

RAW FARM, LLC Fresno, CA 93706						
Farm Conditions						
Item	Reference	Narrative of Conditions	Risk Reduction	GMP	SOP	CCP
1	Pastures	RAW FARM allows pasture access to cow groups as often as possible to maintain optimal herd health, cow cleanliness, pasture grazing for nutrition, and conditions management. Seasonally: Mow, water, graze, repeat. Replant all denuded pastures as needed	Provide conditions to optimize herd cleanliness, health and nutrition; and finished product nutritional benefit	✓		
2	Water Testing	Coliform-free water is required by Fresno County for use in the production facilities. Well water shall be maintained as needed to ensure no coliforms. Water filters and softeners should be used to reduce heavy mineral deposits. Fresno County tests quarterly.	Coliform-free water reduces coliforms in facilities and products and improve food safety		✓	
3	Water Pressure	Without an adequately pressurized water source, operations cannot properly clean facilities and equipment. Cows need water to drink 24/7 and milking takes place at least 22 hours a day. 50 PSI water is essential.	Adequate water pressure to properly clean and feed herd	✓		
4	Species Selection	Careful thought should be given any time new species of animals are introduced onto the farm to be cautious of potential cross contamination and illness.	Prevent cross contamination	✓		
5	Water Troughs	Regularly clean water troughs inside and around the concrete pad below the trough. Troughs should be permanently built on a 10' concrete pad that slopes to a sump. In case of mobile water trough, muddy leaking areas should be moved immediately, leak fixed, and muddy area fenced off to prevent wallowing and pasture degradation.	Prevent cows from wallowing around muddy water troughs and provide clean drinking water	✓		
6	Walking / Feed Lanes	Cow walking lanes should be raised, crowned, dry. Scrape walking lanes as needed to prevent manure accumulation. Fences and gates should be well maintained. Feeding lanes must be vacuumed daily or as needed to be clean and dry.	Prevent manure accumulation in cow walking lanes	✓		
7	Shade	Farm is located in Central California. Spring, fall and winter seasons are pleasant for cows. Summer heat increases herd stress. Shade over feeding lanes, holding pens and water troughs for all milk cows should be provided when high heat.	Provide shade for all milking cows during times of high heat	✓		
8	Feeding Lanes	Concrete feeding lanes should be manure vacuumed daily. When appropriate, flush feed lanes after manure vacuum.	Optimize cow cleanliness, herd health, reduction of flies, hoof rot	✓		
9	Feed Storage	Feed should be protected from rain and weather. Milk cow hay and grain should be stored under hay barn, separated from holding pen. Feed storage areas are high and dry and protected from water flooding and damage. Corn silage bags will only be opened enough to expose daily feed	Prevent feed damage, mold and maintain high quality feed, reduce rodent habitat	✓		
10	Cleanliness, Organization	All roads should be watered during summer months, all tractors cleaned at position 4 (never at Creamery) and in good maintenance, all equipment working and stored in an organized manner, and equipment and buildings painted and clean.	Preventatively maintained equipment reduces failures in systems		✓	
11	Fencing	Our dairy is surrounded on two sides by major roads with high-speed vehicle traffic. All fences should be well maintained and inspected regularly to prevent cows getting outside of perimeter fence. Assure gates are locked and in good repair	Fences should be well maintained to reduce liability	✓		
12	Confinement Management	Every day, the pens should be managed. When building a new bed pack: 3 loads of almond shells added with minimum 4 bags of Dry Hydrated Lime. Float. When bed pack is established: rototiller bed pack and add Dry Hydrated Lime and almond shell as needed.	Ensure cows rest in a clean environment: pasture or mound		✓	
13	Human Factor Management	Employees and visitors can act as a vector for carrying bacteria around and between different parts of RAW FARM production facilities. Maintenance personnel, Management, outside vendors (Vets, DHIA, service technicians, etc) can pose as a cross contamination threat. Proper care should be taken to isolate tools and tool carriers that are used in multiple departments from coming in direct contact with facilities. Try to use dedicated tools when possible.	Prevent cross contamination from employees and visitors		✓	

Animal Nutrition and Conditions						
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1	Disease Free	Herd is tested annually for TB by our private vet Valley Vets. All employees working with cows are tested for TB. Milk is tested quarterly for Brucellosis. Cows and heifers purchased off-site should be healthy, come from well managed, known herds in TB-free areas and be Bangs vaccinated.	Maintain a healthy, TB and Brucellosis free herd			✓
2	Hospital Pen Management	Hospital pen will be maintained for all cows with clinical mastitis, subclinical mastitis, or other ailments. Hospital cows should be fed a standard dairy ration to maintain milk production. All mastitis cows should have a red ankle bracelet for visual identification. Animals should not be in hospital pen longer than 1 week. If animal's health does not improve within 1 weeks of organic treatment, management will evaluate animal and most likely cull them from herd. Cows that cannot be organically treated should be culled. Collect collect culture before/after treatment prior to release.	Reduce risk of contaminated milk getting milked into the milk line for human consumption	✓		
3	Illness Treatment and Prevention	Cow illnesses or injury such as Johnes, hardware disease, lameness, tumors, clinical or subclinical mastitis should be reported to the Dairy Manager immediately and properly handled. The cow should be moved to the hospital pen immediately. When possible, treatment should be administered to return the cow to a health state. Cull cows as needed.	Maintain a healthy herd that is well cared for and managed		✓	
4	Feed	Cows are fed supplemental minerals. Only high quality hay and grain should be fed when supplemental feeding is required. Clean free-choice mineral stations regularly.	Aid cows in digesting food, milk production and high body condition		✓	
5	Animal Care	Assure that our cows are treated in a safe, humane, and minimal stress environment. Cow receive a preventative hoof trimming at each dry off. Cows are assessed daily by staff and management, and all cows receive annual locomotion scores. Cows with clinical hoof problems should be treated with copper sulfate and a fresh bandage wraps. Cow tails should be trimmed to prevent contamination during milking.	Aid cows with mobility, access to feed and prevent lameness		✓	
6	Fresh Cows	Fresh cow pen will be maintained for all cows fresh in milk production. All fresh cows will be milked in stainless buckets with separate milk machines and hoses. See SOP for fresh cow management. Fresh cows are moved to pen 1 and are milked for Grade B utilization only (silo 3, butter and cheese only). Cows are not moved to pen 2 for Grade A Class 1 and 2 utilization (Silos 1-2) until they have received 40 days of weekly pathogen testing. No cows shall be moved from pen 1 to pen 2 until they have culture results negative for Staph Aureus and negative for all 4 human pathogens for over a month (3 tests minimum).	Reduce risk of contaminated milk getting milked into the milk line for human consumption and properly care for fresh cows			✓
7	Quarantine	Purchased cows must quarantine in pen 1 (if milking) for at least a month while weekly pathogen samples confirm negative. Fresh cows will quarantine in pen 1 for 40 days. Pen 1 milk will be used for Grade B products only (cheese and butter) and finished products on hold until negative results for pathogens are received in COA.	Reduce risk of contaminated milk getting milked for human consumption		✓	
8	Calves	Calves are raised off-farm to reduce risk. Calves return at 155 days old, already BANGS vaccinated, and weaned. Transition care shall be given with Ruminsen and high quality feed for 2 weeks to ensure herd health prior to movement to Dickenson Ranch pen 13.	Reduce risk of cross contamination and raise healthy calves		✓	
9	Composite Testing	Within 7 days of completion of the previous herd testing, the Dairy Manager will composite test entire herd in groups of 20 cows into a bottle. Samples are sent to the Lab for testing all 4 pathogens: e.coli O157:H7, campylobacter, listeria, salmonella.	Reduce risk of human pathogens in milk for human consumption			✓
10	Husbandry	All heifers and cows will be bred using artificial insemination (AI) using bulls selected for: A2, Immunity Plus, Grazing, Butterfat, Protein, and Milk Production (In that order). Dairy staff will check for heats daily, breed, and record in our herd software, DHI-Plus. Weekly Preg Check will be conducted (Tuesday's) to assure all cows are confirmed pregnant or marked open. All movement of cows will take place promptly.	Ensure quick breed-back of open cows to maintain herd viability and milk quality	✓		

Milking Conditions						
Item	Reference	Narrative of Conditions	Risk Reduction	GMP	SOP	CCP
1	Milk Barn	The milk barn is inspected for Grade A standards by Fresno County, Department of Public Health. All facilities and conditions should be properly maintained to achieve a high farm score. All deviations from the farm score should be quickly addressed and brought into compliance.	Maintain high standards for milk barn, prevent degrades and achieve high farm score		✓	
2	Udder and Teat Cleanliness	All Milkers are trained to the food safety protocols and expectations of cleanliness and procedures for milking. All cows are pre-washed in the sprinkler pen, manually using a 50 PSI water hose then drip dry prior to entering the barn. All teats dipped with pre-dip, stripped clean, inspected, and udders wiped 3 times with a single-use towel, one cow per towel inside of hind legs are cleaned.	Consistently achieve low coliform and bacteria results on bulk transport tankers		✓	
3	Milking	During milking; machines should be hung above splatter zone, air vent kept clean and dry, machines kept free of manure, floors/walls/parlor clean, must pass completely before milking between each set. Clean teat towels will be protected from contamination.	Clean udders, teats and equipment optimize the potential for low bacteria counts		✓	
4	GMP's	Milkers should be in good health, wash hands after leaving milk barn or going to the bathroom, refrain from smoking in the parlor, wear gloves and aprons and keep all self-closing doors closed.	Reduce potential from cross contamination and maintain high quality standards	✓		
5	Milk Cow Testing	Every milk cow will be tested within 7 days of completion of the previous weekly test for e.Coli 0157:H7, campylobacter, salmonella, and listeria. Composite testing in groups of 20 will be followed by groups of 5 and then individual. All presumptive results will be confirmed by lab. Monthly, Fresno County Environmental Health will pull samples for their regulator needs. RAW FARM tests every day, every lot of milk and no milk is sent to the Creamery unless it passes our strict standards.	Conform with Grade A standards for Raw Milk for Human Consumption			✓
6	Wash Down	Holding pen should be hand washed with a 50 PSI water hose after each pen. Foot baths should be cleaned and filled with water and copper sulfate solution after each pen.	Prevent clean cows from getting dirty in holding pen, reduce hoof wart		✓	
7	Sprinkler Pen	Sprinkler pen should be inspected daily to ensure all sprinklers turn and are high pressure. Cows should be washed before each milking and drip dry prior to coming into the milk barn.	Dry clean udders and underbodies entering the milk barn		✓	
8	Swabs	Minimum Quarterly: the milk parlor, silo room, and equipment inside the parlor shall be tested for Salmonella and Listeria Monocytogenes	Reduce risk of human pathogens in milk for human consumption		✓	
9	CIP	CIP of the milk line should be completed after each milking. Follow the SOP to ensure proper sanitation, temperatures, draining of the milk line. Daily checklists and visual inspection confirm the procedures are being followed.	Assure that milking equipment is cleaned properly and low bacteria counts are achieved		✓	
Processing Conditions and Facilities						
Item	Reference	Narrative of Conditions	Risk Reduction	GMP	SOP	CCP
See Food Safety Plan for FDA Processing Facility Protocols						
Distribution and Cold Storage						
Item	Reference	Narrative of Conditions	Risk Reduction	GMP	SOP	CCP
1	Finished Inventory	Fresh milk inventory should be carefully monitored to ensure no inventory is kept for more than 48 hours without going to the distribution hubs for sale. Residual inventory worksheet will be sent before each route to ensure that product with over 12 days until expiration is sold first.	Prevent inventory waste by using First In First Out (FIFO) inventory controls	✓		
2	Cold Chain	Cold chain is maintained at 32 to 40 degrees Fahrenheit as long as the finished products are in our custody. Precautions should be taken when transferring product to the retail store or customer to ensure the cold chain is not broken, particularly in summer heat. Keep doors closed except when unloading product.	Prevent premature souring, maintain low SPC and high product quality	✓		
3	Vehicle Inspection	All Sales Route Drivers should ensure proper functioning of chiller and vehicle by doing a pretrip inspection. Any maintenance issues are reported immediately by the Stager or Sales Rep and precautions are taken to ensure cold chain and product integrity.	Daily Pre-Trip checklists are completed before each route to ensure vehicle and chiller functionality		✓	

Testing Protocol and Results						
Item	Reference	Narrative of Conditions	Risk Reduction	GMP	SOP	CCP
1	Bacteria/ Antibiotic Testing	Every bulk transport tank is tested for coliforms and antibiotics as required for NCIMS under Appendix N.	Conform with Grade A standards for Raw Milk for Human Consumption		✓	
2	Pathogen Testing	Cows are tested for e.Coli 0157:H7, Salmonella, Listeria Monocytogenes, Campylobacter. CDFA tests for Campylobacter, Salmonella, Listeria and e.Coli 0157:H7 once per month in finished products only.	Reduce risk of customer illness from consuming products containing pathogens		✓	
3	Recalls	In the event of a recall, RAW FARM recall procedure in the Food Safety Plan must be followed. The subject raw dairy product is recalled from the stores in accordance with the procedures and Management will work diligently to comply with requirements to resume business.	Reduce risk of customer illness from consuming products containing pathogens		✓	
4	Posting Counts	Samples of representative bacteria counts are emailed to RawMI monthly for posting on www.rawmilkinstitute.org	Achieve high transparency with consumers on product information	✓		
5	Warning Label	Every label (cheese) has a CDFA mandated warning which explains the potential health risks of consuming raw products.	Conform with legal Grade A standards for Raw Milk for Human Consumption	✓		
6	Auditing	The Food Safety and RAMP is audited Annually.	Ensure followup on action items, maintain clean systems		✓	
Customer Feedback						
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1	Complaints	All customer complaints will be logged and recorded by administrative staff. All serious illness complaints shall be handled immediately. Packaging, service and other complaints should be handled at the earliest convenience by the department Manager and followed up with a phone call and/or email.	Be able to identify trends, record, and recall complaints from customers		✓	