

JAMES RANCH ARTISAN CHEESE

DAIRY OPERATING STANDARDS

Our goal is to manage and operate James Ranch Artisan Cheese (JRAC) with a high standard for cleanliness and sanitary conditions that will ensure a safe and healthy product. James Ranch Artisan Cheese operates a licensed Grade A dairy and has done so since 2002. The facilities and herd are registered with and undergo inspection by the Colorado Department of Health.

Animal Facilities:

In all aspects of cow facilities and cow handling procedures, the good health of the animal is our ultimate goal. To this end, all facilities are designed and constructed considering cow comfort, cleanliness and capacity limitations.

- Cow yards are of sufficient size to ensure no overcrowding.
- Cow yards are graded to drain and prevent any standing water.
- Cow yards, sheds, feed alleys and cow holding and traffic areas will be kept clean.
- The cow holding pen will be of concrete.
- Waste from the milking parlor and milk handling rooms will not drain into the cow yards.
- Livestock will have access to a source of clean drinking water.

Dairy Facilities:

All efforts will be made to comply with existing Grade A Dairy Regulations. Several specific areas are addressed below.

Milking Parlor:

- The milking parlor will have adequate lighting, properly distributed.
- There will be adequate ventilation to prevent condensation and to minimize odors.
- Gutters and floors will be made of good quality concrete and graded to drain.
- Walls and ceilings will be made of a suitably impervious material to ensure they are easily cleaned.
- All areas of the milking parlor will be kept clean, free of manure and in good repair.

Milk Room:

- A room of sufficient size will be provided for the cooling, handling and storing of milk and the washing, sanitizing and storing of milk containers and utensils.
- The floor will be made of good quality concrete and graded to drain.
- Walls and ceiling will be made of a suitably impervious material to ensure they are easily cleaned.

- Adequate ventilation will be provided.
- All work areas will have adequate lighting.
- A separate hand washing facility with hand soap and disposable towels will be provided.
- The milk room and equipment will be kept clean and in good repair.
- The milk room will have an adequate hot water system for the cleaning and sanitizing of the milk room utensils and equipment and it shall have a stainless steel sink(s) providing adequate compartments for wash, rinse and sanitizing.
- Compressors, vacuum pumps, and hot water heaters will be housed in a separate room.
- A separate room will be used for the storage of boots, aprons, calf bottles and other milk room supplies.

General:

- The milking parlor and milk room will be used for no other purposes than dairy operations and shall be kept clean with proper removal of all wastes. There will be no dogs, cats or fowl permitted into these areas. The immediate surroundings of the dairy shall be kept neat, clean and free of conditions that might harbor or be conducive to the breeding of flies and rodents.
- Sanitary toilet facilities will be provided.
- Water for milk room and parlor use shall be from Animas Water District.

Milk Handling Procedures:

Equipment:

- All multi-use containers and equipment, milking systems and other equipment in the handling, storage, bottling, or capping of raw milk or raw milk products shall be made of smooth, nonabsorbent, non-corrodible and non-toxic material, shall be fabricated and installed as to be easily cleaned, shall be self draining and kept in good repair. All single-service articles shall have been manufactured, packaged, transported, stored and handled in a sanitary method. Storage of utensils and associated equipment will be in a sanitary manner.
- All milk product contact surfaces of multi-use containers, equipment and utensils used in the milking, handling and storing of milk and milk products are cleaned immediately after use with approved cleaners followed by an acid rinse and are sanitized immediately before use.
- Milking equipment will be maintained in accordance with manufacturer's recommendations and regularly checked to verify proper vacuum levels and pulsator function. Inflatons will be changed on manufacturer's recommended intervals.

Milking:

- Milking will be performed with a closed system milking machine.
- The flanks, udders and tails of all milking cows shall be free of visible dirt. All brushing shall be completed prior to milking.
- Teats are washed, sanitized and dried using approved methods to promote milk let down and udder health. Teats will be forestripped to check for

clinical mastitis and abnormal milk. Milker will be attached within the recommended time of cow prep. Teats will be sanitized after milking.

- Cows with mastitis or abnormal milk will be milked last or separately to ensure no contamination of good milk. Abnormal milk will be discarded.

Milk Handling:

- Milk will be filtered before placement in containers for storage.
- Milk will be cooled to 36 degrees Fahrenheit within two hours of completion of herd milking and maintained at that temperature until retrieved by the owner.
- Distribution containers will be cleaned and sanitized immediately before filling.
- Distribution container filling and capping will be conducted in a sanitary manner.

Milk Testing:

- Milk shall be tested monthly.
- Milk for all lactating cows shall be commingled into a single sample for testing.
- Tests and limits:
 - Standard Plate Count < 10,000 CFU/ml (test for all bacteria)
 - Coliform < 50 CFU/ml (specific test for Coliform)
 - Somatic Cell Count < 200,000 (basic cow and udder health)
- Non-compliance:
 - Raw milk distribution will cease until test results indicate compliance.
 - All lactating cows will be tested individually to determine if one or more individual cows are responsible for the non-compliance. They will be milked last or separately and their milk discarded. Bulk samples from the balance of the herd may then prove compliance and raw milk distribution may be resumed.
 - All equipment and facilities will be thoroughly cleaned and sanitized. Equipment assemblies will be disassembled, and all components cleaned and sanitized. Bulk samples may then prove compliance and raw milk distribution may be resumed.

Changes and Additions:

The above set of standards will result in safe and healthy raw milk for human consumption under current general conditions. If new information or changes in current general conditions warrant changes or additions to this document, they may be made when all herd-share owners and JRAC agree the changes or additions result in an improved situation for the production of safe and healthy raw milk. For example, additional milk quality tests might be added at a later time.