Utah Department of Agriculture and Food Recommended Best Management Practices

General Practices

Animal Health

- Facilities should have a comprehensive herd or poultry health plan that includes written protocols for the following management areas: Nutrition; Non-Ambulatory Animal Management; Euthanasia; Treatment of Common Diseases; Vaccinations and Medications; Humane Care and Safety of Animals; Biosecurity; Pest Control; Water Sources.
- Facilities should identify all animals or poultry with appropriate individual and/or group identification methods.
- Facilities should make timely observations of animals or poultry to ensure basic needs are being met.
- Drugs should be used according to labeled recommendations and withdrawal periods.
- Pharmaceuticals should be prescribed by a veterinarian.
- Facilities should have adequate records to document the health of their animals or poultry and any drug use or medication. Recordkeeping should be in accordance with state and federal law.
- Euthanasia methods used by veterinarians or producers should follow <u>American</u> <u>Veterinary Medical Association (AVMA) guidelines</u>.
- Animal or poultry mortality should be disposed of in accordance with state and local ordinances in order to prevent environmental contamination, control disease, and discourage predation.
- All employees should be trained in proper animal or poultry care and humane handling.
- Transportation should be conducted in accordance with each facility's animal welfare guidelines.
- Every producer should maintain a current, valid veterinary-client-patient relationship.

Facilities

- All animals or poultry should have access to clean water.
- All animals or poultry should have access to sufficient feed for health and growth.
- Facilities should allow for safe and efficient movement and/or restraint of animals or poultry.
- Adequate ventilation should be provided at all times.
- Facilities should have a plan to effectively manage emergencies or crises that occur.
- Manure should be managed to prevent feed and water contamination.

Environmental Good Production Practices

• Facilities should implement practices to protect the State's natural resources, including soil, water, and air.

- Facilities should follow Utah Department of Environmental Quality (DEQ) rules.
- Animal waste is a valuable resource and soil amendment and should be managed accordingly.

Cattle

Cattle Care

- Producers should design, provide, and regularly inspect facilities (fences, corrals, load outs, alleys, etc.) to help ensure safe and easy animal movement and restraint.
- Facilities should ensure feed and water handling equipment is maintained in working condition.

Biosecurity

- Facilities should recognize and mitigate risks associated with the introduction of new cattle and inter-herd/operation traffic.
- Facilities should apply basic sanitation practices to equipment, vehicles, and clothing to decrease the chance of microbial contamination.
- Facilities should take steps to prevent contamination of feed, water, and feeding equipment.

Herd Health

- Facilities should implement disease prevention practices to protect herd health including access to veterinary medical care.
- Facilities should follow all United States Food and Drug Administration (FDA), United States Department of Agriculture (USDA), and United States Environmental Protection Agency (EPA) guidelines and label directions for each product.
- Facilities should use FDA approved feed additives, including those requiring a Veterinary Feed Directive (VFD), in accordance with label requirements.
- Facilities should keep extra-label drug use to a minimum and use only when prescribed by a veterinarian working under a Veterinary Client Patient Relationship (VCPR).
- All vaccines should be administered according to beef quality assurance protocols.
- Facilities should not market compromised, terminally ill, or non-ambulatory cattle.
- Non-ambulatory, terminally ill or severely injured animals may be euthanized on the farm using appropriate methods.
- Accepted husbandry practices such as dehorning, castration etc. should be performed to minimize animal stress. Branding of cattle is recognized as an acceptable husbandry practice.

Transportation

• Facilities should handle and transport all cattle in a fashion to minimize stress or physical injury. Loading and unloading practices should ensure the safety of personnel and cattle.

Recordkeeping

- Facilities are encouraged to keep herd management records.
- Facilities should employ strict adherence to pre-harvest withdrawal periods on product labels and extended withdrawals as determined by a veterinarian in the context of a VCPR.
- Whenever possible, facilities are encouraged to transfer all processing and treatment records with the cattle to the next owner or production level.
- Facilities should keep records of any pesticide use on pasture or crops that could potentially lead to violative residue in cattle.

Nutrition

- Facilities should use feedstuffs and feed ingredients of satisfactory quality.
- USDA, FDA, and EPA approved products for use in cattle should be used only in accordance with product label.
- Facilities should not feed ruminant-derived protein sources per FDA regulations.
- Facilities should support feeding of by-product/co-product ingredients with sound science.

Dairy

Herd Health

- Medicated feeds should be stored separately and be properly labeled.
- Facilities should adhere to all withdrawal times for milk. All official samples of sold milk should have tested negative for antibiotics.
- Facilities should adhere to all withdrawal times before allowing animals to go to slaughter.
- Facilities should keep records of antibiotic use and identify all treated animals, including treatment protocols.
- Facilities should maintain all treatment records in the event of a need to follow up on a confirmed milk or meat residue.
- Employees should be trained on proper animal drug use.
- Written protocols should be reviewed and updated as necessary with the Veterinarian of Record (VOR).
- Bulls raised as dairy steers should be castrated as soon as is practical.
- Humane handling and pain management should be provided according to AVMA guidelines.
- The VOR is the responsible party for providing appropriate oversight of drug use on the farm operation.

Poultry Layers

General Animal Husbandry Practices

- Facilities should follow the United Egg Producers Animal Husbandry Guidelines for US Egg Laying Flocks (2017 edition).
- All lights should be in working order.
- Shelter should be appropriate for bird's age, type, and production.
- Safety rules of the farm must be followed.
- Injured, sick, or trapped birds should be provided care.
- Dead birds will be removed from bird living area on a daily basis and properly disposed of.
- There is zero tolerance for willful acts of abuse and neglect.

Biosecurity and Animal Health

- Facilities should follow NPIP standards, the FDA egg safety rule for the prevention of Salmonella Enteritidis, and the Utah Egg Quality Assurance Plan.
- Only necessary personnel should be allowed in poultry buildings.
- Access to property by visitors should be restricted. Visitors must not be allowed into the poultry house without proper supervision.
- Wild birds, rodents, pets and other animals should not be permitted in poultry houses.
- Environmental conditions within the house should allow the birds to maintain their normal body temperature without difficulty.
- Nutritionally-adequate fresh feed must be easily accessible to all birds and care shall be taken at each rehousing of flocks to ensure that the birds find the feed.
- In layer houses that require mechanized ventilation, stand-by generators with alarm systems must be provided and tested regularly.
- Facilities should coordinate with the USDA and UDAF regarding flock depopulation for disease outbreaks.

Poultry Turkeys

Biosecurity

- Facilities should isolate birds from any potential pathogen that can cause mortality or lead to economically erosive chronic health issues.
- Traffic control is the first step to limiting potential exposure of birds to a harmful pathogen and reducing the probability of the negative results from that exposure.
- Facilities should be proactive to ensure that anyone arriving at the farm is clean and take the precautionary step of sanitizing equipment before entering the farm.
- Any deviation from the guidelines of the biosecurity plan should be approved in advance.
- Farm employees or contractors who occupy ranch dwellings or have home sites and work on the farm daily should not keep any pet birds or poultry.

Mortality Disposal

• All mortality should be picked up and disposed of in a timely and appropriate manner to prevent rodents or predators from coming in contact with the mortality and prevent transmission of disease.

General and Preventative Health and Flock Evaluation

- Birds during all stages of their lifespan shall be handled in a humane manner.
- Barns should be walked at least twice a day to check the environment, feed and water availability, and bird health.

Vermin and Wild Birds

• A regularly monitored and evaluated vermin and wild bird control program should be in place.

Euthanasia

- Any bird with a condition that makes it unlikely to thrive in a growing environment should be humanely euthanized.
- Emergency euthanasia due to a foreign animal disease diagnosis will be performed under the authority and guidelines outlined in the Utah Animal Disease Emergency Response Plan.

Facility and Equipment Requirements

Minimum Housing Standards

- All buildings must be structurally sound and provide adequate light, ventilation, and a comfortable environment for birds.
- All buildings should have adequate feeder and water space.
- Stocking density will follow approved guidelines.

Swine

Herd Health and Biosecurity

- The Pork Quality Assurance Plus (PQA Plus) Program should be used as a basis for information and training about good production practices or pork production.
- A herd health management program should include:
 - Standard Operating Procedure (SOP) for all components of biosecurity
 - Facilities should implement external biosecurity protocols that aim to prevent new pathogen introduction into the farm environment.
 - Vaccination SOP
 - Facilities should have vaccination protocols that are herd and production phase specific.
 - SOP for prevention, detection, and treatment of disease or injury
 - Facilities should implement a zero-tolerance policy for animal abuse.

- Every producer should maintain a current, valid veterinary-client-patient relationship.
- Facilities should utilize responsible antibiotic use.
- Facilities should observe pigs at least once a day and more frequently during specific events such as farrowing or recovery from illness.
- Facilities should document daily observations and provide prompt care to pigs in need.
- SOP for 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 euthanized on the farm and not transported to market channels.
- SOP for pest control
- SOP for individual animal or group identification
 - Identification is important for maintaining records and tracking pigs as they move through the farm.
- Training SOP and programs for animal handlers
 - Facilities should provide training to caretakers on animal handling, animal husbandry, and euthanasia.
 - Pigs should be handled using knowledge of pig behavior.
 - Pigs should be handled according to their size and phase of production, using proper handling equipment.
- SOP for introducing new arrivals to the herd
- SOP for managing sick or injured pigs
 - Attention to sick and injured pigs must take place without delay, and as soon as possible.
 - Each facility should remove and properly dispose of any pigs that die.
 - Daily animal care should be arranged during weekends and holidays.
 - Caretakers must have a method for tracking animals that are undergoing treatment.
 - If a decision is made to move a non-ambulatory pig, movement should occur with consideration for both the pig well-being and caretaker safety.
- SOP for culling animals
- Complete, accurate, and reliable recordkeeping of treatments, reproduction, mortality, and other production metrics
 - Facilities should maintain up to date medication records for pigs on site and use them to enhance the health of the pigs.

Housing and Management

- Facilities should be equipped to provide some automated intervention to prevent the death of animals in the event there is a mechanical ventilation failure.
- Housing and management systems should:
 - Provide every animal access to appropriate feed and water
 - Promote good air quality and allow proper sanitation
 - o Protect animals from environmental extremes
 - Reduce exposure to hazards
 - Facilitate the observation of individual sows to assess their well-being

- Facilities should provide animals with adequate quality and quantity of space that allows sows to assume normal postures and express normal patterns of behavior.
- Farrowing systems should provide for comfort, safety, and hygiene of sows and piglets. The system should be properly maintained and provide adequate space, and unobstructed access to feed and water for the sow.
- Pens should be designed to accommodate growth up to a point where all or part of the group of pigs in the pen are removed. Each pig must be able to lie down fully on its side without having to lie on another pig and without the head having to rest on a raised feeder.
- Natural or manmade shelter must be provided to protect pigs from the elements.
- Critical factors that determine space for pigs housed outdoors should include, at a minimum, bedding, soil type, vegetation type and density, season, rainfall, supplemental feeding levels, vegetative palatability, vegetative tramping and rooting, producer preference, slope of land, waterways, and human and pig health and safety.
- Mixing and regrouping of different pigs should be avoided as much as possible.
- Producers commonly wean pigs from 14-35 days.
- Animals should be fed to at least meet their minimum nutrient requirements for growth and/or maintenance of good body condition.
- Water should be evaluated for livestock suitability.
- Pigs should be provided with feed and water at least once per day to meet their daily requirements.
- Feeders and waterers should be in good state of repair and positioned to allow for unobstructed feed and water delivery without causing injury to the pigs.
- Regardless of whether pigs are kept indoors or outdoors, it may be necessary to provide supplemental heating or cooling for pigs when temperatures are outside of pigs' critical temperatures.
- Caretakers should learn to identify signs of heat stress and cold stress.
- Caretakers should avoid startling pigs with sudden and/or unnecessary loud noise.
- Living facilities should have adequate floor space, floor layout, air inlets, air distribution, air flow, humidity, and ambient temperature to allow pigs to keep their areas clean and keep area for defecation and urination separate from their lying area.
- Guidelines should be developed for pumping manure.
- The physical condition of all pens, floors, and alleyways should be appropriate for the phase of production. All pens, floors, and alleyways should be kept in a good state of repair whereby they do not cause injury to animals.
- Proper preparation is critical when loading or unloading. The loading/unloading plan should clearly define the roles and responsibilities of each individual handler.

Sheep

Facilities, Handling, and Environment

- Facilities and methods should be designed to protect sheep.
- Facilities should have adequate drainage and offsite containment of runoff.
- Housing and handling sheep in groups reduces stress to individuals

• Well trained herding dogs can move sheep quietly and safely.

Training Programs

• All sheep producers and their employees should evaluate their animal welfare programs on a regular basis.

Manure Management

• Responsible manure management is expected of all livestock owners.

Planning for Emergencies

• Operations should develop written plans to respond to potential emergencies and day-to-day disruptions of normal sheep care.

Managing Predation

- Producers should try to provide adequate predation control with guard dogs or through other methods.
- A facility that has not paid head taxes will not receive predation services from the State of Utah.
- Producers must become familiar with federal, state, and local laws governing predators that may prey on their sheep as they develop their prevention strategies.
- The use of herders can help producers recognize and identify the cause of depredation loss.
- When losses occur, producers should examine the sheep carcasses and all evidence around the death site in order to identify the type of predator responsible.
- For a guardian animal to perform its task well, adequate bonding of the animal with the sheep is essential.
- Approved lethal predator control methods used by knowledgeable individuals are needed from time to time to protect the flock.
- An integrated approach is often most effective at reducing predation.

Nutrition

- Adequate water and forage should be provided and monitored.
- Sheep can utilize a wide variety of feedstuffs to meet their nutritional requirements.
- Nutritional programs must be developed to address specific and sometimes unique situations.
- Routine monitoring of forage quality, is important to optimize animal efficiency, reduce costs, and maximize animal welfare.
- Changes in diet should be made gradually.
- Producers should be familiar with conditions in their area (deficiencies or excess of certain micronutrients) and their program should account for variations.

Equipment

- Feed handling facilities should be designed and constructed to reduce the risk of feed contamination with chemicals, freight materials, and disease-causing infectious agents.
- Locate feeders and waterers away from each other in the feedlot.

- Fertilizers, herbicides, insecticides, fungicides, and other chemicals should be stored in facilities separate from feed.
- Protecting grains and forages from moisture prevents deterioration of feed and limits mold growth.

Record Keeping

- VFD drugs mixed in sheep feed should only be used under the supervision of a licensed veterinarian with a written order.
- All records of VFD feeds must be detailed and maintained in compliance with the requirements of the VFD.

Biosecurity

• Each producer should have the goal of implementing the Secure Sheep Plan, an example of which can be found on the UDAF website.

Monitoring and Animal Health

- Regular monitoring of health, body condition, and growth rates allows producers to evaluate the adequacy of flock nutritional programs.
- Vaccination programs that are tailored specifically for a region, flock, and management system are usually the most successful and cost effective.
- Vaccines should be used according to the manufacturer's guidelines as directed by a veterinarian.
- Vaccination should be viewed as a part of a flock health program and not as absolute protection against disease.

Humane Treatment of Animals

• Accepted husbandry practices such as tail-docking, castration etc. should be performed to minimize animal stress.

Using Animal Health Products

- Antimicrobial therapy should be used only after a careful diagnosis is made and all options have been considered.
- Preventative strategies should be emphasized.
- Extra label antimicrobial therapy must be prescribed only in accordance with the Animal Medicinal Drug Use Clarification Act amendments to the Food, Drug, and Cosmetic Act.
- The veterinarian should be readily available for follow up evaluation in the event of adverse reactions or failure of the treatment regimen.

Animal Identification

• Animal identification should comply with Scrapie regulations.

Shearing

- Annual shearing is necessary for wool removal and for physical well-being.
- Facilities and methods used should be designed to protect the sheep, the shearer, and the resulting wool clip.

Harvest Practices

• Producers should be familiar with North American Meat Institute (NAMI) guidelines for humane handling and be trained in effective, humane slaughter techniques.