

Section 8.3

# **Water, Feed and Bedding**

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## SECTION 8.3

### WATER, FEED AND BEDDING

#### RECOMMENDATIONS

1. A water test for fecal coliform should be completed at least once a year.
  - a. The fecal coliform levels should be at or below < 1 colony forming units (CFU)/100 mL.
2. A total dissolved solids test of the water should be completed.
3. Water lines should be cleaned and flushed between every batch of pigs, or at least twice a year in continuous flow barns.
4. Feed and bedding suppliers should be used only if they follow:
  - a. a quality assurance program and
  - b. a biosecurity program that includes a truck-washing procedure.
5. Delivery into a controlled access zone (CAZ) should be done in a way that prevents cross-contamination.
6. Periodic feed testing should be completed at the on-farm feed mill to check pathogens and toxins (e.g., porcine epidemic diarrhea (PED), vomitoxins).
7. The use of animal by-products should be avoided.

#### RATIONALE

- a. Water, feed and bedding are major sources of pathogenic agents (e.g., E.coli). Surface water sources (e.g., puddles, reservoirs, ponds, lakes and rivers) and rainwater-collection systems are the most susceptible to contamination.
- b. Water lines accumulate mineral deposits and organic material between cleaning cycles, which can gather and protect pathogens. These pathogens are then carried through the water to the next batch of pigs if the water lines are not adequately cleaned between batches.
- c. Proper sourcing and storage of bedding are two important factors to be considered to protect health.
- d. Animal feed can easily be contaminated by insects, rodents or wild birds at any stage of distribution or storage.
- e. Animal by-products, totes, containers and transport trucks can be a significant source of pathogens.

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#### GUIDANCE

It is recommended that the preventive measures below be followed:

- a. Have a water-treatment system (chlorination or other) for any surface-water supply on-farm.
- b. Keep a record of all water tests (dates, results, etc.).
- c. Water lines should be cleaned with descalers to break down mineral deposits and detergents to break down organic material accumulation. The lines should then be flushed to ensure all the cleaning products are removed before the next batch of pigs are placed. Colour in the products provide a visual cue as to when they have been completely flushed from the water lines.
- d. Install a fence around surface sources of drinking water to block access to wild and domestic animals.
- e. Adequately drain areas where pigs are housed to prevent them from drinking any accumulation of liquids.

- f. Have a delivery sequence within the production system where sites with the best health status are the first to receive deliveries. Keep suppliers well informed of any important health-status changes on the farm so they can adjust their delivery sequence as required.
- g. Store feed and bedding in enclosed areas (feed bins, closed rooms) to avoid contamination by rodents, birds and insects.
- h. Buy all medicated feeds, supplements and premixes in their original, labelled and unopened packaging.

## BIOSECURITY QUESTIONS

Q#	Importance	Biosecurity Questions	Yes	No	N/A	Comments	
Q8.3.1	Highly recommended	Is the water tested for fecal coliforms at least once a year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		a. Is the fecal coliform level at or below < 1 colony forming unit (CFU)/100 mL? b. If not, is there a water-treatment plan in place to minimize or eliminate contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Q8.3.2		Has a total dissolved solids test of the water been completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Q8.3.3		Are water lines cleaned and flushed between every batch of pigs, or at least twice a year in continuous flow barns?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Q8.3.4		Do your feed and bedding suppliers follow:					
		a. a quality assurance program? b. a biosecurity program that includes a truck-washing procedure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Q8.3.5		Are deliveries into the controlled access zone done in a way that prevents cross-contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Q8.3.6		Is periodic feed testing completed at the on-farm feed mill to check for pathogens and toxins in the ration?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Q8.3.7		Are animal by-products used on-farm?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

N/A = not applicable

