



PQA PLUS®
Our Responsibility. Our Promise.

SITE ASSESSMENT GUIDE

Version 4.0



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A quality assurance program of America's Pork Producers.

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OVERVIEW

This resource is designed for the site assessor conducting a PQA Plus® site assessment and accompanies the PQA Plus handbook. 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

Regardless of the business, trust and transparency are essential to maintaining customer appeal. This has never been more challenging or necessary for the pork industry, as the general public and pork customers want to know how their food is produced.

The We CareSM initiative addresses these concerns and communicates that the industry is responsible and aware of what customers and pigs need. The We Care initiative encourages continuous improvement in the pork industry's production practices and promotes a strong record of responsible farming to those outside the industry.



At the heart of this commitment is a strong code of ethics, which asks each and every producer to make the following commitments:

- Produce safe food.
- Protect and promote animal well-being.
- Ensure practices to protect public health.
- Safeguard natural resources in all of our practices.
- Provide a work environment that is safe and consistent with our other ethical principles.
- Contribute to a better quality of life in our communities.

Pork producers and others throughout the pork supply chain have consistently demonstrated an industry-wide commitment to improvement. That commitment has helped generations of consumers develop confidence in the pork industry. PQA Plus delivers improved production practices based on the latest scientific research to producers and caretakers, providing them with the tools and information to feed their drive for continuous improvement.

The PQA Plus site assessment is an on-farm educational assessment tool for all pork producers to objectively assess the well-being of their pigs as well as pre-harvest pork safety. The site assessment evaluates pre-harvest pork safety and animal well-being independent of housing designs and size of operation. When the site assessment is performed regularly, it 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. Additionally, retailers and restaurants may ask for assurances about animal well-being and pre-harvest pork safety from

their suppliers and the packers. This may cause packers to require verification of on-farm well-being practices from their suppliers, the producers.

The *Site Assessment Guide* is provided separately from PQA Plus handbook and is designed as a supplementary tool to help the site assessor complete the site assessment. The site assessment form follows the instructions in the *Site Assessment Guide* and is used to record assessment criteria. It is used to help benchmark the current site assessment and record areas that may need improvement. Each section provides specific details for how that assessment criteria should be evaluated and scored on the site assessment form. Items that are considered “action items” for the site assessor are noted and are prefaced with a check mark.

What does a PQA Plus site assessment cover?

PQA Plus assesses 27 key aspects of swine care and pre-harvest pork safety for all phases of production through the full life cycle of the pig while they are on the farm, including pig handling and load-out for transportation.

The four areas reviewed during the site assessment are:

- Animals
- Facilities
- Caretakers
- Records

The site assessment is designed to be independent of housing designs, size of operation, or geographical location. Most site assessment criteria apply to all phases of production but some are specific to either breeding or non-breeding animals:

- Breeding animals include 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 an open wound, the sow/litter unit is recorded as 1 occurrence. Specific details should be recorded in the comment section.
- Non-breeding animals include nursery and finisher pigs.



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 PIN 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 pork.org.

The site assessment must include all animals and facilities located at the geographic location identified by the PIN. 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.

Scheduling a Site 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. When possible, schedule a site assessment when loading or unloading pigs for transport is occurring. 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 site's emergency action plan.

EXPLANATION OF THE SITE ASSESSMENT PROCESS

Preparing for a PQA Plus site assessment

1. Contact a PQA Plus advisor to schedule a PQA Plus site assessment.

2. Prior to meeting with a PQA Plus advisor, producers can review the PQA Plus educational program either by accessing it on-line at 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 site assessment form. These should be reviewed prior to meeting with an advisor and accepted prior to the end of the assessment process.
4. To prepare for the site assessment, a PQA Plus advisor should confirm the biosecurity protocols for the site.
5. The PQA Plus advisor will need the current animal inventory by phase of production and housing type and a site map of the facilities. While the animal inventory may change before you arrive on the farm, this information will assist the Advisor in determining which pigs are included in their assessment (see instructions on page 7).
6. 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. Records or copies of the records should be returned to the site for the verification 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.

Conducting a PQA Plus site assessment

1. The PQA Plus advisor will conduct the site assessment using the PQA Plus Assessment Guide and form. They will review records, interview caretakers, 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 caretakers to ask questions as the site assessment is completed. A caretaker with responsibility for the care of the animals in that facility needs to be on-site during the assessment. Discuss any translator needs and logistics for having an interpreter present during the assessment.

It is critical that the PQA Plus Advisor does not compromise the biosecurity of a swine farm. The site assessor does not want to be responsible for introducing a disease to the farm or spreading a disease within the farm. In order to efficiently conduct the on-site PQA Plus Site Assessment, the Advisor needs to understand the biosecurity protocols he or she will be subject to, as well as the physical layout of the operation.

3. If animals need to be moved for observation, PQA Plus advisors should request assistance from farm staff to make this happen. In the interest of sow and piglet well-being, sows that are actively farrowing or nursing piglets should not be made to stand.
4. Several questions in the site assessment, particularly those related to caretaker training, may require the site assessor to interview caretakers. Information is best gathered from the caretaker by using a conversational process and asking open-ended “who”, “what”, “when”, “where”, “how”, and “why” questions. Examples of open-ended interview questions are:
 - ✓ What tasks are you responsible for each day?
 - ✓ What training did you receive to perform this task?
 - ✓ How do you perform this task?
 - ✓ Where do you record treatment information?
 - ✓ When did this animal first receive treatment and how do you know?
 - ✓ Who do you tell if you have concerns about animal care or handling?

Site assessors should avoid asking leading questions that are asked with the expectation of a specific answer. Examples of leading questions are:

- ✓ Do you follow the procedure for this operation?
- ✓ Don't you have to notify your supervisor whenever you have concerns about animal care or handling?
- ✓ Did you read the standard operating procedure for this task?
- ✓ Do you record the treatments on the sow cards?

Site assessors should provide detailed comments for at least any question found to be unacceptable during the site assessment.

5. The questions in the site assessment form are in the order in which an assessor would physically conduct a site assessment at the facility. It begins with questions to be asked on the outside of a facility followed by questions in the office area and lastly questions in the barn regarding the animals and facilities. The questions asked during a site assessment fall under the following categories: Animal Welfare – Critical Criteria, Animal Benchmarking, Caretaker, Facility, Records, Transport/Loadout, and Pork Safety. The final site assessment report will display the questions in their respective category. For each site assessment criteria, the *Site Assessment Guide* lists the category in which the question will be displayed on the final site assessment report.
6. Each section of the *Site Assessment Guide* provides specific details for how that criterion should be evaluated and marked on the site assessment form. The site assessment form should be used to record the result of the assessment question and any comments for each of the assessment criteria.
 - ✓ There are five assessment questions that are considered critical to animal care and well-being. These are separated from the assessment questions and require detailed comments and a corrective action plan if marked as unacceptable.
 - ✓ Each remaining assessment question has an answer

that can be marked acceptable or unacceptable, which requires the development and implementation of a corrective action plan by the producer. The corrective action plan template is provided in the back of the assessment guide.

- ✓ Some assessment questions will have a measure assigned to them. The measures beneath an assessment question will have an impact on how that question is assessed. For example, the aerial ammonia concentrations in the facility will be expressed as parts per million (ppm).
- ✓ Some assessment questions will have a calculation assigned to them. The result of the calculations beneath an assessment question will impact how that question is assessed. For example, the percentage of pigs with a BCS of 1.
- ✓ Some assessment questions may not apply to a particular type of site. Special instructions are provided in the assessment standards for these particular questions and define when it is appropriate for site assessors to select the “Not Applicable or NA” option.
- ✓ The Transport/Load-Out section of the PQA Plus site assessment can only be evaluated if the site is loading animals for transport during the site visit. If this activity is not observed, this section will not be included in the site assessment report.

Completing a PQA Plus site assessment

1. Review the results of the site assessment with a PQA Plus advisor. This review should include a recap of the scope and purpose of the PQA Plus site assessment, discuss positive practices as well as findings for areas needing improvement, and allow for questions.
2. Work with a PQA Plus advisor to develop and implement a corrective action plan for those assessment criteria 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 a PQA Plus advisor, register an operation with the

EXAMPLE CALCULATION FOR BCS: 278 BREEDING, 258 NON-BREEDING ANIMALS OBSERVED		
Body Condition Score	56a. Total # of breeding animals observed with BCS 1:	1
	56b. % of breeding herd with BCS 1:	$\frac{1}{278}$ $\times 100 = 0.36\%$
	56c. Total number of non-breeding animals observed with BCS 1:	2
	56d. % of non-breeding herd with BCS 1:	$\frac{2}{258}$ $\times 100 = 0.78\%$
	56e. Total number animals observed with BCS 1 (56a + 56c):	3
	56f. % total with BCS 1 (56e ÷ total # of animals assessed):	$\frac{278+258=536}{(3/536) \times 100 = 0.56\%}$
	56. Do 1% or less of the animals observed have a body condition score of 1 (56f ≤ 1%)?	Yes

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 website (at pork.org) will register the production site as a PQA Plus-assessed site. For individuals conducting a site self-assessment, a PQA Plus advisor will register the site during the post-assessment consultation.

4. After registration of the production site, a PQA Plus advisor is responsible for providing a PQA Plus site status document suitable for framing and display. The advisor is responsible to provide the caretaker with a copy of the completed site assessment report and corrective action report, if so reported. All documents can be downloaded from the site upon successful entry of the assessment.
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 report as completed by the advisor.
 - A record of how any noted concerns of assessment criteria (if any) that needed improvement were addressed.
 - A copy of the Site Assessment Report.
6. To get maximum benefit from a PQA Plus site assessment, talk with a PQA Plus advisor about an appropriate time interval to repeat the PQA Plus site assessment and how to track the results. To maintain your PQA Plus site status, repeat the process at least once every three years or at more frequent intervals if desired.

ANIMAL SELECTION FOR SITE ASSESSMENT

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.

Terms and Conditions for Assessment Data Submission: The BOD 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 BOD is signed by the Advisor and the Producer, or the Producer's authorized designee signifying agreement to the terms and conditions.

STEP 1. Identify how many pigs are kept on the facility(s) and the types of housing used on the site.

- ✓ Ask the producer for the current animal inventory by phase of production and housing type as well as a site map of the facilities. Be sure to ask how many rooms/barns are on the site that currently house pigs.
- ✓ Pigs on the site should be categorized as either:
 - Breeding: gilts, sows, boars and neonatal piglets
 - Non-breeding: nursery, grower, and finisher sized pigs. Gilts in GDU/isolation units should be sampled as part of the non-breeding herd.
- ✓ The lactating sow and her litter are evaluated as a unit rather than at the individual piglet level. 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. For example, if two piglets in the litter have an open wound, the sow/litter unit is recorded as 1 occurrence. Specific details should be recorded in the comment section.

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

- ✓ All pigs need to be observed during the site assessment but the benchmarking criteria are only calculated from a statistical sample of the pigs.
- ✓ Only healthy pigs should be included in the sample size for benchmarking points. Treatment pens/stalls or cull pens must be included in the sample when evaluating humane euthanasia and treatment management (Assessment Questions 25 and 42-45). A treatment pen/stall may also be referred to as sick pens, hospital pens, etc. All terms refer to some sort of segregated space where animals receive special attention or treatment.
- ✓ The sample size must be large enough to allow for detection of at least a 1% occurrence at a 95% confidence level. Use Table 1 to determine the minimum number of pigs to observe per site.
- ✓ If the number of pigs on a site does not match a number given in Table 1, round up to the closest inventory 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. For each phase (breeding and non-breeding), calculate the percentage of pigs present for each age and housing type to determine a representative sample from the entire site.

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

STEP 4. For each phase (breeding and non-breeding), calculate the sample size of pigs to observe for each age and housing type to determine a representative sample from the entire site.

STEP 1		STEP 2	STEP 3	STEP 4	STEP 5
Total Pigs on Site		# to observe from Table 1	Percentage	# of pigs to observe	Pens/pigs to observe
Total Pigs in Breeding					
# in Gestation housed individually					
# in Gestation housed in groups					
# in Farrowing housed individually					
# in Farrowing housed in groups					
# Boars on the site					
Total Pigs in Non-Breeding					
# in Nursery (<10 wks) housed in groups					
# in Finishing (>10 wks) housed in groups					

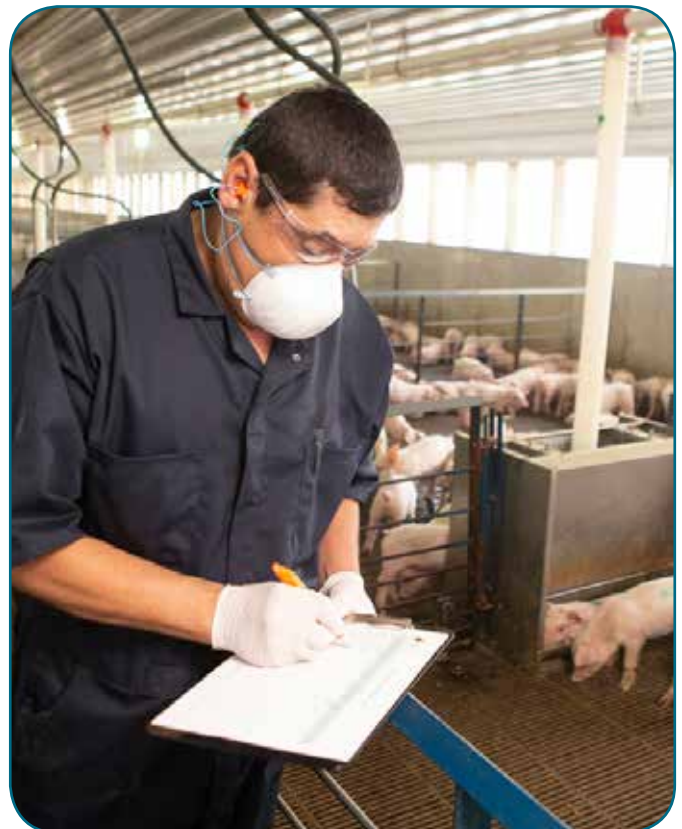
ALWAYS REMEMBER TO ROUND UP!

- ✓ For example, the total # of pigs to observe in breeding \times the percentage of sows housed individually in gestation = the # of individually housed sows to observe.
- ✓ Always round the calculated number up to fit housing setup (i.e. pen size).

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 observe. To accomplish this, you may need to 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, pigs from all rooms/barns must be included in the sample to observe.
- ✓ 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 always rounding up (6.1 pens requires 7 pens to be observed). Remember, pigs from all rooms/barns must be included in the sample.
- ✓ 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 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 pigs 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. The exceptions are any observations related to observations of willful acts of abuse and humane euthanasia.

TABLE 1: # OF INDIVIDUAL PIGS TO OBSERVE	
Total # of pigs per phase	Minimum # 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
10,000 +	294



Example 1: Determining the number of animals to observe 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. The farm also has 5 boars for a total of 145 pigs 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 pigs. Since 145 is not listed in the table, *remember that you must round up to the next highest number, 150.*

STEP 3. For each phase (breeding and non-breeding), calculate the percentage of pigs present for each age and housing type to determine a representative sample from the entire site.

- ✓ 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 age and housing type to determine a representative sample from the entire site.

- ✓ According to the calculations, 108 sows should be observed in gestation and 19 sows should be observed in farrowing, and at least 1 boar 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 (108) 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	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Total Pigs on Site	145	# to observe from Table 1	Percentage	# of pigs to observe	Pens/pigs to observe
Total Pigs in Breeding	145	129			
# in Gestation housed individually					
# in Gestation housed in groups	120		$120 \div 145 = 0.83$	$129 \times 0.83 = 108$	$108 \div 120 = 1 \text{ pen}$
# in Farrowing housed individually	20		$20 \div 145 = 0.14$	$129 \times 0.14 = 19$	$20 \div 19 = \text{every stall}$
# in Farrowing housed in groups					
# Boars on the site	5		$5 \div 145 = 0.04$	$129 \times 0.04 = 5.16$	
Total Pigs in Non-Breeding					
# in Nursery (<10 wks) housed in groups					
# in Finishing (>10 wks) housed in groups					



Example 2: Determine the number of pigs to observe 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 6435 pigs of which there are
 - 435 in the breeding herd:
 - » 325 sows housed individually in gestation and 50 sows housed as one gestation group in one room
 - » 50 sows housed individually in one farrowing room
 - » 10 boars housed individually in the gestation barn
 - 6000 in the non-breeding herd:
 - » 100 pens of nursery pigs, 20 pigs per pen in 1 barn
 - » 200 pens of finisher pigs, 20 pigs per pen in 2 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 non-breeding 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. For each phase (breeding and non-breeding), calculate the percentage of pigs present for each age and housing type to determine a representative sample from the entire site.

- ✓ These 512 animals (218 in breeding and 294 in non-breeding) should be spread proportionately throughout each age and housing type. Review the worksheet below to see how to achieve good representation throughout the site.

STEP 4. Calculate the number of pigs to observe for each age and housing type.

- ✓ According to the calculations, 164 individual and 27 group housed sows in gestation, 27 sows in farrowing, and 7 boars totaling 225 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 (325) by the minimum number of pigs to evaluate (164) to determine that every 2nd stall plus 2 additional stalls should be observed to achieve the sample size.
 - Divide the number of pigs to observe (27) by the average number of pigs/pen (50) 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 2nd stall plus 2 additional stalls 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.

EXAMPLE 2	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Total Pigs on Site	6435	# to observe from Table 1	Percentage	# of pigs to observe	Pens/pigs to observe
Total Pigs in Breeding	435	218			
# in Gestation housed individually	325		$325 \div 435 = 0.75$	$218 \times 0.75 = 164$	$325 \div 164 = \text{every } 2^{\text{nd}} \text{ stall} + 2$
# in Gestation housed in groups	50		$50 \div 435 = 0.12$	$218 \times 0.12 = 27$	$27 \div 50 = 1 \text{ pen}$
# in Farrowing housed individually	50		$50 \div 435 = 0.12$	$218 \times 0.12 = 27$	$50 \div 27 = \text{every } 2^{\text{nd}} \text{ stall} + 2$
# in Farrowing housed in groups					
# Boars on the site	10		$10 \div 435 = 0.03$	$218 \times 0.03 = 7$	$7 \div 10 = \text{every stall}$
Total Pigs in Non-Breeding	6000	294			
# in Nursery (<10 wks) housed in groups	2000		$2000 \div 6000 = 0.33$	$294 \times 0.33 = 98$	$98 \div 20 = 5 \text{ pens}$ $100 \div 5 = \text{every } 20^{\text{th}} \text{ pen}$
# in Finishing (>10 wks) housed in groups	4000		$4000 \div 6000 = 0.67$	$294 \times 0.67 = 197$	$197 \div 20 = 10 \text{ pens}$ $200 \div 10 = \text{every } 20^{\text{th}} \text{ pen}$

Example 3: Determine the number of pigs to observe 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 289 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 16th 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, 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	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Total Pigs on Site	5000	# to observe from Table 1	Percentage	# of pigs to observe	Pens/pigs to observe
Total Pigs in Breeding					
# in Gestation housed individually					
# in Gestation housed in groups					
# in Farrowing housed individually					
# in Farrowing housed in groups					
# Boars on the site					
Total Pigs in Non-Breeding	5000	289			
# in Nursery (<10 wks) housed in groups	2000		$2000 \div 5000 = 0.4$	$289 \times 0.4 = 116$	$116 \div 25 = 5 \text{ pens}$ $80 \div 5 = \text{every } 16^{\text{th}} \text{ pen}$
# in Finishing (>10 wks) housed in groups	3000		$3000 \div 5000 = 0.6$	$289 \times 0.6 = 174$	$174 \div 1500 = 1 \text{ pen}$

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.

Site 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 site assessment form and benchmarking appendix.

Assessment Criteria – This relates to the criteria that are measured and recorded on the site 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 and has two sections. The first section identifies and describes any criteria that were found to be unacceptable during the assessment. 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.

Handler - Anyone who is in physical contact with a pig and interacts with it in a manner that causes the pig to move. This includes transporters when they are physically moving pigs on foot instead of driving a vehicle.

Pork Producer – Refers to everyone involved in the pork operation on the farm, including the operation management and caretakers.

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 pork 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.

Transporter - An individual animal handler who controls a piece of equipment that transports pigs, including truck drivers, tractor drivers using a hog cart, etc.



SITE ASSESSMENT STANDARDS

Each section of the *Site Assessment Guide* provides specific details for how that criterion should be evaluated and marked on the site assessment form. The site assessment form should be used to record the result of the assessment question and any comments for each of the assessment criteria.

The questions in the site assessment form are in the order in which an assessor would physically conduct a site assessment at the facility. It begins with questions to be asked on the outside of a facility followed by questions in the office area and lastly questions in the barn and regarding the animals. The questions on the site assessment form fall under the following categories: Animal Welfare – Critical Criteria, Animal Benchmarking, Caretaker, Facility, Records, Transport/Loadout, and Pork Safety. The final site assessment report will display the questions in their respective category. For each Site Assessment Criteria, the *Site Assessment Guide* lists the category in which the question will be displayed on the final site assessment report.

BIOSECURITY

Biosecurity is a combination of management practices designed to prevent the introduction and transmission of diseases and disease-causing agents into a herd. Prevention of the entry of diseases into a herd is a key component of a herd health management plan. Procedures that are typically associated with a biosecurity plan include barn and transportation sanitation, rodent control, worker and visitor entry policies and other general farm security measures. If a disease is already present in one or more segments of the herd, biosecurity can help prevent that disease from spreading to other segments. However, all biosecurity measures should be focused on the prevention of the entry of diseases.



People can transfer pathogens on their body and clothing to the pigs. Vehicles can also carry unwanted pathogens that could infect pigs. In order to protect the health of the herd, limit visitors and vehicle traffic.

- Develop and visibly post biosecurity standard operating procedures for caretakers and visitors which can include steps to:
 - » Require all visitors park away from the facility.
 - » All non-farm worker visitors sign-in before entry to the farm.
 - » Require downtime away from pigs or pig facilities (including slaughter plants) prior to entry.
 - » Create barrier to disease entry–shower in/out and change clothing and footwear prior to entry to the farm.
 - » Do not bring in computers, cell phones or other equipment without proper disinfection procedures.
 - » Do not bring food, especially raw meat products, into animal areas.

- Limit visitors to only those who have a reason to be there and only allow visitors when the producer is present.
- Wildlife, birds, rodents, feral swine and other pests can readily transmit many diseases and compromise biosecurity. Limiting exposure to these animals will protect pig health.
- Keep the area around the barn free of weeds, debris or feed making the area less desirable for unwanted pests.
 - » This area is known as a sterile zone and is immediately adjacent to and surrounding the facility that serves as a buffer and detection zone for rodents and wildlife activity. The sterile zone should not contain items that could harbor rodents, wildlife or birds. The sterile zone can contain decorative vegetation that is well maintained, but then should have increased rodent control measures. These rodent control measures are outlined below.
 - Use fencing, bird netting or other materials to keep pests out of the barn or away from the building.
 - If mortality occurs, dispose of pigs in a timely manner. Focus on biosecurity steps to remove mortalities on-farm:
 - » Compost mortalities when allowed rather than having a rendering truck come to the farm.
 - » If a rendering service is employed, prohibit rendering trucks from areas near pigs or buildings.
 - » Promptly move carcasses to a pick-up area that is protected from scavengers.
 - Prevent damage to facilities and equipment by denying entrance to facilities and buildings, removing sources of food that can attract and maintain rodent populations, preventing or denying rodents cover and places to live and baiting or trapping to reduce rodent populations.

In addition to limiting exposure using the methods above, some additional steps can be implemented for rodent control:

- Work with a rodent control specialist to develop a plan tailored to the operation.
- Store feed in rodent-proof bins and feeders covered with tight-fitting lids.
- Clean up feed spills promptly so as not to attract rodents and wildlife.
- Plug holes and gaps in the walls and doors of buildings.
- Place bait stations strategically throughout the facility.
- Maintain a 3-foot sterile zone around the exterior of buildings.
- Prevent refuge within 100 feet of the pig buildings.

Cats and dogs are an unacceptable way of controlling rodents in and around livestock buildings. Cats can be the source of disease agents that infect pigs and other livestock. Some of these disease agents may present pork safety hazards in pork.

The following resources can provide additional information about biosecurity:

- University of Nebraska, Lincoln. Biosecurity of Pigs and Farm Security. Accessible at extension.unl.edu/publications.
- Biosecurity guidelines at pork.org.

For additional information on disinfectants, see cfsph.iastate.edu/BRM/disinfectants.htm

Notes for Site Assessors:

- ✓ Review the visitor log for the facility.
- ✓ Observe the facility for appropriate signage or other methods that control and restrict access for biosecurity compliance. Examples may include security cameras, locked gates or doors.
- ✓ Review the biosecurity SOP for the facility. A biosecurity plan must include (1) barn sanitation, (2) rodent control, (3) worker and visitor entry policies and (4) general farm security measures.
- ✓ Elements of an effective rodent control plan must include:
 - » Denying rodent entrance to facilities
 - » Removing sources of food that can attract and maintain rodent populations
 - » Preventing or denying rodents places to live
 - » Baiting/trapping to reduce rodent populations, including the location of bait stations and details of their inspections.
- ✓ The required details of the rodent control plan may be included in the biosecurity SOP or may be a separate document. There must be evidence that the rodent control SOP is being followed. For example, bait stations are in place and they contain bait.

Site Assessment Criteria:

These questions will be displayed in the Pork Safety section of the final assessment report.

Question 1: Does the site have a log for visitors to the facility?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 2: Does the site have signage or other methods around the facility to control and restrict access for biosecurity compliance?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 10: Does the site have a written biosecurity SOP that contains information covering barn sanitation, rodent control, worker and visitor entry policies and general farm security measures?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 84: Is there evidence that the site’s rodent control protocol is being followed?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” for the site assessment form.



MANUALS/SOPS

Standard operating procedures (SOPs) provide caretakers a guide for the day-to-day execution of production practices to help insure consistency and accuracy of the work being completed. The Pork Checkoff’s Employee Care Toolkit (part of the Barn Culture resource at pork.org) is a good resource to help producers establish training protocols and includes sample standard operating procedures that can be adapted to the specifics of an operation.

SOPs can be in paper or electronic form but need to be accessible at the farm. Some SOPs may be combined into one document but as long as the topics are covered, this is considered acceptable. Relative to animal welfare, the farm or production site should have written SOPs for the following:

- Euthanasia Plan
- Animal Handling
- Piglet Processing Procedures
 - » Specifically castration and tail docking on sow farms that minimally complies with American Association of Swine Veterinarian (AASV) guidelines. For more information refer to aasv.org.
- Feeding and Watering Protocols
- Daily Observation
- Caretaker Training
- Treatment Management

Relative to pork safety, the farm or production site should have written SOPs for the following:

- Needle Usage
- Rodent Control
- Biosecurity

Notes for Site Assessors:

- ✓ Manuals and SOPs can be in paper or electronic form, but need to be accessible at the farm.
- ✓ Verify written manuals/SOPs for all of the above are accessible at the farm.
- ✓ Some SOPs may be combined into one document, but as long as the topics are covered, these are considered acceptable.

Site Assessment Criteria:

These questions will be displayed in the **Records** section of the final assessment report.

Question 3: Does the site have a written SOP for animal handling procedures?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 5: Does the site have a written SOP for feeding and watering protocols?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 6: Does the site have a written SOP for conducting daily observations?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 7: Does the site have a written SOP for caretaker training?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 8: Does the site have a written SOP for treatment management?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.



SITE ASSESSMENT

Conducting site assessments on a regular basis is an excellent way to benchmark how the animal care practices are implemented and measure the animals' well-being on the farm. Assessing animal well-being on a regular basis will help detect changes in the environment that could negatively affect the pigs.

INTERNAL SITE ASSESSMENTS

Internal site assessments of the facility, animals, caretakers, and records must be conducted by the production management team including, but not limited to: veterinarians, supervisors, site managers, or other internal animal welfare auditors. Any tool that covers the four areas listed above will be considered acceptable. Producers are encouraged to use tools that provide feedback that supports continuous improvement. These internal site assessments must be conducted at least quarterly on sow farms and semiannually on nursery and finishing farms.

It is suggested that the results of the internal assessment be reviewed with a PQA Plus advisor to develop and implement an action plan for identified problem areas. These internal assessments and documentation of corrective actions made should be kept for three years and will be reviewed by a PQA Plus advisor during the next PQA Plus site assessment.

PORK QUALITY ASSURANCE® PLUS SITE ASSESSMENTS

A PQA Plus Site Assessment must be conducted and PQA Plus Site Status achieved at least once every three years. New production facilities should achieve PQA Plus site status within 6 months of operation or before animals are marketed from the site.

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. Caretakers who work with the herd on a daily basis may become less aware of slight changes in the environment that could affect the well-being of the pigs. Having a second set of eyes observe the farm can be useful in detecting these changes. Additionally, a PQA Plus advisor is a useful resource for learning about new equipment, production practices and research that can affect the well-being of the animals.

Notes for Site Assessors:

- ✓ The internal assessments may be any assessment tool that covers the facilities, animals, caretakers, and records conducted on the farm.
- ✓ Review the results of the internal assessments and discuss how any issues identified were corrected.

Site Assessment Criteria:

These questions will be displayed in the **Records** section of the final assessment report.

Question 13: Does the site have a valid PQA Plus Site Status?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 18: Does the site conduct internal site assessments of the facility, animals, caretakers, and records (breeding = quarterly; non-breeding = semi-annually)?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

ANIMAL CARE/ABUSE POLICY & REPORTING

All caretakers should be familiar with what is considered willful acts of abuse and know there is zero tolerance for neglect or willful acts of abuse on the farm. Caretakers should be aware of the policy, understand how to report abuse and neglect and understand the disciplinary steps that are associated with abuse and neglect.

If a willful act of abuse is observed, immediately intervene to stop the situation if reasonably and safely possible. The incident should be reported to the site representative, farm owner or management. Every site should have a reporting mechanism in place for caretakers to report abuse and neglect. All reports should be thoroughly investigated. The National Pork Board strongly encourages anyone with knowledge of possible animal abuse or neglect to report these actions immediately to the proper responsible persons. The National Pork Board endorses adherence to the *See it? Stop it!* initiative and its principles. *See It? Stop It!* enforces the perspective that willful acts of abuse are unacceptable and will not be tolerated. *See it? Stop it!* empowers anyone working on a farm or in a farm setting where animals are being raised or transported, to immediately report any instances of animal abuse or neglect.



Notes for Site Assessors:

- ✓ Verify the site has a written zero tolerance policy for neglect or willful acts of abuse or neglect.
- ✓ Verify what is the site's reporting mechanism for reporting abuse or neglect.
- ✓ Review records that indicate all caretakers have received training on the abuse zero tolerance policy and reporting mechanism.
- ✓ Interview a sample of caretakers in the barn to verify they have received training on the zero tolerance policy and know how to report neglect or willful acts of abuse.

Site Assessment Criteria:

These questions will be displayed in the **Records** section of the final assessment report.

Question 16: Does the site have a written zero tolerance policy for willful acts of abuse?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 17: Does the site have a reporting mechanism in place for caretakers to report abuse?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

This question will be displayed in the **Caretaker** section of the final assessment report.

Question 30: Can caretakers articulate the site's zero tolerance policy for willful acts of abuse and how to report abuse?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

DAILY OBSERVATION RECORDS

Daily observation and prompt delivery of care are critical in addressing individual animal health and 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.



Caretakers must conduct and document daily observations and deliver prompt care to address individual animal health and welfare and detect facility or management issues. When performing daily observations, caretakers should evaluate the animals, environment and equipment. Daily observations should include:

- Animals' eating and drinking habits, laying patterns, and signs of sickness or injury.
- The environment at the pig and barn level to make sure temperatures and air quality are correct for the phase of production.
- Evaluate fans, flooring, penning, feeders, waterers, and other equipment to make sure they are working properly.
- Record daily total mortalities that occur on the farm.

The best way to fully assess the pigs' environment and health is to walk inside the pens daily. Be sure to follow good biosecurity procedures when walking the pens. Recording such information as water intake or high and low temperatures within the barn can be a useful management tool. For example, a decrease in water intake can be an early indicator of illness in the herd. Large differences in high and low temperatures can be an indicator that the ventilation system is not functioning properly. Recording animal, facility or management concerns as the caretaker walks through the facilities will also promote corrective actions. Talk with a PQA Plus advisor or a veterinarian about the advantages of tracking daily observations of the animals for the operation.

At a minimum, a record demonstrating all animals on the site have been observed at least once a day should be kept. These records need to be kept for 12 months or as long as the farm has been operating if less than 1 year. Documenting 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.

Notes for Site Assessors:

- ✓ Review the daily observation records demonstrating someone has observed all of the animals every day.
- ✓ Records should minimally include:
 - » Date
 - » Caretaker name (or initials)
 - » Building or outdoor pen ID
- ✓ Verify records are being kept for at least 12 months (or the length of time a new facility has contained animals).
- ✓ All phases of production on the site must have proper daily observation records for this criteria.
- ✓ Acceptable daily observation records can be:
 - » Log
 - » Calendar
 - » Water usage record
 - » High/low temperature recordings
 - » Sow cards
 - » Etc.

Site Assessment Criteria:

This question will be displayed in the Records section of the final assessment report.

Question 19: Does the site have 12 months of records to verify the animals were observed at least once daily?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

MORTALITY RECORDS

Caretakers must conduct and document daily observations and deliver prompt care to address individual animal health and welfare and detect facility or management issues.

Daily observations should include a record of daily total mortalities, including pigs that die and/or are euthanized, that occur on the farm. The mortality records must be kept for 12 months or as long as the farm has been operating if less than 1 year.

Notes for Site Assessors:

- ✓ Review total daily mortality records and verify they are being kept for 12 months.

Site Assessment Criteria:

Question 20: Does the site have 12 months of mortality records?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

MEDICATION AND TREATMENT RECORDS

Working with licensed veterinarians on treatment and medication protocols, storing medications properly, and accurate record keeping are vital to ensuring violative residue-free pork products. Along with maintaining detailed animal identification, medication records play a pivotal role in tracking medicated animals.

VETERINARIAN-CLIENT-PATIENT RELATIONSHIP (VCPR)

The basis for a herd health plan is working with a veterinarian. The establishment of a working relationship between the producer and a veterinarian is critical in order to develop herd health plans, administer and monitor treatments and vaccinations, monitor and adjust herd health strategies and develop an emergency preparedness plan for the farm. The veterinarian can create a tailored plan to meet individual herd health needs taking into consideration farm-specific factors such as the disease profile of the herd and the type, age and location of production and facilities.

Regular observations of the herd by a veterinarian are not only beneficial in maintaining a healthy herd, they also fulfill the requirements of a VCPR. A veterinarian can observe the pigs in their current environment and review production, vaccination and treatment records and other veterinary information in evaluating the health status of the herd. In addition, any health problems that have been noted since the last visit can be discussed and addressed. Many times a veterinarian can provide a “fresh set of eyes” and may observe subtle problems that have gone unnoticed by caretakers seeing them every day.

According to the American Veterinary Medical Association, a VCPR is defined as a relationship in which:

1. A veterinarian has assumed the responsibility for making medical judgments regarding the health of the animal(s) and the need for medical treatment, and the client (the owner of the animal(s) or other caretaker) has agreed to follow the instructions of the veterinarian.
2. There is sufficient knowledge of the animal(s) by a veterinarian to initiate at least a general or preliminary diagnosis of the medical condition of the animal(s).
3. The practicing veterinarian is readily available for follow-up in case of adverse reactions or failure of the regimen of therapy.

*Note: It is important to be familiar with both state and federal definitions of veterinary oversight as regulations are subject to change.

Notes for Site Assessors:

- ✓ 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 the site veterinarian confirming the relationship.
- ✓ VCPR verification must be dated within the past 12 months.



Site Assessment Criteria:

This question will be displayed in the **Pork Safety** section of the final assessment report.

Question 21: Does the site have a valid VCPR?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

MEDICATION STORAGE

Medications should be viewed as a perishable commodity. They must be protected from damage by environmental conditions and from contamination. The effectiveness of a stored drug may be quickly diminished by temperature extremes or exposure to sunlight. Most medications require storage in a clean, dry and dark location. Some drugs are best stored at room temperature while others require refrigeration. Most vaccines and some antibiotics should be refrigerated at 40°-45° F. Always refer to the label for the correct storage instructions of any product. As a rule, once a bottle of injectable medication has been opened, it should be stored in a refrigerator unless specifically directed otherwise by the label instructions or a by a veterinarian.

To avoid using medications that have lost some of their potency, the supply of medication should be limited to only what will be used before the expiration date. Routinely check medication inventory and sort medications by expiration dates to make sure that products with older dates are used first. Periodically check products for expiration and properly discard those that are expired.

In addition to preserving the efficacy of drugs in storage, it is also important to maintain their identity. Medication should be stored in the original container bearing the product label. If a product is placed in another container, it should be clearly labeled immediately to prevent misidentification.

The practice of withdrawing an injectable medication and storing it in a syringe for later use should be avoided. These syringes are often unlabeled so one medication may be mistaken for another resulting in unsatisfactory treatment

response or withdrawal time mistakes. Syringes do not provide the protection from contamination and sunlight degradation like a colored glass vial. Additionally, syringes that have been cleaned and disinfected may have a soap or disinfectant residue that can inactivate the drug or vaccine left in them for a period of time. Medication must be stored in a way to prevent contamination. Injectable medications should be kept in a tightly sealed, clean bottle.

For many vaccines, the label directions will state, “Use the entire contents immediately when opened.” These vaccines lose their effectiveness rapidly and should be discarded, according to the label, if not used after they are opened or re-hydrated.

Notes for Site Assessors:

- Verify animal health products are being stored according to label instructions.
- Verify animal health products are not expired.

Site Assessment Criteria:

This question will be displayed in the **Pork Safety** section of the final assessment report.

Question 37: Are animal health products stored properly and not past the expiration date?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

MEDICATION AND TREATMENT RECORDS

There are several reasons related to pork safety for keeping records of all medications given to food-producing animals. The primary reason is to make sure withdrawal times have elapsed before marketing. Keeping and maintaining records is also a basic expectation of regulatory officials. Medication records provide documentation that demonstrates a drug was used properly. In instances where a violative residue found at harvest has been traced to a farm, the producer will be expected to provide complete medication records to the investigator.

Periodic review of the medication records and the pig’s response to treatment can be discussed with a veterinarian as part of the VCPR and herd health plan. If changes in herd health are noted, a veterinarian can work with the producer to determine if additional investigation and potential health changes need to be made.

FDA Compliance Policy Guide (CPG) 7125.37 – Proper Drug Use and Residue Avoidance by Non-Veterinarians outlines the records the FDA expects to see as part of the operation’s standard operating procedure for using animal-health products. The FDA expects producers to maintain medication records that include:

- The identification of the animal(s) that were treated.
- The date(s) of treatment, including last date of administration.



- The drug(s) administered.
- The route of administration.
- The person who administered each drug.
- The amount of each drug administered.
- The withdrawal time prior to harvest.

Animal Medication Record (Minimum Requirement)

Date (mm/dd/yy)	ID	Product name	Dose	Route	Given by	Withdrawal Time
3/28/18	210	Tylosin	3 ml	IM	W.P.	14 days

Veterinary Feed Directives (VFDs)

Feed medication records, also known as Veterinary Feed Directive (VFD) orders, must be kept according to FDA guidelines. A copy of the VFD should be available for review during the site assessment.

Notes for Site Assessors:

- ✓ Review the site's medication and treatment record system.
- ✓ Verify the site keeps records for 12 months after the animal has been treated or as long as the farm has been operating if less than 1 year.
- ✓ Records must be PQA Plus or equivalent that contain all of the following information:
 - » 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 the 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

- ✓ Sites that have not treated any animals in the last 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.
- ✓ Verify the site's VFD records are retained according to the FDA guidelines.

Site Assessment Criteria:

These questions will be displayed in the Pork Safety section of the final assessment report.

Question 22: Does the site have compliant medication and treatment records?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 23: Are medication and treatment records retained for 12 months?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 24: Are VFD records retained according to FDA guidelines?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- For sites not using products that require a VFD mark this question as “Not Applicable or NA”.

TREATMENT MANAGEMENT

Caretakers should have a plan for how an animal could be isolated from the rest of the herd for treatment or recovery when needed. Once a pig has been identified as ill or injured, it may need to be moved to a treatment area if its health and wellbeing are compromised by its fellow pen mates or if treatment of the animal is affected by remaining with the group. Properly managed treatment pens can aid recovery and provide easier follow-up treatment. The treatment pen may be a temporary or permanent separate pen or enclosure, or an individual stall. An important consideration is providing adequate treatment and supportive care for the animal. This includes easy access to feed and water. Caretakers must have a method for tracking animals that are undergoing treatment, be able to demonstrate what treatments have been administered and how long that animal has been receiving the treatment, evaluate the effectiveness of the treatment and, if necessary, make good decisions about timely euthanasia.

Notes for Site Assessors:

- ✓ Ask caretakers to demonstrate or explain how they track animals that are undergoing treatment.
- ✓ Ask caretakers to demonstrate what treatments have been administered and how long those animals have been receiving treatment.

- ✓ Ask caretakers to articulate how they evaluate the effectiveness of treatments.
- ✓ Ask caretakers to articulate how they make good decisions about timely euthanasia for animals that are not responding to treatment.

Site Assessment Criteria:

This question will be displayed in the Caretaker section of the final assessment report.

Question 25: Can caretakers articulate their method for tracking what treatments have been administered and how long each animal has been receiving treatment?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.



CARETAKER TRAINING

The caretaker is someone who has daily responsibility to provide care for animals. 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 caretaker 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.

Caretakers must receive and be able to articulate training specific to their daily duties as detailed in the farm's written standard operating procedures and receive retraining annually. New caretakers who have not yet completed training should be directly supervised by someone who is trained. Training records should include date, topic of training, trainer, trainee, and trainee signature. Online training modules are acceptable forms of training as long as there is an electronic date stamp, topic of training, and name of trainee on the record. All caretakers must be PQA Plus Certified within 90 days of employment and maintain certification while employed.

If available on-site during the site assessment, specialized labor performing tasks with animals must be able to articulate or demonstrate training specific to their daily

duties. Specialized labor may include vaccination crews, load-out crews, and infrequent part-time help.

Training can come from training manuals, CDs/DVDs and videos, as well as from on-the-job training under the guidance of experienced caretakers. There are at least three areas common to all production system training programs that address swine well-being. They are:

1. **Euthanasia** – Caretakers responsible for euthanasia must have documented training and be familiar with the site's euthanasia plan. Trained caretakers should be able to articulate the farm's method of euthanasia for which they are responsible, handling methods used during euthanasia, confirmation of insensibility and death, carcass disposal, and cleaning and maintenance of equipment and supplies. *On-Farm Euthanasia of Swine - Recommendations for the Producer* brochure outlines the methods and practical considerations for euthanasia of pigs and can serve as a training resource.
2. **Handling** – All transporters delivering or picking up pigs must be Transport Quality Assurance (TQA) Certified. Those loading animals for transport must be trained according to practices taught in PQA Plus or TQA. Additional training information on how to handle pigs, other than the information contained in the PQA Plus handbook, is available in the Transport Quality Assurance® (TQA®) Program and the *Swine Care Handbook*.
3. **Husbandry** – Caretakers responsible for piglet processing must be trained on the farm's standard operating procedures for processing. The *Swine Care Handbook* contains information about husbandry skills. Additional information on specific husbandry skills may be available from university extension services or area community colleges.

Notes for Site Assessors:

- ✓ Review PQA Plus certifications for all caretakers.
- ✓ Review TQA certifications for transporters delivering or picking up pigs. This can be demonstrated by the current or most recent transporter delivering or loading pigs at the site providing their TQA card or name to verify TQA certification.
- ✓ Review the site's training records.
- ✓ Documentation of training records should include:
 - » Trainee name and signature
 - » Trainer name
 - » Date of the training
 - » Topic covered in training
- ✓ Online training modules are acceptable forms of training as long as there is an electronic date stamp, topic of training and name of trainee displayed.
- ✓ 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 record.
- ✓ If on-the-job training is the method used for training caretakers, there must be a paragraph describing the training including:
 - » Trainer name
 - » Trainee name

- » Date of the training
- ✓ Site Assessors can verify training by asking employees about the training they have received.

Site Assessment Criteria:

These questions will be displayed in the **Caretaker** section of the final assessment report.

Question 11: Are transporters delivering or picking up pigs from the site Transport Quality Assurance (TQA) Certified?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 12: Do all caretakers have a current PQA Plus Certification or are certified within 90 days from their new employment date?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 27: Are caretakers able to articulate the training they received specific to their daily duties?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 28: If observed on the site, is specialized labor able to articulate or demonstrate the training they received specific to their daily duties?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If specialized labor is not observed during the site assessment, mark “N.O.” on the site assessment form.

Question 29: Are caretakers responsible for euthanasia able to articulate the site’s euthanasia plan?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

This question will be displayed in the **Records** section of the final assessment report.

Question 15: Does the site have documentation of annual caretaker training specific to their daily duties?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

WRITTEN EUTHANASIA PLAN

Because 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 euthanasia action plan. Sites must have a written euthanasia plan covering primary and backup methods for each stage of production in the operation and it should be readily accessible to all caretakers in the facility. The written plan must comply with the current American Association of Swine Veterinarians (AASV) guidelines for euthanasia. Table 2 is a summary and

additional information and guidance on these euthanasia methods can be found in the AASV and American Veterinary Medical Association’s euthanasia guidelines.

Euthanasia methods appropriate to pigs of different sizes (weights)

Method	Approved for
Carbon dioxide (CO ₂)	All ages but may not be practical for pigs over 70 lbs
Gunshot	Nursery pigs or older
Non-penetrating captive bolt	Pigs less than 70 lbs*
Penetrating captive bolt	Pigs greater than 12 lbs
Electrocution, head-to-heart	Pigs over three days of age
Electrocution, head only	Pigs over three days of age with a secondary step
Veterinarian administered anesthetic overdose	All ages but may not be practical
Manual blunt force trauma	Pigs up to 12 lbs

*Refer to page 9 of AASV 2016 On-Farm Euthanasia of Swine: Recommendations for the Producer to determine appropriate force and weight range combinations

The *On-Farm Euthanasia of Swine* brochure provides information to help producers choose the appropriate method to use in the operation 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.
- **Practical And Technical Skill Requirements:** The method should be easily learned and repeatable with the same expected outcome.
- **Caretaker Compliance:** Caretakers and others must be comfortable with, and willing to perform, the chosen method when needed. Lack of compliance compromises the well-being of the pig.
- **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.

Any equipment used for pig euthanasia must be kept in proper repair and must be functional. Records must exist that demonstrate routine maintenance of euthanasia equipment and be retained for 12 months.

Notes for Site Assessors:

- ✓ Verify euthanasia equipment exists by observing the equipment and/or interviewing caretakers responsible for euthanasia about the equipment's location and storage.
- ✓ Review the euthanasia action plan for each stage of production in the operation for consistency with AASV guidelines.
- ✓ Ensure the plan is readily accessible by all employees in the facility.
- ✓ Review the maintenance records of the euthanasia equipment and verify records are retained for 12 months.
- ✓ Record the euthanasia methods used in the comments section of the site assessment form.

Site Assessment Criteria

This question will be displayed in the Facilities section of the final assessment report.

Question 33: Is the euthanasia equipment readily available for use?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

These questions will be displayed in the Records section of the final assessment report.

Question 34: Does the site have 12 months of records demonstrating routine maintenance of euthanasia equipment?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 35: Does the site have a written euthanasia plan that is consistent with the current AASV guidelines and is accessible to all caretakers in the facility?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

This question will be displayed in the Animal Observations section of the final assessment report.

Question 46: If euthanasia is observed, are caretakers following the site's SOP for euthanasia?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If euthanasia is not observed during the assessment, mark “Not Observed” on the site assessment form.

PIGLET PROCESSING PROCEDURES

Facilities that process piglets should have a written Standard Operating Procedure in place for piglet processing procedures on sow farms. This SOP should include details on procedures for castration and tail docking. At a minimum, the site's SOP should follow the AASV guidelines for piglet processing procedures. Caretakers responsible for piglet processing should be trained on the SOP. The current AASV Policy on Castration and Tail Docking is below.

Notes for Site Assessors:

- ✓ Review the written SOP for piglet processing procedures and verify compliance with the AASV guidelines.
- ✓ Review training records for caretakers involved in the processing of piglets.
- ✓ Interview or ask caretakers to demonstrate piglet processing procedures.
- ✓ If the site uses anesthetics or analgesics during piglet processing, record those in the comments section of the site assessment form.

AASV Policy on Castration and Tail Docking: Castration of male pigs is performed to reduce aggressive behaviors and improve the palatability of pork. The AASV supports the use of procedures that reduce pain, including the development and approval of practical analgesic and anesthetic protocols that improve piglet outcomes. Currently, U.S. commercial market pig processors do not accept uncastrated male pigs for sale into the domestic or foreign food supply. Surgical castration should be performed early and sufficiently prior to weaning such that no open wounds remain at the time of weaning. Clean, sharp equipment must be used to minimize pain and risk of infection. If surgical castration is performed after weaning, analgesia and/or AMDUCA-permissible anesthetic protocols should be used. Immunological castration is an alternative technology that prevents boar taint.

Tail docking is performed to reduce tail biting and cannibalism among pigs. Tail docking should be performed early and sufficiently prior to weaning such that no open wounds remain at the time of weaning. Clean, sharp equipment must be used to minimize pain and risk of infection.

*Approved by the AASV Board of Directors on October 3, 2013.
Reaffirmed by the AASV Board of Directors on March 30, 2015*

Site Assessment Criteria:

This question will be displayed in the **Records** section of the final assessment report.

Question 4: Does the site have a written SOP for piglet processing procedures, specifically castration and tail docking, that complies with AASV guidelines?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site does not farrow piglets, mark “Not Applicable or NA” on the site assessment form.

This question will be displayed in the **Caretaker** section of the final assessment report.

Question 30: Can caretakers responsible for piglet processing procedures demonstrate or articulate the training they received to conduct the procedure according to the site’s SOP?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site does not farrow piglets, mark “Not Applicable or NA” on the site assessment form.

EMERGENCY BACKUP VENTILATION SYSTEM

Providing good animal care means being prepared for times of emergencies, too. There are three important components of emergency support: the emergency action plan, emergency detection system and the emergency backup ventilation system.

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. For example, a back-up generator, automatic or manual drop curtains, or some provision for natural ventilation may be appropriate depending upon the building’s ventilation type. Testing this emergency backup system allows producers to identify problems and perform maintenance updates to the system. Keeping a record of an established schedule for testing and maintenance demonstrates the emergency backup system is operational. The emergency backup equipment should be tested and the testing documented at least twice a year.

Notes for Site Assessors:

- ✓ Review the emergency backup system.
- ✓ Verify the system is checked at least twice per year for operational status by reviewing maintenance/test log records or actually running the system.
- ✓ Naturally-ventilated indoor/outdoor barns do not need an emergency backup system and can be marked “Not Applicable or NA” on the Questions 14 and 31 of the site assessment form.

Site Assessment Criteria:

This question will be displayed in the **Records** section of the final assessment report.

Question 14: Is there a written record of emergency backup equipment being tested at least twice per year?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site is naturally-ventilated indoor/outdoor barns, mark “Not Applicable or NA”.

This question will be displayed in the **Facility** section of the final assessment report.

Question 32: Does the site have an operational emergency backup system?

- Yes–Mark “Acceptable” on the site assessment form.
- No – Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site is naturally-ventilated indoor/outdoor barns, mark “Not Applicable or NA”.

EMERGENCY ACTION PLAN

An emergency action plan (EAP) will prepare producers, management and caretakers to take immediate action when someone is hurt, a fire starts, a tornado is imminent or when other emergencies occur. In an emergency, time cannot be wasted; it could be the difference between life and death. In case of an emergency, quick communication is important. An EAP covers who to notify in case of emergency, what to say and what actions to take.

The operation should have an up-to-date written EAP that will provide guidance to persons not familiar with the operation or are mentally distraught due to the emergency. The plan should include who to contact in an emergency, driving directions to the farm or GPS coordinates, a facility map, descriptions of all operations, plans for dealing with fires, weather emergencies, personal injuries, contingency plans addressing critical system failures (e.g., power, water, ventilation, building damage or collapse, etc.), contingency plans for alternative mortality disposal under normal and catastrophic loss conditions and steps to mitigate uncontrolled manure releases including releases from any off-site transfer of manure. It is recommended that copies of structural design drawings and specifications, including re-designs, additions or reductions, for the facility be maintained on-site.

Caretakers should be trained in the EAP and emergency procedures for the operation.

Emergency contact phone numbers and site address numbers must be posted and readily available to all employees.



important to consider the types of injections, how to correctly administer the injections and how to properly use and care for the equipment used before, during and after injections.

The most common method of injection is intramuscular. Below are the guidelines caretakers should use in performing this type of injection.

- Use a spot on the neck just behind and below the ear, but in front of the shoulder.
 - » Do not use a needle to inject in the ham or loin, unless directed to do so by a veterinarian. There may be some bleeding and bruising of the muscle followed by scarring. This scar can stay in the muscle for the life of the pig and be a blemish in the cut of meat. This standard applies to sows, as well as to market swine. While sows may not be going to market soon, they are at greater risk for blemishes because of the repeated injections they typically receive over their productive life in the form of vaccinations and farrowing medications.
- Use the proper size and length of needle to ensure the medication is deposited in the muscle, not in other tissues.
- When using 16 gauge or larger size (lower number) needles, they should be highly detectable (HD) needles.

Recommended Needle Size For IM and SQ Injections	Intramuscular (IM) Injections		Subcutaneous (SQ) Injections	
	Gauge	Length	Gauge	Length
Baby Pigs	18 or 20	$\frac{5}{8}$ " or $\frac{1}{2}$ "	18 or 20	$\frac{5}{8}$ " or $\frac{1}{2}$ "
Nursery	16 or 18	$\frac{3}{4}$ " or $\frac{5}{8}$ "	16 or 18	$\frac{1}{2}$ "
Finisher	16	1"	16	$\frac{3}{4}$ "
Breeding Stock	14 or 16	1" or $1\frac{1}{2}$ "	14 or 16	1"

There may be needles of different sizes present on the site that do not meet the PQA Plus recommendations for specific reasons such as obtaining blood from animals or inducing sows or according to a written SOP or a written veterinarian recommendation. If caretaker interviews indicate the needles are used for a specific reason under veterinarian recommendations, question 38 should be marked acceptable.

Notes for Site Assessors:

- ✓ Observe sizes and lengths of needles available on the site.
- ✓ Ask caretakers to articulate the site's procedures for needle size and length selection.
- ✓ Verify needles that are 16 gauge or larger size (lower number) are highly detectable.
- ✓ Needle length and size selection does not apply to sites using needle-free technologies.

Notes for Site Assessors:

- ✓ Review the site's written emergency action plan.
- ✓ Verify the action plan covers likely emergencies or catastrophes for that area.
- ✓ At a minimum, the plan must include the address of the facility as well as telephone numbers for the:
 - » Owner
 - » Veterinarian
 - » Electrical power company
 - » Fire and Police
 - » Address of the facility, GPS coordinates, or directions from the nearest town
- ✓ Verify the action plan is readily available to all employees and emergency contact numbers are posted.
- ✓ Ask caretakers to articulate the emergency procedures for the operation as well as the emergency action plan.

Site Assessment Criteria:

This question will be displayed in the **Records** section of the final assessment report.

Question 36: Does the site have a written emergency action plan and are emergency contact and site address number posted?

- Yes–Mark "Acceptable" on the site assessment form.
- No–Mark "Develop and Implement an Action Plan" on the site assessment form.

NEEDLE & SHARPS USAGE

Proper use and care of needles, syringes and scalpel blades is important to the correct and safe administration of animal health products. Take care when practicing appropriate use and disposal procedures as outlined below.

INJECTIONS

Injections are useful when treating individual animals and may be the only practical way of medicating pigs that are too sick to eat or drink or for administering medications that are poorly absorbed from the gut. When giving injections it is

Site Assessment Criteria:

These questions will be displayed in the **Pork Safety** section of the final assessment report.

Question 38: Is the site using the appropriate needle sizes per PQA Plus recommendations?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site uses only needle-free technologies, mark “Not Applicable or NA” on the site assessment form.

Question 39: Are the 16 gauge or larger size (smaller number) needles on the site highly detectable?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site uses only needle-free technologies, mark “Not Applicable or NA” on the site assessment form.

NEEDLE, SYRINGES AND SCALPEL BLADE DISPOSAL

Used needles and scalpel blades are called “sharps” and must be disposed according to state medical waste regulations to prevent environmental contamination and injury to fellow workers, children, waste handlers and livestock.

Proper disposal involves placing sharps in a rigid, puncture-resistant container immediately after use. Glass containers are not acceptable for sharps disposal because the container may break.

Commercially available containers can be purchased from farm supply stores, safety supply houses, drug stores or veterinarians.

Regardless of the container type it should prevent the penetration of needles

both on the farm and throughout transport to the final disposal location. Sharps containers must be clearly labeled as a biohazard waste container not for recycling. When the container is full, the cap or lid should be securely tightened and sealed with heavy tape. For the rules that apply to the farm, contact the agency in charge of overseeing the disposal of biomedical wastes in the state. The website *epa.gov* provides information about agencies in each state that regulate biomedical or infectious waste disposal. Approved sharps collection stations are available in some regions. Another option may be to ask a veterinarian or a local hospital if they accept farm-generated medical wastes.



Notes for Site Assessors:

- ✓ Verify the sharps disposal container is a rigid puncture-resistant container that is clearly labeled as sharps and according to each state’s regulation.
- ✓ Glass sharps disposal containers are not acceptable.
- ✓ If full sharps containers are observed, verify the cap or lid is securely tightened and sealed with heavy tape.

Site Assessment Criteria:

This question will be displayed in the **Pork Safety** section of the final assessment report.

Question 40: Are used sharps placed in a rigid puncture-resistant container that is labeled properly?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

BENT NEEDLES

Pork Checkoff-funded research on needle strength shows that disposable needles will rarely break during the initial use. However, the needle shaft is much more likely to break if it has been bent during an injection, straightened and used again, or after repeated use.

Never straighten and reuse a bent needle. Always carefully discard and replace it.

A standard operating procedure (SOP) for needle inventory and use for the operation will help address needle breakage in a logical, consistent way. Everyone involved in the operation, including management, caretakers and family members, need to understand and follow the SOP. When needle breakage occurs, it must be reported with honesty. Consider including in the SOP:

- Prevention
 - » Evaluate the strength and detectability characteristics of the needles used. Information is available on the Checkoff website, *pork.org*. This includes the quality of the needle and hub.
- Provide needle-use guidelines to all caretakers that address how to:
 - » Ensure proper animal restraint.
 - » Select the proper site and technique for injection.
 - » Select the proper size and length of needle according to the pig’s age, the injection site selected and the characteristics of the product to be injected.
 - » Change the needle when appropriate to maintain cleanliness and sharpness.
 - » Take measures to minimize the loss of needles in areas occupied by pigs. Retrieve dropped needles because they may be chewed on by a curious pig and could become lodged in the tissues around the mouth, throat and jowls of sows and market pigs.
 - » Change bent needles. **NEVER STRAIGHTEN A BENT NEEDLE, ALWAYS CAREFULLY REMOVE AND REPLACE IT.**
 - » Consider the appropriate number of needles that would be reasonable to use for a particular job. Then account for and reconcile the number of needles at the beginning of the job and the number of needles at the finish.
- Identify pigs that are at risk of carrying a broken needle.
 - » Provide caretakers appropriate training.
 - » Establish a plan for immediately identifying pigs known or suspected of harboring a broken needle fragment.
 - » Provide permanent identification of the animal if the

identification applied at the time of the incident is not permanent.

- » Use permanent identification that is recognizable by all caretakers and packers.
- » Record all pertinent information regarding the event. This information could include: activity, gauge and brand of needle, location, restraint used, person giving the injection and person who reported it. For more information regarding medication recordkeeping, refer to Chapter 1 of the PQA Plus handbook.
- Communicate with the packer
 - » Find the packer's notification and payment policies for at-risk pigs. Use this information to develop the needle SOP for the operation.
 - » How are the pigs to be marked?
 - » How is the packer to be notified?
- Keep broken needles out of the pork supply to help maintain the confidence of consumers when purchasing pork products. No matter where a pig is marketed, buyers or processors must be informed of any pig potentially carrying a needle.

Notes for Site Assessors:

- ✓ Review the site's SOP for needle usage to verify it includes information addressing needle breakage prevention, identification of suspect pigs and protocols for what to do with that animal.
- ✓ Ask caretakers to articulate the site's protocol for handling broken needles.

Site Assessment Criteria:

These questions will be displayed in the Pork Safety section of the final assessment report.

Question 9: Is there a written SOP for needle usage that includes a section on broken needles covering prevention, identification of suspect pigs and protocol for what to do with that animal?

- Yes—Mark “Acceptable” on the site assessment form.
- No—Mark “Develop and Implement an Action Plan on the site assessment form.
- If a site uses only needle-free technologies, mark “Not Applicable or NA” on the site assessment form.

Question 26: Can caretakers articulate the site's protocol for handling broken needles?

- Yes—Mark “Acceptable” on the site assessment form.
- No—Mark “Develop and Implement an Action Plan on the site assessment form.
- If a site uses only needle-free technologies, mark “Not Applicable or NA” on the site assessment form.



WILLFUL ACTS OF ABUSE OR NEGLECT

Willful acts of abuse or neglect are unacceptable and are not tolerated.

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 or neglect and know that these are unacceptable and are not tolerated. 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 or neglect 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.)

Notes for Site Assessors:

Willful acts of abuse or 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. Excessive prod use could qualify as a willful act of abuse. Electric prods must not be used on suckling pigs or on the day of weaning.
- ✓ Malicious hitting/beating of an animal. This includes forcefully striking an animal with closed fist, foot, handling equipment (e.g. sorting board, rattle paddle, etc.), or other hard/solid objects that can cause pain, bruising or injury
- ✓ Driving pigs off high ledges, platforms or steps while moving, loading or unloading (animals are falling to the ground)
- ✓ Dragging of conscious animals by any part of their body except in the rare case where a non-ambulatory animal must be moved from a life threatening situation. Non-ambulatory pigs may be moved by using a drag mat
- ✓ Purposefully dropping or throwing animals
- ✓ Causing physical damage to the snout or tusks of a boar as a means to reduce aggression (this excludes nose ringing and tusk trimming)
- ✓ Failure to provide food, water and care that results in significant harm or death to animals. This includes the intentional failure to provide food, water, or care that falls outside the normal husbandry practices and would be reasonable considered neglect.

Assessment Criteria:

This question will be displayed in the **Critical Criteria** section of the final assessment report.

Question 41: Were any willful acts of abuse or neglect observed during the assessment?

- Yes–Mark “Develop and Implement an Action Plan” on the site assessment form.
- No–Mark “Acceptable” on the site assessment form.

HUMANE EUTHANASIA

Every operation will, at some time, have sick or injured pigs that do not respond to care and treatment. Operations must euthanize these animals in a humane method that complies with the American Association of Swine Veterinarians (AASV) guidelines.

Timely euthanasia is defined as:

- Animals that have no prospect for improvement or not responding to care and treatment after two days of intensive care should be humanely euthanized unless otherwise recommended by a veterinarian. 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 is considered non-ambulatory if it cannot get up or if it can stand with support but is unable to bear weight on two of its legs.
- Any animal that is non-ambulatory with a body condition score of 1 should be euthanized immediately.
- Pigs with hernias that are perforated must be euthanized. Pigs with hernias that are ulcerated and necrotic must be euthanized. Pigs with large hernias that touch the ground while standing and cause difficulty walking and are ulcerated must be euthanized.
- Any pig with an untreated prolapse that has become necrotic should be euthanized. Uterine prolapses must be euthanized immediately.

Events that call for timely euthanasia can happen any day of the week. Caretakers trained in euthanasia should always be available to respond – including nights, weekends and holidays. Animals should be handled humanely during the euthanasia process. If animals are not euthanized in place, suitable equipment is available to move non-ambulatory animals so they can be humanely euthanized. Caretakers must confirm animals insensible and dead after the euthanasia method is applied and before being removed from the facility.

Notes for Site Assessors:

- ✓ If euthanasia is not performed during the site assessment, questions 43-45 can be marked as “Not Observed”.
- ✓ 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.
- ✓ If it is possible the pig became injured between the last barn check and the beginning of the assessment, questions 43-45 can be marked as acceptable. Examples of these types of situations would include recently farrowed piglets that are deformed or have suddenly become injured.
- ✓ Caretakers should be able to articulate their method of tracking treated animals to help you determine length and success of treatment.
- ✓ Caretakers should be able to articulate where they euthanize animals and show the functionality of any equipment used to move non-ambulatory animals.
- ✓ Caretakers involved in euthanasia procedures should be able to articulate how they confirm insensibility and death.

Site Assessment Criteria:

These questions will be displayed in the **Critical Criteria** section of the final assessment report.

Question 42: Are animals euthanized in a timely manner?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 43: If euthanasia is observed, are the animals handled humanely during the process?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If euthanasia is not observed during the assessment, mark “Not Observed” on the site assessment form.

Question 44: If euthanasia is observed, are animals euthanized in place or is suitable equipment available to move non-ambulatory animals so they can be humanely euthanized?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If euthanasia is not observed during the assessment, mark “Not Observed” on the site assessment form.

Question 45: If euthanasia is observed, do caretakers confirm insensibility and death after the euthanasia method is applied and before being removed from the facility?

- Yes–Mark “Acceptable” on site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If euthanasia is not observed during the assessment, mark “Not Observed” on the site assessment form.

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. When pigs are improperly handled, they become distressed, which can lead to several negative consequences such as physical injury to the pig, injury to the handler, decreased sow reproductive performance,

increases in the incidence of non-ambulatory pigs, increased time to load and unload pigs and reduced growth rates. Additionally, improper handling also significantly contributes to carcass shrink, trim loss and poor meat quality. Improper handling and transport of pigs is one of the largest profit-reducing issues facing the pork industry today.

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
- Point of balance
- Senses – sight, hearing and smell

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.

Basic handling techniques apply to all pigs, but specific requirements for certain sizes and types of pigs differ.

Handling PIGLETS and NURSERY PIGS:

Pigs can either be moved by herding or by picking them up and moving them by hand or with a cart. If pigs are picked up, they should be picked up by holding them under their rib cage, over the back, or by grabbing a rear leg, above the hock, and then gently setting the piglets into a cart, alleyway or pen. Before releasing a pig to the ground the pig should have a point of contact before the handler lets go (i.e. a front leg). Pigs may squirm and wiggle when picked up so care should be used so that they are not dropped. Pigs should not be tossed or thrown or picked up by ears or tail. When being held for an extended period of time, pigs should be held under the rib cage next to the handler's body or by both rear legs using two hands. Electric prods should not be used on suckling or weaned piglets. Electric prods should not be used to move nursery pigs out of pens.

Handling FINISHER PIGS:

Groups of finished pigs should be small enough so that the handler can apply handling interventions to the pigs not moving. Electric prods should not be used to move market pigs out of pens.

Handling BREEDING STOCK:

Groups of breeding stock should be small enough so that the handler can maintain control of all pigs in the group so handling interventions can be applied to the pigs not moving. Electric prods should not be used to move sows or boars out of pens.

Pigs should be moved at their normal walking pace. Aggressive handling should be avoided as it can lead to injured or stressed pigs. Aggressive handling includes things such as:

- Excessive, or improper use, of electric prods
- Excessive loud noises and yelling
- Moving pigs too fast
- Moving too many pigs per group
- Overcrowding pigs in chutes, ramps and alleyways
- Rough physical contact

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. Appropriate group sizes will depend on facility design, temperament of the animals, or weather conditions may require adjustment to group size.

A pig is considered non-ambulatory if it cannot get up or if it can stand with support but is unable to bear weight on two of its legs. 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. All animal handling equipment should be in good working order and not broken or have any sharp edges. Pipes, sharp or pointed objects, or other items which would cause injury or unnecessary pain to the animal shall not be used when 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.

- The Site Assessor needs to have some visual, aural, or behavioral indication that the prod was energized when applied to the pig.
- If a single pig is prodded more than once, it is only counted as one animal.
- Prods must not be used on non-ambulatory pigs that have clearly been identified as non-ambulatory and should not be used more than twice on ambulatory animals that refuse to move.
- Excessive prod use could qualify as a willful act of abuse.
- Intentionally applying prods to sensitive parts of the animal such as the eyes, ears, nose, genitals or rectum also qualifies as a willful act of abuse.
- 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 five seconds to respond before another shock is given.
- No more than 25% of animals should receive an electric shock.

Notes for Site Assessors:

- ✓ The Site Assessor needs to have some visual, aural, or behavioral indication that the prod was energized when applied to the pig.
- ✓ If a single pig is prodded more than once, it is only counted as one animal.
- ✓ Prods must not be used on non-ambulatory pigs that have clearly been identified as non-ambulatory and should not be used more than twice on ambulatory animals that refuse to move.
- ✓ Excessive prod use could qualify as a willful act of abuse.
- ✓ Intentionally applying prods to sensitive parts of the animal such as the eyes, ears, nose, genitals or rectum also qualifies as a willful act of abuse.
- ✓ If animal handling activities are occurring during the site assessment, these should be observed.
- ✓ If animal handling activities are not occurring at the

time of the site assessment, caretakers should be asked to demonstrate or articulate animal handling procedures.

- ✓ Site Assessors should observe as many different age groups being handled as is possible on each site.

Site Assessment Criteria:

These questions will be displayed in the Animal Benchmarking section of the final assessment report.

Question 47: Are animals handled appropriately for their age?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 48: Can animal caretakers articulate or demonstrate appropriate use of equipment during animal handling?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 49: Is proper handling equipment available and in good working order with no sharp edges?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 50: Are electric prods used on suckling or weaned piglets?

- Yes–Mark “Develop and Implement an Action Plan” on the site assessment form.
- No–Mark “Acceptable” on site assessment form.
- If suckling or weaned pigs are never on the site, this question may be marked “Not Applicable or NA”.

Question 51: Are electric prods used to move nursery, market pigs, sows or boars out of pens?

- Yes–Mark “Develop and Implement an Action Plan” on the site assessment form.
- No–Mark “Acceptable” on the site assessment form.

THERMAL COMFORT/ AIR TEMPERATURE

Provisions for heating and cooling should be present and in working order during extremes in weather. Pigs perform thermoregulatory behaviors in an effort to regulate their body temperature.

Pigs should not show thermoregulatory behaviors that indicate they are too hot or too cold, and the air temperature at the pig level should be in the preferred temperature range for the phase of production. If the air temperature is outside the preferred temperature range for the phase of production and pigs are displaying thermoregulatory behaviors, the caretaker must take appropriate actions to minimize heat or cold stress (Thermoregulatory Laying Postures of Swine).

The Thermal Limits for Swine table gives the critical limits and preferred temperature ranges for pigs in various stages of production. Upper and lower critical temperatures define

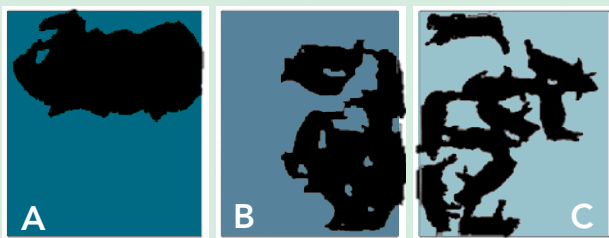
the Thermal Comfort Zone or the range of temperatures that the pig does not have to use heat-conserving or heat-dissipating mechanisms (such as shivering, huddling or panting). Keeping pigs above or below their critical temperature cannot only negatively influence thermal comfort, but also feed intake, growth, feed efficiency and health. The thermal perception of the caretaker may be very different than that of the pig. Remember that air temperature measurements should be recorded at pig height (approximately 1 foot above the ground). Temperatures should be taken in the building center at one-third intervals down the length of the barn. Avoid taking temperatures near inlets and direct heat sources.

Regardless of whether pigs are kept indoors or outdoors, it may be necessary to provide supplemental heating or cooling 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. Producers should work with a PQA Plus advisor to determine which supplemental heating or cooling method is best for the operation's housing design.

Thermoregulatory Laying Postures of Swine

The images portray the normal 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.



Taken from Shao et al., 1997, in volume 40 of the Transactions of the American Society of Agricultural Engineers.

Thermal Limits for Swine			
Production Phase	Lower Critical Limit ¹	Upper Critical Limit ²	Preferred Range (°F)
Lactating sow and litter	50°F for sow	90°F for sow	60-80 sows; 90-95 piglets
Pre-nursery, 10-30lbs	60°F	95°F	80-90
Nursery, 30-75lbs	40°F	95°F	65-80
Growing, 75-150lbs	25°F	95°F	60-75
Finishing, 150lbs-market	5°F	95°F	50-75
Gestating sows	5°F	90°F	60-75
Boars	5°F	90°F	60-75

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

Notes for Site Assessors:

- ✓ Observe pigs for thermoregulatory behaviors that suggest they are too hot or too cold.
- ✓ If needed, measure the air temperature at pig level, in the center of the room and compare to the preferred range for the phase of production.
- ✓ Record any measured air temperatures in the comments section of the site assessment form.
- ✓ Ask caretakers to articulate what kind of actions they would take to minimize heat or cold stress if signs are displayed by the pigs.

Site Assessment Criteria:

This question will be displayed in the Animal Benchmarking section of the final assessment report.

Question 52: Do pigs show thermoregulatory behaviors that indicate they are too hot or too cold and the air temperature at the pig level is outside the preferred temperature range for the phase of production?

- Yes—Ask second question: has the caretaker taken appropriate steps to minimize heat or cold stress?
- Yes—Mark “Acceptable” on the site assessment form.
- No—Mark “Acceptable” on the site assessment form.

FEED/WATER ACCESS

Animals must have access to feed and water according to the site's written SOP. All pigs must have free access to water at least once each day. Different feeding protocols may be used on different farms. Adequacy of these feeding protocols are evaluated through body condition scores.

Automated feed systems must be checked daily to prevent the occurrence of out-of-feed events. Bulk bins should be checked to make sure they have adequate feed supply and there is no bridging of feed. Feed lines and feeders should

be checked daily to assure they are in good working order and that feed delivery is not blocked. Out-of-feed events can negatively impact the pigs' well-being by increasing aggression, increasing the risk of developing stomach ulcers or hemorrhagic bowel syndrome and decreasing average daily gain and average daily feed intake.

Water is an important nutrient for normal body function, growth and reproduction. The quality and quantity of water a pig receives is important and should be monitored regularly. Poor water quality can negatively impact the health of the pig and reduce their consumption rates. Waterers should be designed so animals can drink freely and have flow rates that easily meet the pigs' water intake requirements. Specific information about appropriate water requirements per day and suggested flow rates can be found in the Water Requirements by Phase table. During very hot weather, water requirements may increase and the water system must have sufficient capacity to supply many pigs drinking at the same time.

Water Requirements by Phase		
Production Phase	Water Requirement (gal/pig/day)	Flow rate (cups/min)
Nursery	0.7	1-2
Growing	2 to 3	2-4
Finishing	3 to 5	2-4
Gestating sows	3 to 6	4
Lactating sows	2.5 to 7	4
Boars	5	4

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 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.

Notes for Site Assessors:

- ✓ Review the site's written feed and water SOP.
- ✓ Verify by observation that all pigs have free choice access to water at least once per day.
- ✓ Verify by observation that all pigs have access to feed according to the site's SOP.
- ✓ Because there are a variety of feeding protocols used throughout the industry, adequacy of feeding protocols are evaluated in this site assessment through body condition scores.

Site Assessment Criteria:

This question will be displayed in the Animal Benchmarking section of the final assessment report.

Question 53: Do pigs have access to feed and water according to the site's written SOP?

- Yes—Mark "Acceptable" on the site assessment form.
- No—Mark "Develop and Implement an Action Plan" on the site assessment form.

MORTALITY MANAGEMENT

When the trained caretaker's ability to evaluate an animal's condition is combined with daily observations, a caretaker will be able to more easily detect ill, disadvantaged, or dead animals. Pigs that are seriously ill, disadvantaged, or dead can give valuable information about the other animals' conditions. Dead animals should be removed from the living space upon identification.

Notes for Site Assessors:

- ✓ If a mortality is discovered within the living space during a Site Assessment, confirm with the caretaker and the records when the last barn check was completed. If it is possible the pig died between the last barn check and the beginning of the Site Assessment, the site should be marked as acceptable for this area.

Site Assessment Criteria:

This question will be displayed in the Animal Benchmarking section of the final assessment report.

Question 54: Are dead animals removed from the living space upon identification?

- Yes—Mark "Acceptable" on the site assessment form.
- No—Mark "Develop and Implement an Action Plan" on the site assessment form.

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 contaminants, such as dust and various gases, which contribute to the quality of the air within the pigs' environment. Some air contaminants, 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 contaminant that can directly impact pig well-being and concentrations should not exceed 25ppm. Physical signs consistent with exposure to poor air quality include watery and mattery eyes and difficulty breathing. If these physical signs are present in an air space, appropriate actions should be taken which may include actual ammonia measurements using dosimeter tubes,

air meters, or litmus papers. Samples should be taken at pig height (approximately 1 foot above the floor) and in the room center at one-third intervals down the length of the barn. Avoid taking samples near inlets and direct heat sources. In addition, caretakers should adjust ventilation management.

Notes for Site Assessors:

- ✓ Observe the pigs for physical signs consistent with exposure to poor air quality. These physical signs include watery and mattery eyes and difficulty breathing.
- ✓ If physical signs are present, measure the ammonia concentrations:
 - » At pig height (approximately 1 foot above the floor)
 - » In the center of the room (from side-to-side) at one-third intervals down the length of the barn
- ✓ Calculate barn/room average ammonia concentration and record in the comments section on the site assessment form.
- ✓ Avoid taking samples near inlets and direct heat sources.

Ammonia Concentration (ppm) first 1/3 of building	
Ammonia Concentration (ppm) second 1/3 of building	
Ammonia Concentration (ppm) third 1/3 of building	
Total	
Average Ammonia Concentration (ppm) Total ÷ 3	

Site Assessment Criteria:

This question will be displayed in the Animal Benchmarking section of the final assessment report.

Question 55: Do pigs show exposure to poor air quality?

- Yes—measure the average ammonia concentration in barn and answer the second question: does the ammonia concentration exceed 25ppm?
 - Yes—Mark “Develop and Implement an Action Plan” on the site assessment form
 - No—Mark “Acceptable” on the site assessment form.

SPACE ALLOWANCE

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.

For animals housed in individual stalls, the stall size must be appropriate for the physical size of the pig and cannot cause injury to the animal. Back-to-back, back-to-udder, or udder-to-udder contact is appropriate as long as injury due to contact is not evident. Group housing for pregnant sows

is defined as a housing environment for more than one sow where, after confirmed pregnant, they have the ability to lie down and stand up unimpeded and to turn around.

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 and are considered acceptable temporary housing for piglets. If all piglets are able to perform the criteria listed above without the split-suckling area, they are recorded as having adequate space. The *Swine Care Handbook* gives recommended space allowances for pigs in total confinement, pigs in pens with outside concrete aprons and pigs on pasture. However, 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. Discuss with a PQA Plus advisor the stocking density that meets the needs of the animals given the specifics of the production facility and intended uses.

Notes for Site Assessors:

- ✓ Body Space should be reported for each phase of production (breeding and non-breeding) and for total pigs observed.
- ✓ 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 site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked “Acceptable” or “Develop and Implement an Action Plan”.






Adequate Space	56a. Total breeding animals observed with adequate space:	
	56b. % of breeding herd with adequate space:	
	56c. Total non-breeding animals observed with adequate space:	
	56d. % of non-breeding herd with adequate space:	
	56e. Total animals observed with adequate space (56a + 56c):	
	56f. % total with adequate space (56e ÷ total number of animals assessed):	
	56. Do at least 90% of animals observed have adequate space allowance (56f ≥ 90%)?	

Site Assessment Criteria:

This question will be displayed in the Animal Benchmarking section of the final assessment report.

Question 56: Do at least 90% of pigs observed have adequate space allowance?

- Yes—Mark “Acceptable” on the site assessment form.
- No—Mark “Develop and Implement an Action Plan” on the site assessment form.

Body Condition Scoring					
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)					

BODY CONDITION SCORE (BCS)

Animals should be fed to at least meet their minimum nutrient requirements for growth and maintenance of good body condition. 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. Body condition scoring has been adopted from the industry standard that is based on a 1 (emaciated) to 5 (obese) scale as shown in the Body Condition Scoring table above. Pigs with a BCS of 1 are described as being very thin and their spine, ribs, and hip bones are easily visible.

Animals should be fed according to their body condition. ANY animal with a body condition score less than 2 should receive immediate attention to improve their body condition. Any animal that is non-ambulatory with a body condition score of 1 should be euthanized immediately.

While emaciated (BCS 1) is a potential indicator of a pig's well-being, an obese pig also has increased risks to its health. Obese pigs should have caloric intake decreased. Pigs that are either too thin or too fat could be an indication of a management need and a cause for discussion with a PQA Plus advisor.

Notes for Site Assessors:

- ✓ BCS should be reported for each phase of production (breeding and non-breeding) and for total pigs observed.
- ✓ Complete the calculations below for the number of animals found to have BCS 1 in the breeding and non-breeding herd and record on the site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked "Acceptable" or "Develop and Implement an Action Plan".
- ✓ For all pigs observed with a BCS of 1, ask caretakers if these pigs have been identified and are receiving treatment.

Body Condition Score	57a. Total breeding animals observed with BCS 1:	
	57b. % of breeding herd with BCS 1:	
	57c. Total non-breeding animals observed with BCS 1:	
	57d. % of non-breeding herd with BCS 1:	
	57e. Total animals observed with BCS 1 (57a + 57c):	
	57f. % total with BCS 1 (57e ÷ total # of animals assessed):	
	57. Do 1% or less of the animals observed have a body condition score of 1 (57f ≤ 1%)?	
	58. Have these pigs observed with a BCS of 1 been identified and are receiving attention? <i>NA if zero pigs observed with BCS of 1.</i>	

Site Assessment Criteria:

These questions will be displayed in the Animal Benchmarking section of the final assessment report.

Question 57: Do 1% or less of the pigs observed have a BCS of 1?

- Yes–Mark "Acceptable" on the site assessment form.
- No–Mark "Develop and Implement an Action Plan" on the site assessment form.

Question 58: Have these pigs observed with a BCS of 1 been identified and are receiving attention?

- Yes–Mark "Acceptable" on the site assessment form.
- No–Mark "Develop and Implement an Action Plan on the site assessment form.
- If zero animals are observed with a BCS of 1, mark "Not Applicable or NA" on the site assessment form.

LAMENESS

There are several factors that can contribute to lameness including bacterial infections, heredity, foot and leg structure, injury or trauma, or nutrition. The severity of lameness can be scored using a 0 (no lameness) to 4 (severe lameness) scale as shown in the table below. To detect lameness, ensure all animals are standing in order to observe their ability to bear weight. Pigs that are diagnosed as lame should be treated, culled, or humanely euthanized depending on the cause and degree of lameness. Severely lame pigs that do not show

improvement after two days of treatment should be evaluated per existing euthanasia protocol.

Lameness Scoring	
Score	Description
0	Pig moves freely and uses all four limbs and feet evenly
1	Pig shows weight-shifting activities away from affected limb upon standing but shows little or no lameness or limping when walking
2	Pig obviously shifts weight away from affected limb when standing and shows limping or adaptive behavior when walking (head bob, arched back, caudal swagger, quickened step on affected limb, or shortened stride)
3	Pig is reluctant to stand and/or walk, shows obvious limp and adaptive behaviors when walking (head bob, arched back, caudal swagger, has quickened step on affected limb, or shortened stride)
4	Pig is non-weight bearing on the affected limb when either standing or walking

Lameness Score Scale adapted from Karriker et al., 2013 and Nalon et al., 2014.

Notes for Site Assessors:

- ✓ Pigs should be observed for severe lameness while they are standing or walking. Ask caretakers to help get animals up or move them to observe for lameness.
- ✓ Pigs showing severe lameness should be reported for each phase of production (breeding and non-breeding) and for total pigs observed.
- ✓ Complete the calculations below for the number of animals found to have severe lameness in the breeding and non-breeding herd and record on the site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked “Acceptable” or “Develop and Implement an Action Plan”.
- ✓ For all pigs observed with severe lameness, ask caretakers if these pigs have been identified and if they are receiving treatment.

Lameness	59a. Total breeding animals observed with severe lameness:	
	59b. % of breeding herd with severe lameness:	
	59c. Total non-breeding animals observed with severe lameness:	
	59d. % of non-breeding herd with severe lameness:	
	59e. Total animals observed with severe lameness (59a + 59c):	
	59f. % total with severe lameness (59e ÷ total number of animals assessed):	
	59. Do 2% or less of the pigs observed show signs of severe lameness (59f ≤ 2%)?	
	60. Have these pigs observed to be severely lame been identified by caretakers and are receiving attention? NA if zero pigs observed with severe lameness.	

Site Assessment Criteria:

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 59: Do 2% or less of the pigs observed show signs of severe lameness?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan on the site assessment form.

Question 60: Have these pigs observed to be severely lame been identified by caretakers and are receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan on the site assessment form.
- If zero animals are observed with severe lameness, mark “Not Applicable or NA” on the site assessment form.

ABSCESSSES

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. Swollen ears are typically hematomas and are not considered abscesses. Large numbers of pigs observed with ear hematomas should be noted in the general comments of the site assessment form. Note the number of animals observed with abscesses and if one location is more common than others.

Notes for Site Assessors:

- ✓ Abscesses should be reported for each phase of production (breeding and non-breeding) and for total pigs observed.
- ✓ Complete the calculations below for the number of animals found to have abscesses in the breeding and non-breeding herd and record on the site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked “Acceptable” or “Develop and Implement an Action Plan”.
- ✓ For all pigs observed with abscesses, ask caretakers if these pigs have been identified and if they are receiving treatment.

Abscesses	61a. Total breeding animals observed with abscesses:	
	61b. % of breeding herd with abscesses:	
	61c. Total non-breeding animals observed with abscesses:	
	61d. % of non-breeding herd with abscesses:	
	61e. Total animals observed with abscesses (61a + 61c):	
	61f. % total with abscesses (61e ÷ total # of animals assessed):	
	61. Do 5% or less of the pigs observed have abscesses (61f ≤ 5%)?	
	62. Have these pigs observed with abscesses been identified by caretakers and receiving attention? NA if zero pigs observed with abscesses.	

Site Assessment Criteria

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 61: Do 5% or less of the pigs observed have abscesses?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 62: Have these pigs observed with abscesses been identified by caretakers and receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If zero animals are observed with abscesses, mark “Not Applicable or NA” on the site assessment form.

OPEN WOUNDS

Open wounds are defined as gashes, breaks, or openings that completely penetrate the skin, such as bites or other lesions that penetrate through the skin. Animals with wounds that have scabbed over must not be counted as an open wound. Note the location of the open wound to determine if one area is more common than others and work to identify the likely cause of the wounds. Note the number of animals observed with open wounds. Lesions associated with ear tip necrosis and side suckling sores should be included here and noted in the comments. For piglets in the farrowing room, lesions associated with castration, ear notching, and tail docking are not included. Lesions associated with tattooing or treatment at any time are not included. Shoulder sores are evaluated in a separate section so are not included here.

Notes for Site Assessors:

- ✓ Open wounds should be reported for each phase of production (breeding and non-breeding) and for total pigs observed.
- ✓ Complete the calculations below for the number of animals found to have open wounds in the breeding and non-breeding herd and record on the site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked “Acceptable” or “Develop and Implement an Action Plan”.
- ✓ For all pigs observed with open wounds, ask caretakers if these pigs have been identified and if they are receiving treatment.

Open Wounds	63a. Total breeding animals observed with open wounds:	
	63b. % of breeding herd with open wounds:	
	63c. Total non-breeding animals observed with open wounds:	
	63d. % of non-breeding herd with open wounds:	
	63e. Total animals observed with open wounds (63a + 63c):	
	63f. % total with open wounds (63e ÷ total # of animals assessed):	
	63. Do 1% or less of the pigs observed have open wounds (63f ≤ 1%)?	
	64. Have these pigs observed with open wounds been identified by caretakers and receiving attention? <i>NA if zero pigs observed with open wounds.</i>	

Site Assessment Criteria

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 63: Do 1% or less of the pigs observed have open wounds?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 64: Have these pigs observed with open wounds been identified by caretakers and receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If zero animals are observed with open wounds, mark “Not Applicable or NA” on the site assessment form.

SCRATCHES

Scratches are injuries to the skin that go into the skin but do not go all the way through. Fresh scratches will still have redness and inflammation. The number of pigs with scratches over 12 inches in length should be noted.

Notes for Site Assessors:

- ✓ Scratches should be reported for each phase of production (breeding and non-breeding) and for total pigs observed.
- ✓ Animals with scratches over 12 inches that have scabbed over should not be counted.
- ✓ Complete the calculations below for the number of animals found to have scratches in the breeding and non-breeding herd and record on the site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked “Acceptable” or “Develop and Implement an Action Plan”.
- ✓ For all pigs observed with scratches, ask caretakers if these pigs have been identified and if they are receiving treatment.

Scratches	65a. Total breeding animals observed with scratches:	
	65b. % of breeding herd with scratches:	
	65c. Total non-breeding animals observed with scratches:	
	65d. % of non-breeding herd with scratches:	
	65e. Total animals observed with scratches (65a + 65c):	
	65f. % total with scratches (65e ÷ total # of animals assessed):	
	65. Do 10% or less of the pigs observed have scratches longer than 12 inches (65f ≤ 10%)?	
	66. Have these pigs observed with scratches longer than 12 inches been identified by caretakers and receiving attention? <i>NA if zero pigs observed with scratches.</i>	

Site Assessment Criteria

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 65: Do 10% or less of the pigs observed have scratches longer than 12 inches?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 66: Have these pigs observed with scratches longer than 12 inches been identified by caretakers and receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If zero animals are observed with scratches longer than 12 inches, mark “Not Applicable or NA” on the site assessment form.

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 BCS 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 veterinarian advice. Placing rubber mats in the farrowing and gestation stall has been shown to reduce shoulder sores and reduce healing time. Note the number of animals observed with shoulder sores that are open sores or scabbed over.

Notes for Site Assessors:

- ✓ Animals with a healed shoulder sore with no scab should not be counted.
- ✓ Shoulder sores are observed in the breeding herd only.
- ✓ Complete the calculations below for the number of animals found to have shoulder sores in the breeding herd and record on the site assessment form.
- ✓ If the site only has non-breeding animals, questions 67

and 68 should be marked as “Not applicable or NA” on the site assessment form.

- ✓ For all pigs observed with shoulder sores, ask caretakers if these pigs have been identified and if they are receiving treatment.

Shoulder Sores	67a. Total breeding animals observed with shoulder sores:	
	67b. % of breeding herd with shoulder sores (67a ÷ # of breeding animals assessed):	
	67. Do 5% or less of the breeding herd observed have shoulder sores (67b ≤ 5%)? <i>NA if no breeding pigs on site.</i>	
	68. Have these pigs observed with shoulder sores been identified by caretakers and receiving attention? <i>NA if no breeding pigs on the site or zero observed with shoulder sores.</i>	

Site Assessment Criteria:

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 67: Do 5% or less of the breeding herd observed have shoulder sores?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If there are no breeding animals on site, mark “Not Applicable or NA” on the site assessment form.

Question 68: Have these pigs observed with shoulder sores been identified by caretakers and receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If there are no breeding animals on the site or if zero animals are observed with shoulder sores, mark “Not Applicable or NA” on the site assessment form.

TAIL BITING

Tail biting is a behavior that negatively impacts the well-being of the targeted pig. 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. Note and record evidence of tail biting in the herd resulting in open wounds, bleeding, or infection of the tail. Injured animals should be treated, and the biter(s) should be identified if possible and housed separately.

Notes for Site Assessors:

- ✓ Tail biting should be reported for each phase of production (breeding and non-breeding) and for total pigs observed.
- ✓ Complete the calculations below for the number of animals found to have tail biting wounds in the breeding and non-breeding herd and record on the site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked “Acceptable” or “Develop and Implement an Action Plan”.
- ✓ For all pigs observed with tail biting lesions, ask caretakers if these pigs have been identified and if they are receiving treatment.

Tail Biting	69a. Total breeding animals observed with tail biting lesions:	
	69b. % of breeding herd with tail biting lesions:	
	69c. Total non-breeding animals observed with tail biting lesions:	
	69d. % of non-breeding herd with tail biting lesions:	
	69e. Total animals observed with tail biting lesions (68a + 69c):	
	69f. % total with tail biting lesions (69e ÷ total # of animals assessed):	
	69. Do 5% or less of the pigs observed show evidence of tail biting in the herd (69f ≤ 5%)?	
	70. Have these pigs observed with evidence of tail biting been identified by caretakers and receiving attention? NA if zero pigs observed with tail biting lesions.	

Site Assessment Criteria

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 69: Do 5% or less of the pigs observed show evidence of tail biting in the herd?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 70: Have these pigs observed with evidence of tail biting been identified by caretakers and receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If zero animals are observed with tail biting lesions, mark “Not Applicable or NA” on the site assessment form.

HERNIAS

Hernias are the protrusion of the intestines through the muscles of the abdomen or groin. This includes abdominal and scrotal hernias. No more than 5% of the pigs observed have hernias larger than the size of a softball. Pigs with hernias that are perforated must be euthanized. Pigs with hernias that are ulcerated and necrotic must be euthanized. Pigs with large hernias that touch the ground while standing and cause difficulty walking and are ulcerated must be euthanized.

Notes for Site Assessors:

- ✓ Hernias are observed in the non-breeding herd only.
- ✓ Complete the calculations below for the number of animals found to have hernias larger than the size of a softball in the non-breeding herd and record on the site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked “Acceptable” or “Develop and Implement an Action Plan”.
- ✓ If the site only has breeding animals, questions 70 and 71 should be marked as “Not applicable or NA” on the site assessment form.
- ✓ For all pigs observed with hernias, ask caretakers if these pigs have been identified and if they are receiving treatment.

Hernias	71a. Total non-breeding animals observed with hernias	
	71b. % of non-breeding herd with hernias (71a ÷ # of non-breeding animals assessed):	
	71. Do 5% or less of the non-breeding herd observed have hernias (71b ≤ 5%)? NA if no non-breeding pigs on site.	
	72. Have these pigs observed with hernias been identified by caretakers and receiving attention? NA if no non-breeding pigs on the site or zero observed with hernias.	

Site Assessment Criteria:

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 71: Do 5% or less of the non-breeding herd observed have hernias?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If no non-breeding pigs on site, mark “Not Applicable or NA” on site assessment form.

Question 72: Have these pigs observed with hernias been identified by caretakers and receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If no non-breeding pigs on the site or if zero animals are observed with hernias, mark “Not Applicable or NA” on the site assessment form.

PROLAPSES

Prolapses are an eversion or the turning inside-out of the rectal lining, vagina, or uterus. Common causes are pigs coughing or piling to stay warm. Docking tails too close to the body or the pigs’ genetics can also contribute to the occurrence of rectal prolapses. These animals should be identified and isolated or treated as quickly as possible to prevent further injury and to enhance the chance of full recovery. Pigs with uterine prolapses must be euthanized immediately. Prolapses that have not been addressed and

have become necrotic are unacceptable and these pigs should be euthanized. A veterinarian can help develop a treatment plan, but finding and addressing the contributing cause is also very important.

Notes for Site Assessors:

- ✓ Prolapses should be reported for each phase of production (breeding and non-breeding) and for total pigs observed.
- ✓ Complete the calculations below for the number of animals found to have prolapses in the breeding and non-breeding herd and record on the site assessment form.
- ✓ Use the total animal percentage to determine if the question is marked “Acceptable” or “Develop and Implement an Action Plan”.
- ✓ For all pigs observed with prolapses, ask caretakers if these pigs have been identified and if they are receiving treatment.

Prolapses	73a. Total breeding animals observed with prolapses:	
	73b. % of breeding herd with prolapses:	
	73c. Total non-breeding animals observed with prolapses:	
	73d. % of non-breeding herd with prolapses:	
	73e. Total animals observed with prolapses (73a + 73c):	
	73f. % total with prolapses (73e ÷ total # of animals assessed):	
	73. Do 1% or less of the pigs observed have prolapses (73f ≤ 1%)?	
	74. Have these pigs observed with prolapses been identified by caretakers and receiving attention? <i>NA if zero pigs observed with prolapses.</i>	

Site Assessment Criteria

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 73: Do 1% or less of the pigs observed have prolapses?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 74: Have these pigs observed with prolapses been identified by caretakers and receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If zero animals are observed with prolapses, mark “Not Applicable or NA” on the site assessment form.

VULVA INJURIES

Vulva injuries can result in open wounds, bleeding, and infection. Injuries to the vulva can occur from being stepped on or bitten by another pig. Note and record evidence of vulva injuries in the breeding herd resulting in open wounds, bleeding, or infection.

Notes for Site Assessors:

- ✓ Vulva injuries are observed in the breeding herd only.
- ✓ Complete the calculations below for the number of animals found to have vulva injuries in the breeding herd and record on the site assessment form.
- ✓ If the site only has non-breeding animals or only male breeding animals, questions 75 and 76 should be marked as “Not applicable or NA” on the site assessment form.
- ✓ For all pigs observed with vulva injuries, ask caretakers if these pigs have been identified and if they are receiving treatment.

Vulva injuries	75a. Total breeding animals observed with vulva injuries:	
	75b. % of breeding herd with vulva injuries (75a ÷ number of breeding animals assessed):	
	75. Do 5% or less of the breeding herd observed have vulva injuries (75b ≤ 5%)? <i>NA if no breeding or only male breeding pigs on site.</i>	
	76. Have these pigs observed with vulva injuries been identified by caretakers and receiving attention? <i>NA if no breeding or only male breeding pigs on the site or zero observed with vulva injuries.</i>	

Site Assessment Criteria:

These questions will be displayed in the **Animal Benchmarking** section of the final assessment report.

Question 75: Do 5% or less of the breeding herd observed have vulva injuries?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site only has non-breeding animals, mark “Not applicable or NA” on the site assessment form.

Question 76: Have these pigs observed with vulva injuries been identified by caretakers and receiving attention?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site only has non-breeding animals or if zero animals are observed vulva injuries, mark “Not Applicable or NA” on the site assessment form.

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.

PENNING, FLOORING AND ALLEYWAY MAINTENANCE

The condition of the pens, floors and alleyways can affect other indicators of a pig’s well-being. Penning, floors and alleyways should be appropriate for the phase of production, be in a good state of repair and not cause or pose an imminent threat of injury to the animal. For example, sharp protruding

objects could affect the number and type of skin lesions found on the pigs. Pens with broken slats can contribute to lameness or other leg injuries. For indoor 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. Non-slip flooring to provide good footing is essential in areas such as loading ramps, scales, restraint chutes or breeding pens where animals are handled. If more than 1% of the animals fall during handling, there is a problem that needs to be corrected. Falling is defined as when a pig loses an upright position suddenly in which a part of the body other than the limbs touches the ground. Housing should be designed to allow for good drainage so that pigs have access to a clean, dry area to lie down if they choose. If bedding is used, it must be dry enough not to transfer mud or manure onto the body of the animal. Deep mud or muck with no dry place to lay is unacceptable. Sites where wet flooring is observed as a result of using supplemental cooling such as misters should be marked as acceptable.

CHUTE MAINTENANCE

Chutes should be appropriate for the phase of production, be in a good state of repair and not cause or pose an imminent threat of injury to the animal. Before loading or unloading pigs, inspect the chute for damage.

- Remove or repair sharp, protruding or otherwise injurious items.
- Repair or replace broken or missing cleats.
- Regularly inspect and maintain moving parts such as cables, pulleys and hinges as necessary.
- Remove potential distractions from ramps and chutes. 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 TQA program.

FEEDER MAINTENANCE

There are a wide variety of feeders and feeding equipment available today. Feeders should be in a good state of repair to allow for unobstructed feed delivery and not cause injury to pigs. Whatever type used in the operation, the number of feeding spaces and their size should allow 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. Therefore, it is important to have feed readily available and easy to access. Additional information can be found in the *Swine Care Handbook*.

WATERER MAINTENANCE

Several types of waterer designs are available for use in pork production. Whatever type is used in the operation, waterers should be in a good state of repair to allow for unobstructed water delivery and not cause injury 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. Enough waterers should be available within a pen to decrease competition for the resource. Specific information about appropriate water requirements per day and suggested flow rates can be found in the Water Requirements by Phase table on page 30.

Notes for Site Assessors:

- ✓ Evaluate the housing for a design that allows for good drainage and where pigs have access to a dry/clean area to lie down if they choose. Sites where wet flooring is observed as a result of using supplemental cooling such as misters should be marked as acceptable.
- ✓ If bedding is used in the facility, evaluate if it is dry enough not to transfer mud or manure on the body of the animal.
- ✓ Deep mud/muck with no dry place to lay is unacceptable.
- ✓ When observing facilities, site assessors should evaluate pens/stalls where the animals in their sample herd are housed.
- ✓ The site assessor may or may not enter the pens per their discretion. However, items such as feeders, waterers and animal movement may require a site assessor to enter the pen.
- ✓ Evaluate feeders and waterers not only for state of repair and functionality, but to verify they are allowing for unobstructed feed or water delivery.
- ✓ Evaluate waters for their position such that animals can drink freely.
- ✓ Some sites may use temporary or mobile chutes during loading/unloading and the chute may not be at the site at the time of the site assessment.

Site Assessment Criteria:

These questions will be displayed in the Facility section of the final assessment report.

Question 77: Is the penning appropriate for the phase of production and in a good state of repair and not causing injury or posing an imminent threat of injury to the animal?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 78: Is the flooring appropriate for the phase of production and in a good state of repair and not causing or posing an imminent threat of injury to the animal?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 79: Are the chutes in a good state of repair and not causing or posing an imminent threat of injury to the animals?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If a chute is not located at the site, mark “Not Applicable or NA” on the site assessment form.

Question 80: Are the alleyways in a good state of repair and not causing or posing an imminent threat of injury to the animals?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 81: Are the feeders in a good state of repair to allow for unobstructed feed delivery and not causing or posing an imminent threat of injury to the pigs?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 82: Are the waterers in a good state of repair and positioned to allow for unobstructed water delivery and are not causing or posing an imminent threat of injury to the animals?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 83: Do the pigs have a dry space to lay down?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

TRANSPORT/LOAD OUT

Transportation involves factors that could be perceived as stressful to a pig such as unfamiliar noises and vibrations, rounding corners, changes in speed (acceleration/ deceleration), and potential temperature extremes. Handlers and transporters should implement procedures that make transportation as safe and humane as possible. Before loading a truck it should be correctly prepared for its journey including determining loading density, proper setup for weather conditions, and scheduling of transport.

HANDLING EQUIPMENT

Animal handling equipment that aids in sorting and moving pigs in a safe, humane and efficient manner are available to be used during animal handling. Handling equipment is effective by providing barriers or stimuli including:

- Physical barrier (i.e. sorting board).
- Visual barrier (i.e. matador’s cape).
- Auditory stimulus (i.e. rattle or shaker paddle).
- Visual stimulus (i.e. nylon flag).

Most of these tools are effective for a specific situation and should not be used for others. For example, a plastic rattle or shaker paddle may be effective for moving weaned piglets from the farrowing room to the nursery, but is not a tool to use when moving a boar to his pen after estrus detection. Animal handling equipment should be in good working order and not broken or have any sharp edges. Pipes, sharp or pointed objects or other items which would cause injury or unnecessary pain to the animal should not be used when moving pigs.

Using an electric prod to move a pig is stressful and should not be used as a primary tool for animal movement. It should only be used as a last resort.

- Numerous research studies have shown increased use of an electric prod increases stress in pigs, so 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 the 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 five seconds to respond before another shock is given. No more than 25% of animals should receive an electric shock. If a single pig is prodded more than once, it is only counted as one animal. Prods should not be used more than twice on animals that refuse to move. Excessive prod use is considered a willful act of abuse. Electric prods should not be used when moving pigs from the pen.

FACILITIES AND EQUIPMENT

Facilities should be properly designed and constructed, and in good repair, with functional equipment in place before loading or unloading pigs. Lighting should be routinely checked in all movement areas.

Trailers should be kept in a good state of repair and properly aligned with the loading and unloading area. The trailer should have non-slip solid flooring to prevent animals from slipping and falling. All gating and doors should open and close freely and must be able to be secured shut and not have gaps where pigs can get their head or legs stuck or fall out of the truck. Internal ramps should function properly and extend all the way to the floor. There should be no sharp or protruding objects in the trailer that may injure the pigs. Ensure drain plugs are securely in place prior to loading pigs onto the trailer. Trailer interiors should be equipped with sufficient lighting if loading or unloading trailers in the dark.

Handlers should move pigs in a way that prevents them from falling. Falling is defined as when a pig loses an upright position suddenly in which a part of the body other than the limbs touches the ground. Less than 1% of animals fall during loading or unloading.

LOADING DENSITY

Overcrowding pigs on a trailer is preventable. Loading density in the trailer should be observed for overcrowding. Signs of overcrowding may include piling, excessive squealing or panting. Gates should be able to close without having to force the pigs into the space. Once a gate is closed, watch to see if the pigs have room to stand without climbing on top of each other. Listen for pigs that are squealing due to being stepped on or crowded.

If overcrowding is suspected, reduce the number of head per compartment. Pigs in overcrowded conditions will quickly overheat and begin panting, open-mouth breathing and may become injured, fatigued or even die.

Optimal loading density is dependent upon temperature, trailer design, compartment size, etc. Changes in loading density need to be made to accommodate the weight of the pig or weather conditions. The need for these changes may outweigh transport costs and number of pigs left in the barn on a given day for the benefit of the animal's well-being. Research has shown that increasing loading density also increases transport losses.

WEATHER CONDITIONS

Pigs do not have a thick coat of hair nor do they have the ability to sweat, making them sensitive to heat and cold stress. While temperature is not always the primary cause for pigs becoming non-ambulatory or dying during transport, it can be a factor. Trailers should be appropriately equipped for weather conditions during transport. Protocols should comply with TQA and there may be variation depending on weather. The table below provides recommended truck setup procedures for transporting finisher pigs. Too much bedding can be harmful to the pig in warm temperatures.

Recommended Truck Setup Procedures Based on Air Temperatures (Finisher Pigs)		
Estimated Air Temperature	Bedding* (recommended bags/trailer)	Side-Slats (% closed)
≤10° F	Heavy (6 bags)	90-95
11 - 20° F	Heavy (4-6 bags)	75-90
21 - 30° F	Heavy (4-6 bags)	50-75
31 - 40° F	Medium (3-4 bags)	50-75
41 - 50° F	Medium (3-4 bags)	25-50
51 - 60° F	Medium (3-4 bags)	0-25
61 - 90° F	Medium (3-4 bags)	0
> 90° F	Light (1-2 bags)	0

*Bedding refers to a 50 pound bale of wood shavings
Adapted from Xiong, Y., et al., 2013 and McGlone, J., et al., 2014.

Notes for Site Assessors:

- ✓ **If there is no Transport/Load-out taking place during the Site Assessment, you are not required to utilize this section.**
- ✓ If loading animals for transport or unloading into the barn is occurring, the following should be observed during the Site Assessment.
 - » The Assessment should include the entire loadout process for one trailer.
 - » It is suggested to observe 1/3 of the load from the pen, 1/3 of the load from the alley, and 1/3 of the load from the chute.
 - » Observing the load from these locations is ideal,

but biosecurity practices or facility design may limit observation from one or more of these suggested locations. If the trailer cannot be observed during load-out, questions 88, 91, 92 and 93 can be marked "Not Observed".

- ✓ If it is necessary for caretakers 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 5 seconds to respond before another shock is given.
- ✓ Site assessors need to have some visual, aural, or behavioral indication that the prod was energized when applied to the pig.
- ✓ If a single pig is prodded more than once, it is only counted as 1 animal.
- ✓ Prods should not be used on non-ambulatory pigs that have clearly been identified as non-ambulatory.
- ✓ Prods should not be used more than twice on ambulatory animals that refuse to move.
- ✓ Excessive prod use could qualify as a willful act of abuse.
- ✓ Falling is defined as when a pig loses an upright position suddenly in which a part of the body other than the limbs touches the ground.
- ✓ Signs of overcrowding on the trailer may include piling, excessive squealing, or panting.
- ✓ Trailer gates should be able to close without having to force the pigs into the space.
- ✓ Once a gate is closed, watch to see if the pigs have room to stand without climbing on top of each other.
- ✓ Listen for pigs that are squealing due to being stepped on or crowded.
- ✓ Verify that no pigs that are unable to walk or are significantly injured are being loaded for transport.
- ✓ Verify the trailer is properly aligned with the loading/unloading area.
- ✓ Confirm the trailer is in a good state of repair.
- ✓ Verify trailers are appropriately equipped for weather conditions during transport. Protocols should comply with TQA and there may be variation depending on weather and phase of production.

Site Assessment Criteria:

These questions will be displayed in the Transport/Load-Out section of the final assessment report.

Question 85: Are any pigs that are unable to walk or significantly injured being loaded for transport?

- Yes–Mark "Develop and Implement an Action Plan" on the site assessment form.
- No–Mark "Acceptable" on the site assessment form.

Question 86: Are electric prods used as the primary tool for animal movement?

- Yes–Mark "Develop and Implement an Action Plan" on the site assessment form.
- No–Mark "Acceptable" on the site assessment form.

Question 87: If electric prods are used, are they being applied correctly?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the site does not use electric prods, mark “Not Applicable or NA” on the site assessment form.

Question 88: Do pigs loaded on the trailer show signs of overcrowding?

- Yes–Mark “Develop and Implement an Action Plan” on the site assessment form.
- No–Mark “Acceptable” on the site assessment form.
- If the trailer could not be observed during the assessment, mark “Not Observed” on the site assessment form.

Question 89: Do 1% or less of pigs fall during loading or unloading?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 90: Do 25% or less of the pigs being moved receive an electric shock?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.

Question 91: Is the trailer in a good state of repair?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the trailer could not be observed during the assessment, mark “Not Observed” on the site assessment form.

Question 92: Is the trailer properly aligned with the loading/unloading area?

- Yes–Mark “Acceptable” on the Site site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the trailer could not be observed during the assessment, mark “Not Observed” on the site assessment form.

Question 93: Is the trailer appropriately equipped for weather conditions and phase of production during transport?

- Yes–Mark “Acceptable” on the site assessment form.
- No–Mark “Develop and Implement an Action Plan” on the site assessment form.
- If the trailer could not be observed during the assessment, mark “Not Observed” on the site assessment form.



Premises ID: _____ State Site is Located: _____

Farm Name/Description: _____ Date of Assessment: _____

Total # of Breeding Animals On-Site: _____ Breeding Animals Assessed: _____

Total # of Non-Breeding Animals On-Site: _____ Non-Breeding Animals Assessed: _____

 Assessment performed by: ☐ Certified Advisor ☐ Endorsed Producer ☐ Endorsed Field Staff

Producer Name: _____ PQA Plus #: _____

Address: _____

Phone: _____ Email: _____

 Phase of Production (check all that apply): ☐ Breeding ☐ Non-Breeding

Owner of Pigs: _____

	Question	Acceptable	Develop/Implement an Action Plan	Observations/Comments
External Facility	1. Does the site have a log for visitors to the facility?	Yes		
	2. Does the site have signage or other methods around the facility to control and restrict access for biosecurity compliance?	Yes		
Standard Operating Procedures	3. Does the site have a written SOP for animal handling procedures?	Yes		
	4. Does the site have a written SOP for piglet processing procedures, specifically castration and tail docking, that complies with AASV guidelines? <i>NA if the site does not farrow piglets.</i>	Yes/NA		
	5. Does the site have a written SOP for feeding and watering protocols?	Yes		
	6. Does the site have a written SOP for conducting daily observations?	Yes		
	7. Does the site have a written SOP for caretaker training?	Yes		
	8. Does the site have a written SOP for treatment management?	Yes		
	9. Is there a written SOP for needle usage that includes a section on broken needles covering prevention, identification of suspect pigs and protocol for what to do with that animal? <i>NA for sites using needleless systems.</i>	Yes/NA		
	10. Does the site have a written biosecurity SOP that contains information covering barn sanitation, rodent control, worker & visitor entry policies, and general farm security measures?	Yes		

SITE ASSESSMENT FORM page 2

	Question	Acceptable	Develop/Implement an Action Plan	Observations/Comments
Office Records	11. Are transporters delivering or picking up pigs from the site TQA Certified?	Yes		
	12. Do all caretakers have a current PQA Plus Certification or are within 90 days from their new employment date?	Yes		
	13. Does the site have a valid PQA Plus Site Status?	Yes		
	14. Is there a written record of emergency backup equipment being tested at least twice per year? <i>NA if the site is outdoors or non-mechanically ventilated.</i>	Yes/NA		
	15. Does the site have documentation of annual caretaker training specific to their daily duties?	Yes		
	16. Does the site have a written zero tolerance policy for willful acts of abuse?	Yes		
	17. Does the site have a reporting mechanism in place for caretakers to report abuse?	Yes		
	18. Does the site conduct an internal site assessment of the facility, animals, caretakers, and records (<i>breeding: quarterly; non-breeding: semi-annually</i>)?	Yes		
	19. Does the site have 12 months of records to verify the animals were observed at least once daily?	Yes		
	20. Does the site have 12 months of mortality records?	Yes		
	21. Does the site have a valid VCPR?	Yes		
	22. Does the site have compliant medication and treatment records?	Yes		
	23. Are medication and treatment records retained for 12 months?	Yes		
	24. Are VFD records retained according to FDA guidelines? <i>NA for sites not using products requiring a VFD.</i>	Yes/NA		
Office Training Records	25. Can caretakers articulate their method for tracking what treatments have been administered and how long each animal has been receiving treatment?	Yes		
	26. Can caretakers articulate the site's protocol for handling broken needles? <i>NA for sites using needleless systems.</i>	Yes/NA		
	27. Are caretakers able to articulate the training they received specific to their daily duties?	Yes		
	28. If observed on the site, is specialized labor able to articulate or demonstrate the training they received specific to their duties? <i>N.O. if not observed during the assessment.</i>	Yes/N.O.		
	29. Are caretakers responsible for euthanasia able to articulate the site's euthanasia plan?	Yes		
	30. Can caretakers articulate the site's zero tolerance policy for willful acts of abuse and how to report abuse?	Yes		
	31. Can caretakers responsible for piglet processing procedures demonstrate or articulate the training they received to conduct the procedure according to the site's SOP? <i>NA if the site does not farrow piglets.</i>	Yes/NA		

SITE ASSESSMENT FORM page 3

	Question	Acceptable	Develop/Implement an Action Plan	Observations/Comments
Office	32. Does the site have an operational emergency backup system? <i>NA if the site is outdoors or non-mechanically ventilated.</i>	Yes/NA		
	33. Is the euthanasia equipment readily available for use?	Yes		
	34. Does the site have 12 months of records demonstrating routine maintenance of euthanasia equipment?	Yes		
	35. Does the site have a written euthanasia plan that is consistent with the current AASV guidelines and is accessible to all caretakers in the facility?	Yes		
	36. Does the site have a written emergency action plan and are emergency contact and site address numbers posted?	Yes		
Medications	37. Are animal health products stored properly and not past the expiration date?	Yes		
	38. Is the site using the appropriate needle sizes per PQA Plus recommendations?	Yes/NA		
	39. Are the 16 gauge or larger size (lower number) needles on the site detectable?	Yes/NA		
	40. Are used sharps placed in a rigid puncture-resistant container that is labeled properly?	Yes/NA		
Animal Observations	41. Were any willful acts of abuse or neglect observed during the assessment?	No		
	42. Are animals euthanized in a timely manner?	Yes		
	43. If euthanasia is observed, are animals handled humanely during the process?	Yes/Not Observed		
	44. If euthanasia is observed, are animals euthanized in place or is suitable equipment available to move non-ambulatory animals so they can be humanely euthanized?	Yes/Not Observed		
	45. If euthanasia is observed, do caretakers confirm insensibility and death after the euthanasia method is applied and before being removed from the facility?	Yes/Not Observed		
	46. If euthanasia is observed, are caretakers following the site's SOP for euthanasia? <i>N.O. if euthanasia is not observed during the assessment.</i>	Yes/Not Observed		
	47. Are animals handled appropriately for their age?	Yes		
	48. Can animal caretakers can articulate or demonstrate appropriate use of equipment during animal handling?	Yes		

SITE ASSESSMENT FORM page 4

	Question	Acceptable	Develop/Implement an Action Plan	Observations/Comments
	49. Is proper handling equipment available and in good working order with no sharp edges?	Yes		
	50. Are electric prods used on suckling or weaned piglets? <i>NA if suckling or weaned pigs are never on the site.</i>	No/NA		
	51. Are electric prods used to move nursery, market pigs, sows, or boars out of pens?	No		
	52. Do pigs show thermoregulatory behaviors that indicate they are too hot or too cold and the air temperature at the pig level is outside the preferred temperature range for the phase of production? If so, has the caretaker taken appropriate actions to minimize heat or cold stress?	Yes		
	53. Do the pigs have access to feed and water according to the site's SOP?	Yes		
	54. Are dead animals removed from the living space upon identification?	Yes		
	55. Do pigs show signs of exposure to poor air quality? If so does the ammonia concentration exceed 25 ppm?	No; No or Yes; No		
Animal Observations	Adequate Space			
	56a. Total breeding animals observed with adequate space:			
	56b. % of breeding herd with adequate space:			
	56c. Total non-breeding animals observed with adequate space:			
	56d. % of non-breeding herd with adequate space:			
	56e. Total animals observed with adequate space (56a + 56c):			
	56f. % total with adequate space (56e ÷ total number of animals assessed):			
	56. Do at least 90% of animals observed have adequate space allowance (56f ≥ 90%)?	Yes		
	Body Condition Score			
	57a. Total breeding animals observed with BCS 1:			
	57b. % of breeding herd with BCS 1:			
	57c. Total non-breeding animals observed with BCS 1:			
	57d. % of non-breeding herd with BCS 1:			
	57e. Total animals observed with BCS 1 (57a + 57c):			
	57f. % total with BCS 1 (57e ÷ total # of animals assessed):			
	57. Do 1% or less of the animals observed have a body condition score of 1 (57f ≤ 1%)?	Yes		
	58. Have these pigs observed with a BCS of 1 been identified and are receiving attention? <i>NA if zero pigs observed with BCS of 1.</i>	Yes/NA		

SITE ASSESSMENT FORM page 5

	Question	Acceptable	Develop/Implement an Action Plan	Observations/Comments
Animal Observations (continued)	Lameness			
	59a. Total breeding animals observed with severe lameness:			
	59b. % of breeding herd with severe lameness:			
	59c. Total non-breeding animals observed with severe lameness:			
	59d. % of non-breeding herd with severe lameness:			
	59e. Total animals observed with severe lameness (59a + 59c):			
	59f. % total with severe lameness (59e ÷ total number of animals assessed):			
	59. Do 2% or less of the pigs observed show signs of severe lameness (59f ≤ 2%)?	Yes		
	60. Have these pigs observed to be severely lame been identified by caretakers and are receiving attention? <i>NA if zero pigs observed with severe lameness.</i>	Yes/NA		
	Abscesses			
	61a. Total breeding animals observed with abscesses:			
	61b. % of breeding herd with abscesses:			
	61c. Total non-breeding animals observed with abscesses:			
	61d. % of non-breeding herd with abscesses:			
	61e. Total animals observed with abscesses (61a + 61c):			
	61f. % total with abscesses (61e ÷ total # of animals assessed):			
	61. Do 5% or less of the pigs observed have abscesses (61f ≤ 5%)?	Yes		
	62. Have these pigs observed with abscesses been identified by caretakers and receiving attention? <i>NA if zero pigs observed with abscesses.</i>	Yes/NA		
	Open Wounds			
	63a. Total breeding animals observed with open wounds:			
	63b. % of breeding herd with open wounds:			
	63c. Total non-breeding animals observed with open wounds:			
	63d. % of non-breeding herd with open wounds:			
	63e. Total animals observed with open wounds (63a + 63c):			
	63f. % total with open wounds (63e ÷ total # of animals assessed):			
	63. Do 1% or less of the pigs observed have open wounds (63f ≤ 1%)?	Yes		
	64. Have these pigs observed with open wounds been identified by caretakers and receiving attention? <i>NA if zero pigs observed with open wounds.</i>	Yes/NA		

SITE ASSESSMENT FORM page 6

	Question	Acceptable	Develop/Implement an Action Plan	Observations/Comments
Animal Observations	Scratches	65a. Total breeding animals observed with scratches:		
		65b. % of breeding herd with scratches:		
		65c. Total non-breeding animals observed with scratches:		
		65d. % of non-breeding herd with scratches:		
		65e. Total animals observed with scratches (65a + 65c):		
		65f. % total with scratches (65e ÷ total # of animals assessed):		
		65. Do 10% or less of the pigs observed have scratches longer than 12 inches (65f ≤ 10%)?	Yes	
		66. Have these pigs observed with scratches longer than 12 inches been identified by caretakers and receiving attention? <i>NA if zero pigs observed with scratches.</i>	Yes/NA	
	Shoulder Sores	67a. Total breeding animals observed with shoulder sores:		
		67b. % of breeding herd with shoulder sores (67a ÷ # of breeding animals assessed):		
		67. Do 5% or less of the breeding herd observed have shoulder sores (67b ≤ 5%)? <i>NA if no breeding pigs on site.</i>	Yes/NA	
		68. Have these pigs observed with shoulder sores been identified by caretakers and receiving attention? <i>NA if no breeding pigs on the site or zero observed with shoulder sores.</i>	Yes/NA	
	Tail Biting	69a. Total breeding animals observed with tail biting lesions:		
		69b. % of breeding herd with tail biting lesions:		
		69c. Total non-breeding animals observed with tail biting lesions:		
		69d. % of non-breeding herd with tail biting lesions:		
		69e. Total animals observed with tail biting lesions (69a + 69c):		
		69f. % total with tail biting lesions (69e ÷ total # of animals assessed):		
		69. Do 5% or less of the pigs observed show evidence of tail biting in the herd (69f ≤ 5%)?	Yes	
		70. Have these pigs observed with evidence of tail biting been identified by caretakers and receiving attention? <i>NA if zero pigs observed with tail biting lesions.</i>	Yes/NA	
	Hernias	71a. Total non-breeding animals observed with hernias		
		71b. % of non-breeding herd with hernias (71a ÷ # of non-breeding animals assessed):		
		71. Do 5% or less of the non-breeding herd observed have hernias (71b ≤ 5%)? <i>NA if no non-breeding pigs on site.</i>	Yes/NA	
		72. Have these pigs observed with hernias been identified by caretakers and receiving attention? <i>NA if no non-breeding pigs on the site or zero observed with hernias.</i>	Yes/NA	

SITE ASSESSMENT FORM page 7

		Question	Acceptable	Develop/Implement an Action Plan	Observations/Comments
Animal Observations	Prolapses	73a. Total breeding animals observed with prolapses:			
		73b. % of breeding herd with prolapses:			
		73c. Total non-breeding animals observed with prolapses:			
		73d. % of non-breeding herd with prolapses:			
		73e. Total animals observed with prolapses (73a + 73c):			
		73f. % total with prolapses (73e ÷ total # of animals assessed):			
		73. Do 1% or less of the pigs observed have prolapses (73f ≤ 1%)?	Yes		
		74. Have these pigs observed with prolapses been identified by caretakers and receiving attention? <i>NA if zero pigs observed with prolapses.</i>	Yes/NA		
	Vulva injuries	75a. Total breeding animals observed with vulva injuries:			
		75b. % of breeding herd with vulva injuries (75a ÷ number of breeding animals assessed):			
75. Do 5% or less of the breeding herd observed have vulva injuries (75b ≤ 5%)? <i>NA if no breeding or only male breeding pigs on site.</i>		Yes/NA			
76. Have these pigs observed with vulva injuries been identified by caretakers and receiving attention? <i>NA if no breeding or only male breeding pigs on the site or zero observed with vulva injuries.</i>		Yes/NA			
Indoor Facilities		77. Is the penning appropriate for the phase of production and in a good state of repair and not causing or posing an imminent threat of injury to the animal?	Yes		
		78. Is the flooring appropriate for the phase of production and in a good state of repair and not causing or posing an imminent threat of injury to the animal?	Yes		
		79. Are the chutes in a good state of repair and not causing or posing an imminent threat of injury to the animal? <i>NA if chute is not located at the site.</i>	Yes/NA		
		80. Are the alleyways in a good state of repair and not causing or posing an imminent threat of injury to the animal?	Yes		
		81. Are the feeders in a good state of repair to allow for unobstructed feed delivery and not causing or posing an imminent threat of injury to the pigs?	Yes		
		82. Are the waterers in a good state of repair and positioned to allow for unobstructed water delivery and not causing or posing an imminent threat of injury to the pigs?	Yes		

SITE ASSESSMENT FORM page 8

	Question	Acceptable	Develop/Implement an Action Plan	Observations/Comments
Indoor Facilities	83. Do pigs have a dry space to lie down?	Yes		
	84. Is there evidence that the site's rodent control protocol is being followed?	Yes		
	Did you observe transport/load-out?			
Transportation	85. Are any pigs that are unable to walk or significantly injured being loaded for transport?	No		
	86. Are electric prods used as the primary tool for animal movement?	No		
	87. If electric prods are used, are they being applied correctly? <i>NA if site does not use electric prods.</i>	Yes/NA		
	88. Do pigs loaded on the trailer show signs of overcrowding? <i>N.O. if could not be observed.</i>	No/Not Observed		
	89. Do 1% or less of pigs fall during loading or unloading?	Yes		
	90. Do 25% or less of the pigs being moved receive an electric shock?	Yes		
	91. Is the trailer in a good state of repair? <i>N.O. if could not be observed.</i>	Yes/Not Observed		
	92. Is the trailer properly aligned with the loading/unloading area? <i>N.O. if could not be observed.</i>	Yes/Not Observed		
	93. Is the trailer appropriately equipped for weather conditions and phase of production during transport? <i>N.O. if could not be observed.</i>	Yes/Not Observed		

Producer Signature: _____
 Advisor Signature: _____

General Comments:

Producer authorizes Advisor to access its property and facilities to observe and make assessments. 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 that public disclosure of its information other than in aggregate form may cause irreparable harm to Producer's competitive position. 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 reports; and (ii) individually identifiable information will remain confidential to the fullest extent possible. 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 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 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. 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 BOD verifies only that an assessment was conducted on a particular date. The Advisor's signature is not a guarantee of possible future performance on the site. Producer shall be deemed to agree to and accept the terms and conditions of the PQA Plus program by its execution of this application and/or its provision of information and access to the Advisor.

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Producer Name: _____ Site Description: _____

Premises ID: _____ PQA Plus Advisor: _____

Total # of animals on this site: _____ Total # of animals assessed: _____

Total # Pens: _____ Total # Treatment Pens: _____

Pen #	# of Pigs	Space Allowance	BCS 1	Lameness	Abscesses	Open Wounds	Scratches	Shoulder sores	Tail biting	Prolapses	Vulva Injuries	Penning	Flooring	Feeders	Waters
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	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
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	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
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	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50

Water Flow Rate
Location
Seconds
Ounces

Water Flow Rate
Location
Seconds
Ounces

Recommended Flow Rate
Weaning: 29sec/pint
Grower/Finisher: 17-21sec/pint
Sow/Gilt/Boar: 15sec/pint

continued on reverse

BREEDING INVENTORY page 2 of 2

Number of individual pigs to be assessed 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
10,000 +	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.

Always remember to round up!

Notes
Temperature: Out _____ / In _____ Humidity: Out _____ / In _____ Ammonia: Flooring/Bedding Type:
Site Map/Comments
Empty space for site map and comments

STEP 1		STEP 2	STEP 3	STEP 4	STEP 5
Total Pigs on Site		# to observe from Table 1	Percentage	# of pigs to observe	Pens/pigs to observe
Total Pigs in Breeding					
# in Gestation housed individually					
# in Gestation housed in groups					
# in Farrowing housed individually					
# in Farrowing housed in groups					
# Boars on the site					
Total Pigs in Non-Breeding					
# in Nursery (<10 wks) housed in groups					
# in Finishing (>10 wks) housed in groups					



NON-BREEDING INVENTORY page 1 of 2

Producer Name: _____ Site Description: _____

Premises ID: _____ PQA Plus Advisor: _____

Total # of animals on this site: _____ Total # of animals assessed: _____

Total # Pens: _____ Total # Treatment Pens: _____

Pen #	# of Pigs	Space Allowance	BCS 1	Lameness	Abscesses	Open Wounds	Scratches	Shoulder sores	Tail biting	Prolapses	Vulva Injuries	Penning	Flooring	Feeders	Waters
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	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
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	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
	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
	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
	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
	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
	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
	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
	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
	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
	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50

Water Flow Rate
Location
Seconds
Ounces

Water Flow Rate
Location
Seconds
Ounces

Recommended Flow Rate
Weaning: 29sec/pint
Grower/Finisher: 17-21sec/pint
Sow/Gilt/Boar: 15sec/pint

continued on reverse

NON-BREEDING INVENTORY page 2 of 2

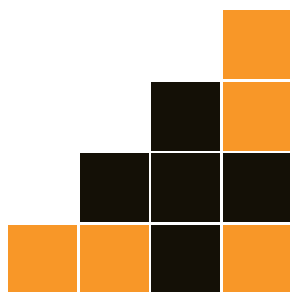
Number of individual pigs to be assessed per phase	
Total number of pigs per phase	Minimum number of pigs to assess
50	50
100	95
150	129
250	174
350	201
450	218
600	235
700	243
800	249
1000	258
2000	278
3000	284
4000	287
5000	289
10,000 +	294

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.

Always remember to round up!

Notes
Temperature: Out _____ / In _____ Humidity: Out _____ / In _____ Ammonia: Flooring/Bedding Type:
Site Map/Comments
Empty space for site map and comments

STEP 1		STEP 2	STEP 3	STEP 4	STEP 5
Total Pigs on Site		# to observe from Table 1	Percentage	# of pigs to observe	Pens/pigs to observe
Total Pigs in Breeding					
# in Gestation housed individually					
# in Gestation housed in groups					
# in Farrowing housed individually					
# in Farrowing housed in groups					
# Boars on the site					
Total Pigs in Non-Breeding					
# in Nursery (<10 wks) housed in groups					
# in Finishing (>10 wks) housed in groups					



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