

## **FACILITIES AND SANITATION**

Sanitation is of utmost importance in keeping swine healthy and in controlling disease. When locating swine equipment and facilities, ask this question: "If I should have a disease or parasite problem, will I be able to manage the situation properly and eradicate the problem?" Sanitation is more than disinfection. It involves a setup that will keep the animals healthy and one that is unsuitable for the growth of organisms that may produce diseases.

In North Dakota, with our large acreages and good drainage, a small or medium sized hog herd can well be handled in a dry lot - pasture management program. If properly organized, this will reduce initial construction costs and keep down the overhead. Locate the entire hog producing unit, including barns, yards, lots, drainage etc., where adequate space is available for all facilities. Proper location is one of the most important points to take into consideration before any actual work is started on the construction program.

The first step in planning yards and facilities is to decide the number of hogs that will be produced and the number of farrowings per year. All inputs into the enterprise, including, building, equipment and management, will depend on the number of pigs to be marketed. Whether purebreds, feeder pigs or finished hogs are marketed, good planning and expert management must go into the operation.

Don't plan any hog lots or buildings in the yard with other buildings. Keep the location away from the house, a town, or any location where people live. Don't select a layout that will drain into a creek, river, or into any area like a shelterbelt that will be difficult to clean up. Do not plan pastures on permanent sod or areas with trees, boulders or obstacles that are a hindrance to a thorough cleanup program.

Drainage from the building should go into a manure pit, cess pool, or lagoon, so drainage is not into the open area traveled by the hogs. Manure, if hauled out, should be removed at once. If held for several days, it should be piled on a concrete apron with drainage of the ramp into the same trap the barn and feeding areas drain into. Liquid manure

should be hauled from the manure pit to the field, unless the pit drains or is pumped into a lagoon.

Pastures and lots should be rectangular to make thorough plowing up of the soil possible. Lots of all types including the central holding area or corral, should be tilled and seeded once a year.

Temporary pasture crops provide a more satisfactory disease and parasite-free grazing area than permanent native or perennial grass pastures, and the gains from some temporary crops, like winter wheat planted in the spring, compare favorably with gains on clean alfalfa pasture.

In selecting a new site, if possible locate the entire swine plant with the drainage in one direction. There should be enough area between the swine buildings and yards where pigs are handled so the ground can be tilled once a year, and more often if necessary, like following a disease outbreak. If pasturing is in the program, leave enough space between the pasture lots and buildings so the area can be worked up with power machinery. This won't take much extra room if just enough space is left to work up the main traveled areas with a tractor and plow. Where possible, keep away from lanes that cannot be tilled. Don't build a lane right up to the barn from pasture lots. This eliminates the possibility of plowing the area. Lots or pastures should have gates opening into the central holding lot of perhaps an acre or more in size so the holding and driving area can be plowed and seeded to some crop at least once a year.

One acre lots are adequate in size for pasture. If they are all the same width and length they can easily be tilled two at a time.

Fence the entire hog plant, and allow no one to enter without first walking through a good disinfectant. Even with these precautions, permit no visitor in the pens, pastures or lots where hogs are being held. Always accompany a visitor. If the setup is S.P.F. or a similar program, the regulations governing the operation require adequate sanitation and disease control measures. Fencing the plant also helps keep out dogs, skunks, etc. Don't let a rat problem get started, since these filthy rodents are great spreaders of disease.

Sound sanitation is a must. Give special consideration to the following:

1. Take every precaution to maintain a clean herd.

2. Buy animals only from herds known to be sound and healthy.
3. Keep purchased animals in isolation for 30 days before admitting them to the herd. Make no exceptions. Following the isolation period, which should allow most contagious conditions to manifest themselves in new locations, allow a 30 day or longer period for across-the-fence contact of new introductions with herd sows. This allows for certain diseases not recognizable to the naked eye or detectable only by blood tests to be transferred between the herd animals and the new introductions. They will go through any resultant infection and recover before breeding and pregnancy. This is the only way now known to prevent losses from certain virus-caused conditions which include stillbirths, mummification of feti, embryonic death and fertility or sterility (SMEDI). For best health precautions, new herd introductions should arrive on the farm at least 60 days before use in breeding.
4. Be sure that anyone admitted to the premises carries no disease organisms on his shoes or clothing.
5. Properly handle manure by keeping it away from the buildings.
6. Always rotate hog lots. For little pigs, pastures or dirt lots should be used only one year in four.
7. Clean and disinfect all buildings at least once each year. Always disinfect buildings where young pigs are kept before each new crop of pigs is moved in. Follow this or a similar system:
  - a. Clean all equipment and the inside of the building of any trace of foreign material or manure that might absorb the disinfectant, such as bedding, dust, feed, etc.
  - b. Remove all movable equipment from the barn before attempting to clean the building.
  - c. Soak the entire inside of the barn and all equipment with warm water to which detergent has been added, using a pressure sprayer.
  - d. After washing the building and equipment, cover with a light spray of a good disinfectant, used according to directions. If the disinfectant has an odor, use it enough in advance of moving animals in so most of the odor will have disappeared.
  - e. Before using disinfected feeding equipment, wash with warm water under pressure.
  - f. Thoroughly clean any equipment used for handling manure before using it to move feed.
  - g. Before allowing any visitor to enter your hog area, require him to slip on a pair of your farm's overshoes and clean pair of coveralls.

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