

**RAW MILK ASSOCIATION OF COLORADO  
STANDARDS AND RECOMMENDATIONS**  
*Updated October 14, 2010*

- I. **OBJECTIVE:** The objective is to provide advisory standards under which raw milk can be produced and distributed through a contractual relationship between farmer and consumer. Standards for all RMAC producers as well as those willing to earn the RMAC Seal of Excellence are documented below.

**II. REQUIRED STANDARDS:**

- A. **LEGAL STANDING:** All Colorado RMAC producers will comply with Colorado law as required by Colorado statute ([25-5.5-117 Raw Milk](#)). Producers are required to read and understand this.

- a. It is illegal in Colorado to outsource any milk from other producers for production of dairy products under the herdshare agreement.

**B. EDUCATION: Required**

**i) Producer Education**

- (1) New Producer package (provided by RMAC)

- (a) Raw Milk Production Handbook by Tim Wightman  
(b) Safe Handling - Consumer's Guide by Peggy Beals, RN  
(c) Lab test vials, labels, and Guidelines for sample collection, labeling and interpreting results. (softcopy)  
(d) Copy of RMAC Standards (softcopy)

- (2) Ongoing Producer education

- a. DVD “Chore Time” <http://www.farmtoconsumerfoundation.org/fsr/> (free download – Part 1 is 1 hour, part 2 is 37 mins)

**(ii) Shareholder Education**

- (3) Farm Tour – Herd, grounds, food storage, water source, milk barn, bottling area  
(4) Herd Health Management document – (softcopy)  
(5) Milk Handling document – (softcopy)  
(6) Health Risks of raw milk – (softcopy)

**C. DOCUMENTATION: Required**

- a. **CDPHE:** All Colorado raw milk producers are required to register with the Colorado Department of Public Health and Environment (CDPHE).

- a) Regional Members are required to comply with Colorado law regarding herd shares, except they do not need to register with CDPHE.

- b. **Producer:** Copies of the consumer-farmer contracts will be kept on file at the dairy facility. They will consist of:

- a) A Bill of Sale

- b) A Boarding Contract outlining the rights and responsibilities of both parties.
- c) Conditionally, a Service Contract outlining the services provided by the producer to produce dairy products. (This may be written into a Boarding Contract.)
- c. **Producer:** A copy of Herd Health and Raw Milk Production Standards will be made available to each potential customer prior to signing a contract with the producer.
- d. **Product:** A prominent label with the words “Raw/Unpasteurized” and the production date is affixed to all dairy product containers, effective 5/1/2009.

**D. PRODUCTION:**

- a. Wet hand milking (from water and/or lubricants) is prohibited. Animal teats and human hands shall be clean and dry during milking.
- b. Abnormal milk (mastitis, blood, serum, gross contamination with manure or dirt) shall not be used for human consumption.

**E. MILK SAFETY TESTS**

- a. RMAC supports both on-farm and 3<sup>rd</sup> party testing for milk safety tests. We have selected Microbial Research, Inc for 3<sup>rd</sup> party testing and can offer a substantial discount to our members. There is a variety of reliable on-farm test equipment, and we encourage you to investigate this option. We urge you to participate in any testing and send us your results. The advantage of 3<sup>rd</sup> party testing is it is less subject to criticism by the scientific and regulatory community, and accusations of subjective interpretation of results. RMAC plans to build a milk safety database containing 3-5 years of test results. This will serve as a tool for continuous process improvement, and build consumer confidence in raw milk products.

a) **Test Reporting**

- (1) **Required for ALL Producers** per Colorado Raw Milk statute:  
Test results will be made available to shareowners along with an explanation of the tests.
- (2) **Required for ALL Producers** – All producers must conduct milk safety tests on a monthly basis. (09/27/2010). Test results will be made available to shareowners and to RMAC Test Administrator on a monthly basis.
- (3) **All producers shall report required testing results of on-farm or third party testing** to a centralized RMAC database or an RMAC Test Administrator. Results of on-farm tests must be shared with shareholders at least once a month for any animals on the milk line.
- (4) **Required for RMAC Seal of Excellence:** Test results must consistently meet RMAC Herd Health & Milk Safety standards for 6 consecutive months.

b) **Test Sampling**

- (1) Milk shall be sampled monthly from a “consumer ready” container.
- (2) Milk from all lactating animals of a single species must be commingled into a single sample for monthly testing prior to bottling.

c) **Milk Test Thresholds REQUIRED for RMAC Producer Members**

- (1) Milk Quality
  - (a) Bacterial limits 15,000 CFU/ml (Standard Plate Count)
  - (b) Coliform limits 50 CFU/ml
- (2) Pathogens
  - (a) Salmonella limit 0 CFU/ml

(b) Escherichia coli 0157:H7 limit 0 CFU/ml

**d) Test Reporting**

(1) Test results will be made available to all shareowners along with an explanation of the tests.

**b. ANIMAL HEALTH TESTS**

a) **All Dairies** - All animals in the herd must test negative for TB and Brucellosis on initial test. Any new animals coming from off-farm must be tested prior to being added to the herd. All positives must be removed from the herd immediately.

(1) **All Cow Dairies** - All animals in the herd must test negative for TB and Brucellosis on initial test and then once every three years for cows. Any new animals coming from off-farm must be tested prior to being added to the herd. All positives must be removed from the herd immediately.

(2) **All Goat Dairies – Closed Herd** - All animals in the herd must test negative for CAE, TB and Brucellosis on initial test. Any new animals coming from off-farm must be tested prior to being added to the herd. All positives must be removed from the herd immediately.

(a) **Goat Dairies – Open herd** – All animals must test negative for CAE, TB and Brucellosis every three years. Any positives must be removed from the herd immediately.

b) Lactating animals which show evidence of the secretion of abnormal milk in one or more teats, based upon physical examination, shall be milked last or with separate equipment; and the milk shall be discarded.

c) Lactating animals treated with, or animals which have consumed agents capable of being secreted in the milk and which may be deleterious to human health shall be milked last or with separate equipment, and the milk disposed of until it is safe for human consumption.

d) Lactating animals which show evidence of systemic illness, based upon physical examination, shall be milked last or with separate equipment and the milk discarded. Examples of such systemic illnesses include, but are not limited to, [mastitis \(inflammation of the udder\)](#), [metritis \(inflammation of the womb\)](#), [ketosis](#), [fatty liver](#), and [pneumonia](#).

e) Milk from animals treated with antibiotics must be discarded until the [drug withdrawal period](#) has passed.

**F. COMPLIANCE:**

- a. If milk quality tests exceed limits, producer will increase testing frequency until test results are below limits within 2 weeks.
- b. If 3 of the last 5 milk quality tests excess of limits, producer shall cease distribution of raw milk until limits can be achieved.
- c. If pathogen tests exceed limits, producer shall immediately cease distribution of raw milk until limits can be achieved and notify shareholders of potential exposure. Samples of the contaminated milk should be secured for subsequent testing.

**G. DISTRIBUTION:**

- a. Only those individuals signing a document constituting a legal consumer/farmer contract shall obtain raw milk.

- b. Once raw milk product is passed into the hands of the consumer, or consumer's agent, the proper handling, transporting, and cooling of the milk is solely the responsibility of the consumer or his agent.
- c. Producers will provide each shareholder with documentation about safe handling, storage, and cooling of raw dairy products.

### **III. RECOMMENDED STANDARDS:**

#### **A. DOCUMENTATION:**

- a. Records of test results should be kept for a minimum of 12 months. For on-farm testing, a ledger with Date, Test, Results, and Initials of person who performed test is recommended.
- b. All producers

#### **B. PRODUCTION:**

- a. The immediate surroundings of the dairy should be kept in a clean, neat condition to prevent breeding of flies and rodents.
- b. Animal cleanliness: The flanks, udders, and tails of all milking animals should be free from visible dirt at the time of milking. All brushing should be completed before milking commences.
- c. Milkers' hands:
  - a) Milkers' hands should be washed clean, rinsed, and dried with a single service towel, immediately before milking and immediately after any interruption in the milking operation.
  - b) No person with an infected cut or lesion on hands or arms should milk animals, or handle milking utensils or other equipment.
- d. Milker's clothing  
All personnel should wear clean outer garments while milking or handling milk, milk products, containers, utensils or equipment.
- e. Milking sanitation:
  - a) Milking should take place in an environment free of dirt, mud, or accumulated manure.
  - b) Teats of animals should be disinfected before milking.
  - c) Teats should be fore-stripped to stimulate milk letdown and to screen for clinical mastitis (abnormal milk).
  - d) Milk should be filtered into a proper milk storage device, or into glass or other impermeable containers meant for final distribution.
- f. Milk cooling
  - a) Milk should be cooled to 40° F (4.5° C) or less within two hours after completion of milking. Blend temperatures of subsequent milkings into bulk storage devices should not exceed 40° F (4.5° C). Bottled milk ready for distribution should be maintained at 40° F (4.5° C) or less.
- i. Equipment sanitation
  - All milk-contact surfaces (milking machines, buckets, pipelines, and containers for final distribution) should be washed and sanitized so as to remove all milk residue, dirt, and [milkstone](#).
  - All multi-use containers, equipment, and other utensils used in the handling, storage, filling, or capping of raw milk and raw milk products should be thoroughly cleaned immediately after each usage.

- After sanitation, containers and other raw milk and raw milk product utensils and equipment should be handled in such a manner as to prevent contamination of any surface with which raw milk and raw milk products come into contact.

ii. Bottling

- Raw milk and raw milk products should be bottled on the farm where produced.
- Bottling should be conducted in a sanitary method
- Containers should be labeled “Raw/Unpasteurized Milk” with date code of bottling prior to distribution.