average number of pigs/pen (25) to determine that 5 pens should be observed. Divide the total number of pens (80) by the number of pens to observe (5) to determine that every 16<sup>th</sup> pen should be observed to achieve the sample size
  - In the finisher, divide the number of pigs to observe (174) by the average number of pigs/pen (1500) to determine that 1 pen should be observed. However, there are two barns so the sample must be divided between the two barns, or 87 pigs per barn. Rather than observing the entire pen of 1500 pigs, have someone else enter the barn and randomly mark 87 pigs. These marked pigs will make up the sample to observe.
- Remember that animals from all rooms/barns must be included in the sample.

#### **Example 3 Chart**

Step 1		Step 2	Step 3	Step 4	Step 5
Total Pigs on Site =	5000	# to assess from Table 1	Percentage	# of pigs to assess	Pens to assess
Total Pigs in Breeding =					
# in Gestation housed:					
individually =					
in groups =					
# in Farrowing housed:					
individually =					
in groups =					
Total Pigs in Non-Breeding =	5000	289			
# in Nursery (pigs <10 wks of age) housed in groups:	2000		2000÷5000=0.4	289 x 0.4=116	116÷25=5 pens 80÷5=every 16 <sup>th</sup> pen
# in Finishing (pigs >10 wks of age) housed in groups:	3000		3000÷5000= 0.6	289 x 0.6=174	174÷1500=1pen

## GPP #9: PROVIDE PROPER SWINE CARE TO IMPROVE SWINE WELL-BEING.

Each section provides specific details for how that criterion should be evaluated and marked on the Assessment Form. *Items that are considered "action items" for the Site Assessor are noted in blue italics.* 

#### Care and well-being principles

Every caretaker has an ethical responsibility to protect and promote the well-being of the pigs in their care by:

- Providing feed, water, and an environment that promotes the well-being of our animals.
- Providing proper care, handling, and transportation for pigs at each stage of life.
- Protecting pig health and providing appropriate treatment, including veterinary care when needed.
- Using approved practices to euthanize, in a timely manner, those sick or injured pigs that fail to respond to care and treatment.

Many factors within a pig's environment influence its overall well-being. Good Production Practice #9 will explain these factors and provide strategies on how to implement each one.

#### Recordkeeping

It may be common for production sites to store certain records, such as medication and treatment records and daily observation records, at an off-site facility. Records or copies of the records should be returned to the site for the assessment visit or arrangements made for them to be reviewed at an off-site location if biosecurity is a concern. Records can be viewed as physical or electronic documents.

#### 1. Veterinarian/Client/Patient Relationship (VCPR)

- A VCPR requires the caretaker and veterinarian to work together to ensure the health and well-being of the pigs on that operation. A VCPR is defined in the US Code of Federal Regulations (21 CFR Part 530) and is described in further detail in GPP #1 of the PQA Plus Certification Manual.
- Keeping the VCPR and other records in a central location, at least during the assessment, will help streamline the site assessment process.
- ✓ A VCPR can be verified by dated veterinary feed directives, dated medical prescription labels, a dated site visit report from the veterinarian, or a letter from your veterinarian confirming the relationship. Verification must be dated within the past 12 months.

#### ✓ Does the swine operation have a VCPR?

- o Yes-Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### 2. Medication and Treatment Records

- Medication and treatment records provide the health history of each individual pig as well
  as help to ensure food safety. By tracking the medication and treatment of animals within a
  herd, a producer will be able to identify trends and work towards improving herd health.
- For a complete explanation of medication and treatment records, refer to GPP #6, "Establish Effective Swine Identification, Medication Records, and Withdrawal Times." An example of a medication and treatment record is provided in the Appendix of the PQA Plus Certification Manual. At a minimum, the record must contain all of the following information (per FDA CPG 7125.37):
  - The animal(s) that were treated animals can be identified as a group when multiple animals are treated but should be identified in such a manner that anyone who visits the site can immediately tell which group was treated.
  - The date(s) of treatment, including last date of administration.
  - The drug(s) administered.
  - The route of administration.
  - The name or initials of the person who administered each drug.
  - The amount of each drug administered.
  - The withdrawal time prior to harvest.
- All food-animal producers must keep medication and treatment records for 12 months from the last day of treatment.
- Producers must also document when animals are marketed as antibiotic-free or when a barn turn is completed and no treatments were administered. This can be done by documenting when the animals entered the barn, when the animals were marketed, specifically stating that no treatments were given to the group, and the name or initials of the person affirming the statement. A sample of this documentation can be found in the Appendix of the PQA Plus Certification Manual.
- ✓ Review the swine operation's medication and treatment record system. The site must have records from the past 12 calendar months AND records must be PQA Plus or equivalent that contain all of the following information:
  - o The animal(s) that were treated animals can be identified as a group when multiple animals are treated but should be identified in such a manner that anyone who visits the site can immediately tell which group was treated.
  - o The date(s) of treatment, including last date of administration.
  - o The drug(s) administered.
  - o The route of administration.
  - o The name or initials of the person who administered each drug.
  - o The amount of each drug administered.
  - o The withdrawal time prior to harvest.

Sites that have not treated any animals in the past 12 months or that participate in an antibiotic-free marketing program still need to provide documentation that no animals were treated and when those animals were marketed.

- ✓ Does the swine operation have 12 months of PQA Plus or equivalent medication and treatment records?
  - o Yes Mark "Acceptable" on the Assessment Form.
  - o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### 3. Documented Caretaker Training Program

- One of the most important factors to good animal well-being is the husbandry skills of the animal's caretakers. The knowledge, training and attitude of the caretakers are the foundation upon which animal well-being is built.
- Research has shown that negative interactions between caretakers and their animals can limit the productivity and well-being of these animals, making training essential.
- Different production systems have different training program needs; therefore, the customized training program should be created and implemented to match the needs of the operation. A standard operating procedure that includes frequency for training the caretakers should be created and implemented. Documentation of initial training and on-going training should include the trainer name, trainee name, date of the training, and the topic covered in the training.
- Caretakers should receive training specific to their daily duties and receive retraining as
  necessary. PQA Plus certification can serve as a minimum training for all animal handlers
  but should be supplemented with training specific to their daily duties. Examples of such
  supplemental training include on-the-job training, on-line training modules, or attending
  seminars to provide training specific to their daily duties.
- If on-the-job training is the method used for training caretakers, this training must be documented with a paragraph describing the training including the trainer name, trainee name, and date of training.
- There are at least three areas common to all production system training programs that address swine well-being. They are:
  - Euthanasia On-Farm Euthanasia of Swine Recommendations for the Producer (2009) brochure outlines the methods and practical considerations for euthanasia of pigs and can serve as a training resource. Employees should understand and use the euthanasia plan developed for your operation. Refer to section 8 of GPP #9 for further information on euthanasia plans.
  - Handling Additional training information on how to handle pigs, other than the
    information contained in GPP #9, is available in the *Transport Quality Assurance*\*
    (TQA<sup>SM</sup>) Program and the *Swine Care Handbook*.
  - **Husbandry** Chapter 1 of the *Swine Care Handbook*, Management Practices and Animal Husbandry, contains information about husbandry skills. Additional information on specific husbandry skills may be available from university extension services or area community colleges.
- The Pork Checkoff offers the Pork Production Resources training materials on CD- and DVD-Rom including a Production Series that addresses euthanasia, handling, and husbandry of swine. The Pork Checkoff's Employee Care Toolkit is a good resource to help producers establish training protocols and includes sample standard operating procedures.
- ✓ Review the swine operation's training records. Documentation should include trainee name, trainer name, date of the training, and the topic covered in the training. The producer may list themselves as the trainer if distance learning courses (CDs, DVDs or Internet) are used for self-education and training on the training record. If on-the-job training is the method used for training caretakers, there must be a paragraph describing the training including the trainer name, trainee name, and date of the training. Site Assessors can verify by asking employees about the training they have received.

#### ✓ Does the swine operation have documentation of caretaker training?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### 4. Written Emergency Action Plan

- In case of an emergency, quick communication is important. The facility should have a written emergency action plan for a variety of emergencies that might be encountered. This plan may be as simple as the names and telephone numbers of the owner, the veterinarian, electrical power company, fire and police departments, and the address of the facility. Refer to GPP #8 for details on developing an emergency action plan.
- All caretakers should be familiar with emergency procedures for the operation and the
  emergency action plan should be readily available to all employees. It may also be helpful
  to place emergency contact information outside the building for employees or neighbors to
  use if they notice something is wrong.
- A design layout of the operation will be helpful to emergency response personnel. Details such as building design, hazard locations and animal inventory per barn will aid them in their response to an emergency situation.
- Every county in the U.S. has an emergency coordinator that is responsible for responding to all emergencies at the county level. Sharing your emergency plan with the county coordinator and including them in your plan may be helpful when responding to emergencies in the future.
- ✓ Review the swine operation's written emergency action plan. The plan must include as a minimum telephone numbers for owner, veterinarian, electrical power company, fire and police, and address of the facility. The action plan must be readily available to all employees.

#### ✓ Does the site have a written emergency action plan?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### 5. Written Euthanasia Plan

- Every operation will at some time have sick or injured pigs that do not respond to care and treatment. It is important to have a written action plan in place in order to be prepared for an event requiring euthanasia.
- The American Association of Swine Veternarian's On-Farm Euthanasia of Swine brochure provides information to help the producer choose the appropriate method by considering the following:
  - Human safety: The method must not put caretakers or others at unnecessary risk.
  - **Pig well-being:** The method should minimize pain or distress on the animal.
  - Practicality/technical skill requirements: The method should be easily learned and repeatable with the same expected outcome.
  - Caretaker compliance: Caretakers must be comfortable with, and willing to perform, the chosen method when needed. Lack of compliance compromises the well-being of
  - Aesthetics: The method should not be objectionable to the person administering the procedure.
  - Limitations: Some methods are only suitable for certain sizes of pigs or certain locations.
- The euthanasia plan in the back of the On-Farm Euthanasia of Swine brochure should be completed for each stage of production in the operation and should be readily accessible to all employees in the facility. The written plan should comply with the current American Association of Swine Veterinarians (AASV) guidelines for euthanasia:

Methods of Euthanasia Appropriate for Pigs of Different Sizes (weights)						
	Suckling pig (up to 12 lbs)	Nursery pig (up to 70 lbs)	Grower - Finisher pig (up to market weight)	Mature pig, sow or boar		
Carbon dioxide (CO <sub>2</sub> )	Yes	Yes	Yes, but not practical <sup>1</sup>	Yes, but not practical <sup>1</sup>		
Gunshot	No	Yes	Yes	Yes		
Penetrating captive bolt	No	Yes	Yes	Yes		
Non-penetrating captive bolt	Yes	Yes, with secondary step	No	No		
Electrocution, head-to-heart	Only for pigs over 10 lbs	Yes	Yes	Yes		
Electrocution, head-only	Only for pigs over 10 lbs	Yes, with secondary step	Yes, with secondary step	Yes, with secondary step		
Veterinarian administered anesthetic overdose	Yes	Yes	Yes	Yes		
Blunt trauma	Yes	No	No	No		

<sup>&</sup>lt;sup>1</sup>This method is an acceptable form of euthanasia for this size of pig but may not be practical for individual pig euthanasia on-farm due to lack of equipment suitable for this size.

- Any equipment used for euthanasia of pigs must be kept in proper repair and must be functional. A maintenance record can help to demonstrate that the condition of the equipment is being addressed.
- Euthanasia equipment should be centrally located for use throughout the site. Caretakers trained in euthanasia methods must have access to this equipment.

- ✓ Review the euthanasia action plan for each stage of production in the operation and ensure that the action plan is readily accessible by all employees in the facility. The written euthanasia plan should conform to AASV guidelines. Verify that equipment exists through observation or interview. Verify that employees responsible for euthanasia have documented training and are aware of the plan through interviews.
- ✓ Does the site have a written euthanasia plan and the necessary equipment to carry out the plan?
  - o Yes Mark "Acceptable" on the Assessment Form.
  - o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### 6. Daily Observation Records

- Daily observation and prompt delivery of care are critical to addressing individual animals'
  health and to detecting facility or management issues that need to be addressed. In addition,
  daily pig observation helps to assess the effectiveness of health and nutrition programs, the
  suitability of facilities and the quality of stockmanship.
- When performing daily observations, caretakers should evaluate the animals, environment, and equipment.
  - Animal observations should include eating, drinking, and sleeping patterns and signs
    of sickness or injury. The best way to fully assess the pigs' environment and health is to
    walk the pens daily.
  - Caretakers should evaluate the environment to make sure temperatures and air quality are correct for the phase of production.
  - Fans, flooring, penning, feeders, waterers, and other equipment should all be evaluated to make sure they are working properly.
  - Mortalities and euthanasias are recorded daily
- A log or record book should be kept that shows that someone has observed the animals every day. Recording daily observations can be as simple as posting a calendar, paper, or poster inside the door of the facility or room where the caretaker can initial and date the document daily. This can also be an opportunity to record such information as daily water intake or high/low temperatures within the barn.
- Minimum information to be recorded would include the person's name or initials, the
  date, and the location or building. A sample observation record form can be found in the
  appendix of the PQA Plus Certification Manual.
- ✓ Review the daily observation records that show that someone has observed the animals every day. The record should include the date, caretaker name or initials, and building or outdoor pen identification. Records should be kept for 12 months. Examples of daily observation records include: log, calendar, water usage record, high/low temperature recordings, sow cards, etc. All phases of production on the site must have proper daily observation records for this criterion to be marked as acceptable.

#### ✓ Does the site have daily observation records?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### 7. Site Assessment

- Conducting an on-farm Site Assessment on a regular basis is an excellent way to measure the animals' well-being on the farm and benchmark how animal care practices are implemented. Assessing animal well-being on a regular basis will help detect changes in the environment that could negatively affect your pigs.
- A PQA Plus Site Assessment must be conducted by your PQA Plus Advisor at least once
  every three years. A PQA Plus Advisor is an individual who has been trained to perform
  assessments objectively and knows how to address problem areas found during the
  assessment. Having a second set of eyes observe your farm can be useful in detecting these
  changes. Additionally, your PQA Plus Advisor is a useful resource for learning about new
  equipment, production practices, and research that can affect the well-being of your animals.
- Completing a site assessment more often than every three years will give you an even better tool to track changes in your production practices and operation that could affect the wellbeing and the productivity of your animals.
- Internal site assessments must be conducted annually between visits from your PQA Plus
  Advisor. It is suggested that the results of the internal assessment be reviewed with your PQA
  Plus Advisor to develop and implement an action plan for identified problem areas. These
  internal assessments and corrective actions that are completed and documented need to be kept
  for three years and will be reviewed by the PQA Plus Advisor during their next PQA Plus site
  assessment.
- A corrective action plan documents what actions have been or will be taken to correct
  the issue(s) identified during the assessment. This final step helps to demonstrate the
  industry's commitment to continuous improvement to our industry partners, customers,
  and the general public. PQA Plus Advisors can be a useful resource when developing and
  implementing an action plan. He or she can provide ideas or advice on how an issue may be
  corrected or connect the producer with other experts.
- ✓ Verify that the site has performed internal assessments at least annually since the last PQA Plus Assessment. Review the results of the internal assessments and discuss how any issues identified were corrected.
- ✓ Does the site perform internal PQA Plus self-assessment or equivalent at least annually between PQA Plus Assessment renewals?
  - o Yes Mark "Acceptable" on the Assessment Form.
  - o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### **Facilities**

#### 8. Emergency Backup Equipment

- Facilities must have intervention procedures or equipment to prevent death of animals
  in the event of mechanical ventilation failure. Intervention procedures can be manual or
  automated and will be dependent upon ventilation type. Examples include, but are not
  limited to, backup generators, automated curtain drops, and phone notification systems.
- Periodic testing of this emergency system will identify problem areas or needed maintenance
  updates to the system. Keeping a record of an established schedule for testing and
  maintenance demonstrates the emergency backup system is operational. The record should
  include the date of the test and the name or initials of the person who performed the test.
- In most cases, emergency backup systems are located outside of the facility. Therefore the backup system will need to be checked prior to entering the facility or after exiting the facility to protect biosecurity, especially if the site has a shower-in/shower-out protocol. In the absence of maintenance/test log records, a farm employee should be asked to demonstrate that the system works rather than the PQA Plus Advisor doing it themselves.
- ✓ Review the emergency backup system. A system should be in place in the case of mechanical ventilation failure. This system can be manual procedures that are in place or the facilities should be equipped to provide some automated intervention to prevent the death of the animals. The system also should be checked to make sure it is operational. This can be verified by maintenance/test log records or actually running the system. Naturally-ventilated indoor/outdoor barns do not need an emergency backup system and should be marked as acceptable.

#### ✓ Does the site have an operational emergency backup system?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

Figure 1. Thermoregulatory Laying Postures of Swine

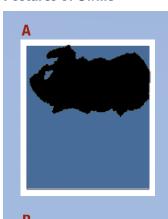






Figure 1 is taken from Shao et al., 1997, in volume 40 of the Transactions of the American Society of Agricultural Engineers.

#### 9. Air Temperature

- Provisions for heating and/or cooling should be present and in working order during extremes in weather. The facility should allow for moderating temperature to prevent the pig from displaying extreme thermoregulatory behaviors. Pigs perform thermoregulatory behaviors in effort to help regulate their body temperature. These behaviors are the best indicator of the pig's perception of the temperature in its environment.
- Regardless of whether pigs are kept indoors or outdoors, it may be necessary to provide supplemental heating or cooling for pigs when temperatures are outside the pigs' critical temperatures. Examples of supplemental heating include using heat lamps or brooders for zone heating, gas or electric heaters, or bedding. Examples of supplemental cooling can include misters, evaporative cooling cells, fans, shelters, shade trees, or wallows.
- As you walk through the facility watch the pigs' behavior. It is important to monitor these behaviors without disturbing the pigs.
  - If air temperature is too cold, pigs will huddle together, shiver and excessively pile onto each other to keep warm.
  - If the air temperature is too hot, pigs will try to avoid body contact with other pigs and often have increased respiration rates.
- The images at left portray the thermoregulatory laying postures of pigs in an environment with three different air temperatures. Take note of the pigs in relation to each other as well as the amount of free space within the pen. Image A depicts a pen of 10 pigs in an environment with cold air temperature. These pigs huddle very close together in a dense pile in one area of the pen. Image B depicts a pen of 10 pigs in an environment with ideal air temperature. These pigs have body contact with each other but do not pile excessively. Image C depicts a pen of 10 pigs in an environment with hot air temperature. These pigs spread out throughout the pen and avoid physical contact with other pigs in the pen. This figure is taken from Shao et al., 1997 in volume 40 of the Transactions of the American Society of Agricultural Engineers.
- Respiration rates are checked by counting breaths per minute and normal ranges for healthy pigs can be found in Table 9.1. Respiration rates above those listed may indicate illness or that a pig is overheated.
- Table 9.2 gives the critical limits and preferred temperature ranges for pigs in various stages of production. Upper and lower critical temperatures define the Thermal Comfort Zone or the range of temperatures that the pig does not have to use heat conserving or dissipating mechanisms (such as shivering, huddling or panting). Note that young pigs may be provided with zone heating to maintain temperature without heating the entire room.
- If there is a question about the air temperature in the barn or thermoregulatory behaviors, record the air temperature. When evaluating air temperature, take measurements at pig height (approximately 1 foot above the floor). Temperatures should be taken in the building center at one-third intervals down the length of the barn. Remember to avoid taking temperatures near inlets and direct heat sources.

**Table 9.2 Thermal Limits for Swine** 

<b>Production Phase</b>	Lower Critical Limit <sup>1</sup>	Upper Critical Limit <sup>2</sup>	Preferred Range
Lactating Sow and Litter	50°F for sow 77°F for piglets	90°F for sow none for piglets	60-80°F for sows 90-95°F for piglets
Prenursery, 10-30 lbs	60°F	95°F	80-90°F
Nursery, 30-75 lbs	40°F	95°F	65-80°F
Growing, 75-150 lbs	25°F	95°F	60-75°F
Finishing, 150 lbs-Market	5°F	95°F	50-75°F
Gestating Sows	5°F	90°F	60-75°F
Boars	5°F	90°F	60-75°F

Table adapted from NRC (1981): Chapter 2; DeShazer and Overhults (1982): Chapters 1 and 2; Hahn (1985): Chapters 1 and 2

- 1. Bedding, supplemental heat or other environmental modification is recommended when air temperatures approach the lower critical limit.
- 2. Except for brief periods above these air temperatures, some form of cooling should be provided when temperatures approach upper critical limits.
- ✓ Observe pigs for thermoregulatory behaviors that indicate they are too hot or too cold. If needed, measure the air temperature at pig level and compare to the preferred range for the phase of production
- ✓ Do the pigs show any thermoregulatory behaviors that indicate they are too hot or too cold?
  - o Yes Mark "Develop and Implement an Action Plan" on the Assessment Form.
  - o No Mark "Acceptable" on the Assessment Form.



Table 9.1 Normal Respiration Rates for Swine

Production Phase	Respiratory Rate (breaths/ minute)
Pre-nursery	50-60
Nursery	25-40
Growing	30-40
Finishing	25-35
Gestating sows	13-18
Lactating sows	15-22*
Boars	13-18

Table adapted from Diseases of Swine, 2006.

\*Respiration rates will increase beginning 24 hours prior to farrowing and should return to normal by 24 hours post-farrowing.

#### 10. Air Quality

- Air quality can be controlled with a ventilation system that is in working order and that can
  operate without interruption. This is true whether the ventilation system uses the natural
  flow of air or mechanical assistance.
- There are several contaminates, such as dust and various gasses, that contribute to the quality of the air within the pig's environment. Some air contaminates, at high concentrations, can irritate the respiratory tract of the pigs and may leave them susceptible to disease while others can be lethal when concentrations are too high.
- Ammonia is a common air contaminate that can directly impact the well-being of the pig
  through irritation of the respiratory tract. Watery and mattery eyes, bloodshot eyes and
  difficulty breathing are all consistent indicators that pigs may be exposed to poor air quality.
- ✓ Observe the pigs for physical signs consistent with exposure to poor air quality. These physical signs include watery and mattery eyes and difficulty breathing.
- ✓ Do the majority of the pigs display physical signs consistent with exposure to poor air quality?
  - o Yes Take a 2-hour time-weighted average (TWA) measurement.
  - o No Mark "Acceptable" on the Assessment Form.
  - Ammonia concentrations in the air can be measured using gas diffusion tubes for 2-hour TWA) measurements. These TWA measurements should not exceed 25 parts per million (ppm).
  - Samples should be taken at pig height (approximately 1 foot above the floor) and in the building center at one-third intervals down the length of the barn. Remember to avoid taking samples near inlets and direct heat sources.
- ✓ If an ammonia concentration measurement is needed, place gas diffusion tubes at pig height (approximately 1ft above the floor) in the center (center from side-to-side) at one-third intervals down the length of the barn. Use the formula below to calculate the barn/room average and record this on the Assessment Form. Avoid taking measurements near inlets and fans.
- ✓ Does the 2-hour TWA measurement exceed 25 ppm?
  - o Yes Mark "Develop and Implement an Action Plan" on the Assessment Form.
  - o No Mark "Acceptable" on the Assessment Form.

# Calculate time weighted Ammonia average (example) 1st tube reading 20 ÷ time length of reading 2 hours = 1st third 10 ppm 2nd tube reading 32 ÷ time length of reading 2 hours = 2nd third 16 ppm (1st third 10 ppm + 2nd third 16 ppm) ÷ 2 = 13 ppm

Calculate time weighted Ammonia average (actual)						
1st tube reading ÷ time length of reading hours = 1st third ppm						
2nd tube reading ÷ time length of reading hours = 2nd third ppm						
(1st third ppm + 2nd third ppm) ÷ 2 = ppm						

#### 11. Facilities

- The state of repair of the facilities can directly impact the well-being of the pigs. Facilities are defined as barn structural components penning, feeders, waterers, floors, chutes, and alleyways. Evaluate the penning, flooring, feeders and waterers of those pens where pigs are observed.
- · Penning, flooring and alleyway maintenance
  - The condition of the pens, floors, and alleyways can affect other indicators of your pigs' well-being. Penning, floors, and alleyways should be appropriate for the phase of production, be in a good state of repair and not causing injury to the animal.
  - Review pens for objects protruding from fences that could affect the number and type
    of skin lesions on pigs.
  - Look for broken slats that could contribute to lameness or other leg injuries.
  - For inside facilities, floors for all phases of production should be rough enough to minimize slips and falls but not so rough as to injure the pad of the hoof.

#### • Chute maintenance

- Chutes should be appropriate for the phase of production, be in a good state of repair, and not causing injury to the animal. Before loading or unloading pigs begins, inspect the chute for damage.
  - Sharp, protruding, or otherwise injurious items should be removed or repaired.
  - Broken or missing cleats should be repaired or replaced.
  - Moving parts such as cables, pulleys, and hinges should be inspected regularly and maintained as necessary.
  - Ramps and chutes should be kept free of potential distractions.
- The design and function of ramps, chutes, and load-out areas should be to minimize the incidence of slips and falls. Additional information on ramp design can be found in the Transport Quality Assurance program.

#### • Feeder maintenance

• Feeders should be in a good state of repair to allow unobstructed feed delivery to the pigs and not causing injury to the animal.

#### • Waterer maintenance

- Waterers must be in a good state of repair to allow water delivery to the pigs. Waterers should be designed and positioned so animals can drink freely and have flow rates that easily meet the pigs' water intake requirements and not causing injury to the pigs. Turn on waterers to ensure functionality.
- ✓ The facilities are defined as barn structural components penning, feeders, waterers, flooring, chutes and alleyways. Penning, floors, chutes and alleyways should be appropriate for the phase of production, be in a good state of repair and not causing injury to the pigs. Feeders and waterers should be in a good state of repair to allow for unobstructed feed or water delivery and not causing injury to the pigs. Evaluate the penning, flooring, feeders and waterers of those pens where pigs are observed. A detailed description must be provided to document the findings.
- ✓ Areas of the facilities that appear to be physical hazards and have the potential to cause injury to the animal in the future should be recorded in the notes/comments only.

#### ✓ Is the penning in a good state of repair?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### ✓ Is the flooring in a good state of repair?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### √ Are the chutes in a good state of repair?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### ✓ Are the alleyways in a good state of repair?

o Yes - Mark "Acceptable" on the Assessment Form.

o No - Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### √ Are the feeders in a good state of repair?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### ✓ Are the waterers in a good state of repair?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### **Animal Observations**

#### 12. Willful Acts of Abuse

- Willful acts of neglect or abuse are unacceptable and are not tolerable.
- Willful abuse and neglect are defined as acts outside of normally accepted production practices that intentionally cause pain and suffering including, but not limited to:
  - Intentionally applying prods to sensitive parts of the animal such as the eyes, ears, nose, genitals or rectum.
  - Malicious hitting/beating of an animal.
  - Purposeful failure to provide minimal food, water and care that results in significant harm or death to animals.
- There are currently no national laws or regulations that dictate animal production conditions on the farm. However, most local or state governments have laws that address animal cruelty. Producers should familiarize themselves regarding such laws in their locations.
- All caretakers should be familiar with what is considered willful acts of abuse and
  know that these are unacceptable and are not tolerable. Anyone with knowledge of
  possible animal abuse or neglect should report these actions immediately to the proper
  responsible persons.
- If a willful act of abuse is observed anywhere on the farm at any point during the visit:
  - Immediately intervene to stop the situation, if reasonably and safely possible
  - Discuss the situation with the appropriate authority (owner, manager, law enforcement, etc.)
- ✓ Willful abuse is defined as any action outside of normally accepted production practices that intentionally cause pain and suffering including, but not limited to:
  - Intentionally applying prods to sensitive parts of the animal such as the eyes, ears, nose, genitals or rectum.
  - Hitting/beating an animal.
  - Purposeful failure to provide minimal food, water, and care that results in significant harm or death to animals. Note any such acts observed on the Assessment Form.

#### ✓ Did you observe any Willful Acts of Abuse?

- o Yes Mark "Develop and Implement an Action Plan" on the Assessment Form.
- o No Mark "Acceptable" on the Assessment Form.

#### 13. Body Condition Score

- Body condition scores are useful to assess the adequacy of the nutrition program and the
  effectiveness of the heating and cooling strategies in the facility's management plan. Adult
  breeding animals should be fed according to their body condition. All non-breeding
  growing animals should be fed to at least meet their minimum nutrient requirements for
  growth and maintenance.
- Body condition scoring has been adopted from the industry standard which is based on a 1 (emaciated) to 5 (obese) system as shown by the scale in figure 13.1. Pigs with a body condition score of 1 are described as very thin and their spine, ribs, and hip bones are easily visible. Figure 13.2 shows the bone structure of the pig.
- Any animal with a body condition score less than 2 should receive immediate attention in effort to improve their body condition. Without improvement, the on-farm euthanasia plan should be implemented and the animal humanely euthanized in a timely manner.

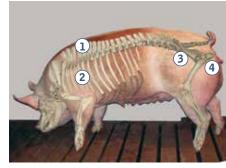


Figure 13.2. Bone structure. 1-spine, 2-ribs, 3-hip bone, 4-pin bone.

#### Figure 13.1. Body Condition Scoring

Image			70		
Score	1	2	3	4	5
Condition	Emaciated	Thin	Ideal	Fat	Obese
Detection of Ribs, Back Bone, "H" Bones and Pin Bones	Obvious	Easily detected with pressure	Barely felt with firm pressure	None	None

Taken from "Assessing Sow Body Condition" by R.D.Coffey, G.R. Parker, and K.M. Laurent (ASC-158; 1999)

✓ Calculate the percentage of animals with a body condition score of 1 observed in the breeding herd and non-breeding herd sample. Record this percentage on the Assessment Form.

BCS Calculation — Gilts, Sows and Boars	(example)	(actual)
1. Number of gilts, sows and boars with body condition score 1 =	3	
2.Total number of gilts, sows and boars observed =	63	
(#1 ÷ #2) x 100 =	4.8%	%

BCS Calculation — Nursery / Finisher Pigs	(example)	(actual)
1. Number of nursery/finisher pigs with body condition score 1 =	4	
2.Total number of nursery and finisher pigs observed =	600	
(#1 ÷ #2) x 100 =	0.7%	%

#### ✓ Did you observe 1% or fewer animals with a BCS of 1 in the breeding herd?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### ✓ Did you observe 1% or fewer animals with a BCS of 1 in the non-breeding herd?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### 14. Body Space

- For pig space to be considered adequate, the pig must be able to:
  - Easily lie down fully on its side (full lateral recumbency) without having to lie on another pig and easily be able to stand back up.
  - Lie down without the head having to rest on a raised feeder.
  - Additionally, a pig housed in a stall must be able to lie down fully on its side (full lateral recumbency) without the head having to rest on a raised feeder and the rear quarters coming in contact with the back of the stall at the same time. The pig must also be able to easily stand back up.
- In the case of stalls, it is important to make sure the stall size is appropriate for the size of the animal and does not cause injury to the animal. For the animal to perform all of the above mentioned criteria, the appropriate size of the stall will be dependent upon the animal's physical size. Back-to-back, back-to-udder, or udder-to-udder contact is appropriate as long as injury due to contact is not evident.
- In group housing, production practices such as group size, ventilation equipment and rate, and type of floors (partial versus total slats) have an effect on proper stocking densities.

  Tables 3, 4, and 5 in the Swine Care Handbook give recommended space allowances for pigs in total confinement, pigs in pens with outside concrete aprons, and pigs on pasture.
- When evaluating pigs housed in pens, if one or more pigs in the pen are not able to perform the criteria listed above, all pigs being evaluated in the pen should be recorded as not having adequate space.
- The lactating sow and her litter should be evaluated as a unit. Split-suckling practices may
  be used in rooms that are farrowing or have recently farrowed. A divider may be placed in
  the pen for a short period of time to allow smaller pigs to suckle without competition but
  is then removed. If all of the piglets are able to perform the criteria listed above with the
  divider removed, they are recorded as having adequate space.
- ✓ Complete the calculations below for the number of animals found to have adequate body space in the breeding and non-breeding herd and record on the Assessment Form.

Body Space Calculation – Gilts, Sows and Boars	(example)	(actual)
1. Number of gilts, sows or boars meeting space requirements =	60	
2.Total number of gilts, sows and boars observed =	63	
(#1 ÷ #2) x 100 =	95.2%	%

Body Space Calculation Nursery and Finisher Pigs	(example)	(actual)
1. Number of nursery/finisher pigs meeting space requirements =	590	
2.Total number of nursery and finisher pigs observed =	600	
(#1 ÷ #2) x 100 =	98.3%	%

- ✓ Did at least 90% of the animals observed in the breeding herd have adequate body space?
  - o Yes Mark "Acceptable" on the Assessment Form.
  - o No Mark "Develop and Implement an Action Plan" on the Assessment Form.
- ✓ Did at least 90% of the animals observed in the non-breeding herd have adequate body space?
  - o Yes Mark "Acceptable" on the Assessment Form.
  - o No Mark "Develop and Implement an Action Plan" on the Assessment Form.

#### 15. Timely Euthanasia

- Once a pig has been identified as ill or injured, it may need to be moved to a treatment area if its health and well-being are compromised by its fellow pen mates or if treatment of the animal is affected by remaining with the group.
- Caretakers must have a method for tracking animals that enter a treatment pen to know what treatments have been administered and how long the animal has been receiving treatment. This information will help caretakers evaluate the effectiveness of the treatment and, if necessary, make good decisions about timely euthanasia.
- Euthanasia is defined as humane death occurring with minimal pain or distress. Pigs that are not responding to care or are unlikely to recover must be euthanized humanely. The caretaker's past experiences with similar conditions should be used to make informed decisions about the likelihood of recovery.
- Events that call for timely euthanasia can happen any day of the week. Personnel trained in euthanasia should always be available to respond including nights, weekends, and holidays. Timely euthanasia, as well as using the appropriate methods and equipment, is critical to the well-being of the pig.
- Timely euthanasia will minimize animal pain or distress. Timely euthanasia is defined as:
  - Animals that have no prospect for recovery after two days of intensive care should be humanely euthanized. The caretaker's past experiences with similar conditions should be used to make informed decisions about the likelihood of recovery.
  - Severely injured or non-ambulatory pigs with the inability to recover are euthanized immediately.
    - An animal should be considered non-ambulatory if it refuses to get up or if it can stand with support but refuses to bare weight on two of its legs.
  - Any animal immobilized with a body condition score of 1 should be euthanized immediately.
  - Pigs with large hernias that touch the ground or cause difficulty walking should be euthanized.
- Pigs housed in treatment pens or stalls should be evaluated for timely euthanasia.
- ✓ Take note of any observed animals that have not been euthanized in a timely manner as defined above. Animals housed in treatment pens or stalls also should be evaluated for this criterion. Caretakers should be able to articulate their method of tracking treated animals to help you determine length and success of treatment. Pigs housed in treatment pens or stalls should be evaluated for timely euthanasia.

#### √ Are pigs euthanized in a timely manner?

- o Yes Mark "Acceptable" on the Assessment Form.
- o No Mark "Develop and Implement an Action Plan" on the Assessment Form.



#### 16. Lesion Scoring

- If skin abscesses or wounds are present, count how often they occur and note their location. These factors provide important clues about their sources and ways to prevent them.
- Abscesses
  - Abscesses are fluid-filled pockets in or under the skin that may cause the skin to be raised.
  - They can be observed after a deep bruise, a penetrating injury, or an injection. Note the location of the abscesses to determine if one area is more common than others.
- Wounds
  - Deep wounds are defined as gashes, breaks or openings that completely penetrate
    the skin.
  - Note the location of the deep wound to determine if one area is more common than others. Specifically look for and note deep wounds on these areas:
    - Main part of the body the shoulder, belly, back, flank, and limbs (both front and back legs)
    - Hooves
    - Head and ears include the cheek, ears, snout, mouth, and chin
    - Tail and genital areas
  - For piglets in the farrowing room, lesions associated with castration, ear notching, tattooing and tail docking are not included.
  - Shoulder sores on sows are not counted in this criterion.
  - Lesions associated with tail biting are recorded on the Benchmarking Appendix.
- Shoulder Sores
  - Shoulder sores are caused by pressure compressing the blood vessels supplying the skin and tissues covering the shoulder blade. This pressure interrupts the blood flow causing tissue damage and the formation of lesions.
  - Sows that have a body condition score less than 3, are older parity, or are lame are more susceptible to developing shoulder sores. Abrasive flooring in farrowing and gestation housing can also have an impact on shoulder lesion development.
  - Shoulder sores and lesions should be kept clean and treated according to veterinary advice. Placing rubber mats in the farrowing and/or gestation stall has been shown to reduce shoulder sores and reduce healing time.
- ✓ Complete the calculation below for the number of animals found to have abscesses, deep wounds and shoulder sores and record on the Assessment Form.

Abscesses	(example)	(actual)
1. Number of pigs with abscesses =	10	
2.Total number of animals observed =	63	
(#1 ÷ #2) x 100 =	15.9%	%

Deep Wounds	(example)	(actual)
1. Number of pigs with deep wounds =	10	
2.Total number of animals observed =	63	
(#1 ÷ #2) x 100 =	15.9%	%

Shoulder Sores	(example)	(actual)
1. Number of pigs with shoulder sores =	10	
2.Total number of animals observed =	63	
(#1 ÷ #2) x 100 =	15.9%	%

- √ What percentage of pigs observed have abscesses?
  - o Record the percentage on the Assessment Form
- √ What percentage of pigs observed have deep wounds?
  - o Record the percentage on the Assessment Form
- √ What percentage of pigs observed have shoulder sores?
  - o Record the percentage on the Assessment Form

#### Secondary Benchmarking

The benchmarking points below are secondary to add to the site assessment. While not required to achieve site status, these benchmarking points can provide additional helpful information about the well-being of the pigs in the herd.

#### 17. Facilities

- Feeder Space
  - Whatever type you use in your operation, the number of feeding spaces and their size
    should allow your pigs to consume their daily ration without unnecessary fighting and
    competition. Adequate space is especially important in the period immediately after
    weaning because newly weaned pigs tend to eat at the same time.
  - Additional information can be found in the Swine Care Handbook, Chapter 3, "Facilities and Equipment."
- Water Availability
  - Water must be available at least twice daily and in a quantity sufficient to fully satisfy the pigs. Enough waterers should be available within a pen to decrease competition for the resource.
  - Flow rate can be difficult to measure in wet/dry feeders, cup waterers, or troughs. For wet/dry feeders and cup waterers, it is necessary to ensure that the internal diameter of the supply line is large enough to allow sufficient water flow to accommodate the desired flow rate for all waterers if they were all to be used at the same time. It is also important to follow manufacturer recommendations for the water pressure necessary for each specific waterer design. Water troughs should be evaluated to make sure no obstacles or leaks are present in the troughs that would prevent any pig from having access to water.
  - Specific information about appropriate water requirements per day and flow rates are as follows:

Production Phase	Water Requirement (gallons/pig/day)	Flow Rate (sec/pint)
Nursery	0.7	29
Growing	2 to 3	21
Finishing	3 to 5	17
Gestating sows	3 to 6	15
Lactating sows	2.5 to 7	15
Boars	5	15

Adapted from Diseases of Swine 10th Edition, 2012

#### ✓ Complete the calculations for feeder space and water availability and record in the Benchmarking Appendix.

Calculation Feeder Space	(example)	(actual)
1. Number of pens with adequate feeder space =	20	
2.Total number of pens observed =	20	
(#1 ÷ #2) x 100 =	100%	%

Calculation Adequate Water	(example)	(actual)
1. Number of pens with adequate water availability =	19	
2.Total number of pens observed =	20	
(#1 ÷ #2) x 100 =	95%	%

#### 18. Body Condition Score

- While emaciated (body condition score 1) is a potential indicator of a pig's well-being, an obese pig also has increased risks to health. Obese pigs should have caloric intake decreased.
- Pay particular attention to sows 14 days before farrowing as body condition at this time can be an indicator of how the sow might be able to handle the stresses of nursing. If needed, additional feed should be supplied after she is weaned to rebuild body condition. Pay close attention 14 days after weaning to assure that body condition is adequate or being corrected.

#### ✓ Complete the calculations below and record in Benchmarking Appendix.

BCS Calculation – Gilts, Sows and Boars	(example)	(actual)
1. Number of gilts, sows and boars with body condition score 2 =	5	
2.Total number of gilts, sows and boars observed =	63	
(#1 ÷ #2) x 100 =	7.9%	%
1. Number of gilts, sows and boars with body condition score 3 =	47	
2.Total number of gilts, sows and boars observed =	63	
(#1 ÷ #2) x 100 =	74.6%	%
1. Number of gilts, sows and boars with body condition score 4 =	8	
2.Total number of gilts, sows and boars observed =	63	
(#1 ÷ #2) x 100 =	12.7%	%
1. Number of gilts, sows and boars with body condition score 5 =	3	
2.Total number of gilts, sows and boars observed =	63	
$(#1 \div #2) \times 100 =$	4.8%	%

#### 19. Lameness

- A lame pig is one that cannot bear full weight on one or more limbs.
- There are several factors that can contribute to lameness including bacterial infections, heredity, foot and leg structure, injury or trauma, or nutrition. Pigs that are diagnosed as lame should be treated, culled, or humanely euthanized depending on the cause and degree of lameness.
- To detect lameness, pigs should be observed while they are standing or walking on a flat surface.
- Count the number of lame pigs and calculate the percent of observed pigs that are lame.

#### ✓ Complete the calculation below and record in the Benchmarking Appendix.

Calculation	(example)	(actual)
1. Number of pigs lame =	25	
2.Total number of animals observed =	63	
(#1 ÷ #2) x 100 =	39.7%	%

#### 20. Tail Biting

- Tail biting is a behavior that negatively impacts the well-being of the other pigs. Tail biting can result in open wounds, bleeding, infection, and even death.
- Several factors can contribute to tail biting behavior including nutritional deficiencies, inadequate access to feed and water, high ammonia concentrations, excessive noise, uncomfortable temperatures, or overcrowding. When an outbreak of tail biting behavior occurs, it is important to identify and correct the root cause of the behavior though this can be difficult to accomplish because of the multi-factorial causes of tail biting.
- Injured animals should be treated, and the biter(s) should be identified if possible and housed separately.
- ✓ Note and record any evidence of tail biting in the herd in the Benchmarking Appendix.

Table 21.1. Suggested Group Sizes by Pig Type				
Pig Type/Size	Suggested Group Size			
Weaned piglets	20			
Nursery pigs	20			
Finished/ Market pigs	3-5			
Sows/gilts	1-5*			
Boars	1-5*			

<sup>\*</sup>Depending upon temperament and safety conditions, may require moving individually

#### 21. Animal Handling

- Using best pig-handling and movement practices will contribute to good well-being of the pig and a safer work environment for the handler.
- Proper handling is best achieved by first understanding some general behaviors exhibited by the pigs, as well as understanding the pig's physical characteristics such as how they can see, hear, smell, learn, and remember experiences. The main instinctive behaviors of a pig that a handler should understand, and use to his or her advantage when possible, include:
  - Flight zone and point of balance
  - Following/herding instincts
- Pigs typically slow, stop, or change direction when they encounter something new or unfamiliar in their environment such as changes in floor surface, footing/traction, temperature, lighting, people or other animals, drafts or wind, or doorways.
- Pigs that have had regular, positive interactions with people will typically be less fearful and
  easier to handle. Walking pens slowly on a daily basis will help pigs become used to positive
  interactions with people. This will train the pigs to quietly get up and calmly move away
  from the handler.
- Handlers should act calmly and avoid sudden movement, loud noises, and other actions that may frighten or excite pigs. This includes shouting to other handlers when working as a team to move pigs. Pigs should be moved at their normal walking pace.
- Basic handling techniques apply to all pigs, but specific requirements for certain sizes and types of pigs differ.
  - Breeding swine can be unpredictable so handlers should use extra caution when moving
    these animals. A sorting board should be used when attempting to turn or stop a large
    animal. The handler should not use his or her body alone. If the animal appears aggressive or
    agitated, it may be safer for the handler to move out of the way than to risk potential injury.
  - Piglets can either be moved by herding, by picking them up and moving them by hand, or with a cart. **Piglets should be picked up under the rib cage or by grabbing a rear leg above the hock,** then gently setting the piglets into a cart, alleyway, or pen. Piglets should not be tossed or thrown; this is considered mishandling. When being held for an extended period of time, piglets should be held under the rib cage next to the handler's body or by both rear legs using two hands.
  - Nursery and finisher pigs grow rapidly and quickly become too large to lift or hold.
     When sorting and moving these pigs, it is often the best practice to work in pairs and have one person work the pen gate while the other sorts the pigs with a sorting board, especially when sorting finished pigs for load-out.
- Pigs should be moved in groups large enough to be efficient for the production system, but small enough to be safe for the pigs and the handler(s). Groups of finished pigs and breeding stock should be small enough so that the handler can always maintain control of the lead pig. The suggested group sizes in Table 21.1 are based on best industry practice but facility design, temperament of the animals, or weather conditions may require adjustment to group size.
- A pig that cannot get up or walk on its own is called non-ambulatory. A pig may become non-ambulatory due to injury, illness, or fatigue. Determining the specific cause will help handlers identify the appropriate way to care for the pig: rest, medical treatment, or euthanasia.
- The position of the National Pork Board is that any pig that is unable to walk or that is ill and will not recover should be humanely euthanized on the farm and not transported to market channels. When the likelihood of recovery is low, even with treatment, the pig should be euthanized. When the likelihood of recovery is high, the pig should be moved

- to a pen where competition for feed and water is reduced and where the pig can be monitored and treated regularly.
- There are many different pieces of handling and sorting equipment on the market, or that can be easily made on the farm, to help you sort or move pigs in a safe, humane, and efficient manner. The most versatile tool is typically the sorting board or panel but rattles, shakers, flags and similar tools are also effective in moving pigs.
- Using an electric prod to move a pig is stressful and should not be the primary tool for moving pigs. It should only be used as a last resort.
  - Use of electric prods should be avoided or minimized. If a pig is moving in the desired direction, there is no need to use the prod.
  - Never prod a pig in sensitive areas such as eyes, ears, nose, genitals, or rectum.
  - If regular use of an electric prod is needed, evaluate your handling procedures and facilities
  - If it is necessary to use a prod, it should be applied to the back of the pig behind the shoulder and the duration of the shock should not exceed one second. The pig should be allowed time to respond before another shock is given.
- Willful acts of neglect or abuse are unacceptable. Willful neglect and abuse are defined as acts outside of normally accepted production practices that intentionally cause pain and suffering. Animal movement is a leading area where willful abuse can occur. The National Pork Board strongly advises anyone with knowledge of possible animal abuse or neglect to report these actions immediately to the proper responsible persons.
- ✓ Animal Handling can be recorded if pigs are being moved during the visit.
- ✓ Observe the following and record observations in the Benchmarking Appendix.
  - o Are pigs moved at a normal walking pace?
  - o Are handling tools/equipment available and being used correctly?
  - o Are pigs handled gently?
  - o Are any pigs that are unable to walk, are ill or significantly injured transported?
  - o Do more than 1% of pigs handled fall during movement? Falling is defined as when a pig loses an upright position suddenly in which part of the body other than the limbs touches the ground.

# SITE ASSESSMENT FORM

(page 1 of 2)

# SITE ASSESSMENT FORM

POAPLUS' Our Responsibility, Our Promise.				SITE ASSESSMENT FORM (page 1 of 2)
Premises Identification Number:				State site is located:
Farm Name/Description:				Date of Assessment:
Total # of breeding animals on this site:			_Total # bree	Total # breeding animals assessed:
Total # of non-breeding animals on this site:			_Total # non-	Total # non-breeding animals assessed:
Assessment performed by:   Certified Advisor		Endors	□ Endorsed Producer	☐ Endorsed Field Staff
Producer Name:				PQA Plus #:
Address:		Phone:		Email:
Verification Contact Name:				
Address:		Phone:		Email:
Phase of Production (check all that apply): $\Box$		ding 🗆	Breeding 🗆 Non-breeding	
# of barns/rooms where ammonia concentrations and air temperature were measured:	tions an	ıd air teı	mperature we	re measured:
Assessment Criteria	Measure	Acceptable	Develop / Implement an Action Plan	Comments
Records				
1. Veterinarian/Client/Patient Relationship (VCPR)				
2. Medication and Treatment Records				
3. Documented Caretaker Training Program				
4. Written Action Plan for Emergencies				
5. Written Euthanasia Action Plan				
6. Daily Observation Records				
7. Site Assessment				
Facilities				
8. Emergency Backup Equipment				
9. Air Temperature	°F			
10. Air Quality - Ammonia	mdd			

### SITE ASSESSMENT FORM

(page 2 of 2)

Assessment Criteria	Measure	Acceptable	Develop / Implement an Action Plan	Comments
11. Facilities Penning				
Flooring				
Alleyways				
Chutes				
Feeders				
Waterers				
Animal Observations				
12. Observation of Willful Acts of Abuse				
13. Body Condition Score # of pigs in breeding herd observed with BCS 1	%			
# of pigs in non-breeding herd observed with BCS 1	%			
14. Body Space # of pigs in breeding herd observed with  adequate space	%			
# of pigs in non-breeding herd observed with adequate space	%			
15. Timely Euthanasia				
16. Lesion Scoring # of pigs observed with deep wounds	%			
# of pigs observed with shoulder sores	%			
# of pigs observed with abscesses	%			
Producer Signature:			Aı	Advisor Signature:

Producer authorizes Advisor to access its property and facilities to observe and make assessments.

that public disclosure of its information other than in aggregate form may cause irreparable harm to Producer's competitive position. Producer and Advisor acknowledge that the responses provided by Producer contain material and data that Producer regularly keeps and protects as confidential business information. Producer considers the information it provides proprietary and believes

reports; and (ii) individually identifiable information will remain confidential to the fullest extent possible. Producer states and Advisor acknowledges that Producer is willing to disclose its confidential business information only upon receiving assurances that: (i) such information will be used only for the purposes of preparing and verifying aggregate data and

aggregate data (combined with information obtained from other producers) and reports and as necessary to authenticate and validate that data and reports. Advisor will use its best efforts to protect the confidentiality of individually reported information to the fullest extent permitted by law. representation has been made as to the confidentiality or availability of information under that statute. Accordingly, Advisor represents that the information it obtains from Producer will not be provided to the National Pork Board except as part of Notwithstanding these provisions, Producer has been advised and understands that information submitted under a governmental program including this one may be subject to disclosure under the Federal Freedom of Information Act and that no

particular date. The Advisor's signature is not a guarantee of possible future performance on the site. PQA Plus Advisor will use best efforts to conduct or oversee an on-farm PQA Plus assessment according to the PQA Plus program standards. However, the Advisor's signature on the assessment form verifies only that an assessment was conducted on a



# PQA PLUS BENCHMARKING APPENDIX

Englisting Fooder Space	
Facilities – Feeder Space	
1. Number of pens with adequate feeder space =	
2. Total number of pens observed =	2
(#1 ÷ #2) x 10	0 =  %
Facilities – Water Availability	
1. Number of pens with adequate water availability =	
2. Total number of pens observed =	
$(#1 \div #2) \times 10$	0 = %
Animal Evaluation - Body Condition Score	
1. Number of sows, gilts, and boars with BCS 2 =	
2. Total number of sows, gilts, and boars observed =	
$(#1 \div #2) \times 10$	0 = %
1. Number of sows, gilts, and boars with BCS 3 =	
2. Total number of sows, gilts, and boars observed =	
(#1 ÷ #2) x 10	0 = %
1. Number of sows, gilts, and boars with BCS 4 =	
2. Total number of sows, gilts, and boars observed =	
$(#1 \div #2) \times 10$	0 = %
1. Number of sows, gilts, and boars with BCS 5 =	
2. Total number of sows, gilts, and boars observed =	
(#1 ÷ #2) x 10	0 = %
Animal Evaluation - Lameness	
1. Number of pigs lame =	
2. Total number of pigs observed =	
(#1 ÷ #2) x 10	0 = %
Animal Evaluation – Tail Biting	
1. Number of pigs observed with tail biting lesions =	
Animal Evaluation – Animal Handling	
Are pigs moved at a normal walking pace?	
Are handling tools/equipment available and being used correctly?	
Are pigs handled gently?	
Are any pigs that are unable to walk, are ill or significantly injured transported?	
Do more than 1% of pigs handled fall during movement? Falling is defined as when a pig loses an upright position suddenly in which part of the body other than the limbs touches the ground.	e
1. Number of pigs falling during handling =	
2. Total number of pigs observed =	
$(#1 \div #2) \times 10$	0 = %

COMMENTS:



### **BREEDING INVENTORY**

(page 1 of 2)

		our nespoi	nsibility. Our	Promise.													
Prod	ucer I	Name	:							Site	Desci	riptio	n:				
Prem	ises I	D:								PQA	Plus	Advis	or:				
	al # o									Total	# of	anim	als as	sesse	ed:		
	al # P												ent Pe				
					1	_								_			
#	f Pigs	e L	Abscesses	Deep Wounds	Shoulder Sores	Tail Biting	BCS #1	BCS #2	\$ #3	\$ #4	BCS #5	ly ce	Waterers	Flooring	Fencing	Feeders	Water Flow Rate
Pen #	# of	Lame				-			BCS	BCS		Body Space	-				Location
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0 1
	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	Seconds
	3 4	3 4	3	3 4	3 4	3	4	3	3	3	3	3	3	3	3 4	3	
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	Ounces
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	Water Flow
	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	Rate
	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	Location
	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	Location
	2	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	Seconds
	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	Seconds
	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	Ounces
	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	
	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	
	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	Recommended
	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	Flow Rate
	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	Weaning:
	21 22	22	21	21	21	21	21	21	21	21	21	21	21	21	21	21	70sec/pint
	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	14oz/min
	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	Grower/
	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	Finisher:
	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	50sec/pint
	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	19oz/min
	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	Sow/Gilt/Boar:
	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	35sec/pint
	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	27oz/min
	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	2702/111111
	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	
	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	
	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	
	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	
	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	
	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	39 40	
	40	40	40		40	40	40	40	40	40	40	40	40	40	40	40	
	41	41	41	1 41	1 41	41	41	41	41	41	41	41	41	41	41	41	

continued on reverse

### **BREEDING INVENTORY**

(page 2 of 2)

individual	umber of pigs to be per phase.
Total number of pigs per phase	Minimum number of pigs to assess
50	50
100	95
150	129
250	174
350	201
450	218
600	235
700	243
800	249
1000	258
2000	278
3000	284
4000	287
5000	289
10000 +	294

Only animals indicated in Table 1 should be included in the assessment. If other animals are observed, they may be noted and discussed with the producer.

Notes
Temperature: Out / In Humidity: Out / In
Ammonia:
Flooring/Bedding Type:
Site Map/Comments

	Step 1	Step 2	Step 3	Step 4	Step 5
Total Pigs on Site =		# to assess from Table 1	Percentage	# of pigs to assess	Pigs to assess
Total Pigs in Breeding =					
# in Gestation housed:					
individually =					
in groups =					
# in Farrowing housed:					
individually =					
in groups =					
Total Pigs in Non-Breeding =					
# in Nursery (pigs <10 wks of age) housed in groups:					
# in Finishing (pigs >10 wks of age) housed in groups:					



# **NON-BREEDING INVENTORY**

(page 1 of 2)

		our nespi	viisiviiity. Oui	riuillise.													
Proc	lucer	Name	<b>:</b> :							Site [	Descri	ption	:				
																	_
	nises :																
To	tal # o	of ani	mals	on th	is site	e:				Total	# of a	anima	ls ass	essed	l:		
To	tal # I	Pens:								Total	# Tre	atmei	nt Pei	ns:			
		<b>C5.</b>				_					,,						
	Pigs		Abscesses	sp	der	Tail Biting	Ţ.	#2	20	4	ក្ល		ers	ng	<u>g</u> r	Z.	Water Flow
Pen #	of P	Lame	sce	Deep Wounds	Shoulder Sores	il Bi	BCS #1	BCS #	BCS #3	BCS #4	BCS #5	Body Space	Waterers	Flooring	Fencing	Feeders	Rate
P	#												-		Fe		Location
	1 2	1 2	1 2	1 2		2	2	2	2	1 2	2	1 2	2	1 2	2	1 2	Seconds
	3	3	3	3		3	3	3	3		3	3	3	3	3	3	
	4	4	4	4		4	4	4	4	4	4	4	4	4	4	4	Ounces
	5	5	5	5 6		5	5	5	5	5	5	5	5	5	5	5	
	7	7	7	7		7	7	7	7	7	7	7	7	7	7	7	
	8	8	8	8		8	8	8	8	8	8	8	8	8	8	8	Water Flow
	9	9	9	9		9	9	9	9	9	9	9	9	9	9	9	Rate
	10	10	10 11	10	10	10	10 11	10 11	10 11	10	10	10 11	10 11	10 11	10	10	Location
	11 2	12	11	11		11	11	11	11	11	11	11	11	11	11 12	11	
	13	13	13	13		13	13	13	13	13	13	13	13	13	13	13	Seconds
	14	14	14	14		14	14	14	14	14	14	14	14	14	14	14	0
	15	15	15	15	15	15	15 16	15	15	15	15	15	15	15	15	15	Ounces
	16 17	16 17	16 17	16 17	16 17	16 17	17	16 17	16 17	16 17	16	16 17	16 17	16 17	16 17	16	
	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	Recommended
	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	Flow Rate
	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	Weaning:
	21 22	21	22	21	21	22	22	21	21 22	21 22	21	22	21	21	22	21	70sec/pint
	23	23	23	23		23	23	23	23	23	23	23	23	23	23	23	14oz/min
	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	Grower/
	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	Finisher:
	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	26 27	50sec/pint
	28	28	28	28		28	28	28	28	28	28	28	28	28	28	28	19oz/min
	29	29	29	29		29	29	29	29	29	29	29	29	29	29	29	Sow/Gilt/Boar:
	30	30	30	30		30	30	30	30		30	30	30	30	30	30	35sec/pint
	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	27oz/min
	33	33	33	33		33	33	33	33	33	33	33	33	33	33	33	
	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	
	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	
	36 37	36 37	36 37	36 37	36 37	36	36 37	36 37	36 37	36 37	36	36	36	36 37	36 37	36	
	38	38	38	38		38	38	38	38	38	37	37	37	38	38	37	
	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	
	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	
	42	42	42	42		42	42	42	42	42	42	42	42	42	42	42	
	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	
	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	
	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	
	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	
	48	48	48	48		48	48	48	48	48	48	48	48	48	48	48	continued

on reverse

# **NON-BREEDING INVENTORY**

(page 2 of 2)

	er of individual essed per phase.
Total number of pigs per phase	Minimum number of pigs to assess
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### ASSESSMENT CORRECTIVE ACTION FORM

To be completed by Assessor:
Site ID:
Assessor name:
Date of visit:
Description of area(s) that need improvement:

### To be completed by Producer:

Please work with your PQA Plus\* Advisor to document how the noncompliant issue has been corrected or that there is a plan in place to correct the issue. Describe how the issue(s) has been corrected or the plan and timeline in place for correcting the issue.



National Pork Board 1776 N.W. 114th St. Des Moines, IA 50325 USA