

Virginia Department of Agriculture and Consumer Services
Animal and Food Industry Services
Office of Dairy and Foods
Dairy Services Program

Dairy Inspector

Policy & Procedure Manual

Dairy Services Policy and Procedure Manual
Index
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Dairy Services Policy and Procedure Manual

Number: 1.1
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PREFACE

The purpose of this manual is to provide information and guidelines that will assist dairy inspectors as they carry out their duties. This manual clarifies certain aspects of laws and regulations which require further interpretation to promote uniform enforcement. Each person should keep this manual in their possession at all times while on duty.

DEFINITION OF TERMS

IN ORDER TO CONSERVE SPACE AND TO AVOID NEEDLESS REPETITION IN THIS MANUAL, REGULATION TITLES WILL BE ABBREVIATED AS FOLLOWS:

1. "Grade "A" Regulations" will be used to indicate 2 VAC 5-490-10 thru 2 VAC 5-490-140, *Regulations Governing Grade "A" Milk*, effective May 23, 2007
2. "Bulk Tank Regulations" will be used to indicate 2 VAC 5-501-10 thru 2 VAC 5-501-110, *Regulations Governing The Cooling, Storing, Sampling, And Transporting Of Milk*, effective January 26, 2005.
3. "Ice Cream Regulations" will be used to indicate 2 VAC 5-510-10 thru 2 VAC 5-510-660, *Rules And Regulations Governing The Production, Processing, And Sale Of Ice Cream, Frozen Desserts, And Similar Products*, effective March 18, 1987.
4. "PMO" will be used to indicate the *Grade "A" Pasteurized Milk Ordinance, 2005 Recommendations of the United States Public Health Service and its revisions*.
5. "Manufacturing Milk Regulations" will be used to indicate 2 VAC 5-531-10 thru 2 VAC 5-531-160, *Regulations Governing Milk for Manufacturing Purposes*, effective January 26, 2005

Dairy Services Policy and Procedure Manual

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GUIDELINES FOR THE DAIRY INSPECTOR

As a representative of the Department of Agriculture and Consumer Services, you must conduct yourself at all times in a manner which will reflect credit on the Department. You must be tactful in all situations. If you do not know the answer to a question, you should state that you do not know but will try to get the answer. It is much easier to learn about a particular problem by listening rather than by talking. Keep an open mind and be ready to listen and learn. Do not have a "know-it-all" attitude. You should take advantage of all opportunities to increase your knowledge and skills. You must be receptive to change, retain personal ambition, and possess an eagerness to grow.

You must remember that as a representative of the Commissioner of Agriculture, you must work beyond the scope of your immediate job. The motives that you have in mind as you go about your work from day to day will determine your success and the success of the organization you represent. In order for dairy programs to be successful there must be a spirit of cooperation between the dairy inspector and laboratory personnel, and a conscientious effort to perform the tasks necessary to get the job done.

You must realize your responsibility to be reliable and dependable. You must not accept favors or gifts, or allow any situations to exist which may compromise your position as a dairy inspector. You must not allow yourself to become involved in any business which would be considered a conflict of interest.

Politeness and good grooming are as important in the dairy inspector's work as in any other profession. You must consider how your actions and appearance affect the people with whom you come in contact. A clean vehicle and clean equipment, such as cooler cases, add to the confidence that people have in the dairy inspector.

You should not use tobacco in any form on dairy farms or in milk plants.

You should wear boots at farms and sanitize your boots before leaving the farm.

You should follow the biosecurity procedures given in Part 3.3 and Part 3.4.

Appropriate and possibly different attire should be worn when inspecting farms, dip shops, and milk plants. Try to arrange your schedule so that dip shops and plants are inspected on separate days from dairy farms. For obvious reasons, it is not desirable to enter plants or dip shops wearing clothing that you wore while inspecting farms. If it is necessary to inspect dip shops, plants, and farms on the same day, it is advisable to inspect dip shops and plants first and the farms last.

You should avoid gossip at all times and not discuss other people's problems.

Care must be taken to avoid the recommendation of any particular brand of equipment, manufacturer, or supplier when advising producers on equipment installations.

When talking to people concerning inspections, you should talk to the person responsible, and remember that it is extremely important to control your temper and emotions. During conversations concerning inspections, you should make every effort to assure the producer's understanding of the instructions.

If, during an inspection you should break a piece of equipment and must replace it, you should obtain two copies of a receipt for the cost of replacement. One receipt shall be turned in with the expense account and one sent in to be used by the Department to collect from the insurance company.

When submitting reports you should keep in mind that legibility is of extreme importance. A messy inspection report indicates carelessness, and illegible reports present problems for those interpreting them. Promptness in submitting reports is very important to confirm actions taken in the field.

As long as a person is employed by the Department of Agriculture and Consumer Services they should support the Department. No matter how disenchanted they may become, if they continually build up the Department in front of the public, they will benefit in the long run.

Dairy Services Policy and Procedure Manual

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Revision:

Effective: December 10, 2008

Emergency Contact Policy and Call Tree

Dairy Services inspectors and managers are provided mobile phones to facilitate communication for normal and emergency purposes. Employees may be contacted: after normal business hours in the event positive drug residues are reported in the milk from one of their producers; after natural disasters like floods, tornadoes, or hurricanes; and after manmade disasters like fires in food processing or storage facilities.

A call tree has been developed which will be used during emergencies. The call tree identifies specific positions and who they are responsible to contact in the event of an emergency. In general the call tree follows the chain of command. The call tree is activated by the Program Manager contacting the Program Supervisor. The Program Supervisor will contact the Regional Manager and the Regional Manager will contact their assigned inspectors. The call tree will be tested from time to time to ensure that employees can be contacted after normal work hours in the event there is an emergency. The call tree will only be used to perform tests on employee availability after normal work hours and for handling emergencies.

To facilitate contact during normal business hours employees are expected to have their mobile phones turned on and carried with them. Employees should respond to phone calls as soon as they are called or receive a message on the phone. Many areas do not have mobile phone coverage and employees will not receive a message until they return to an area with coverage.

After normal business hours employees may be contacted at home on their home phone number or by calling their mobile work phone. Employees who will be away from home after normal work hours are requested to carry their mobile work phones with them for contact purposes. Employees with personal cell phones may avoid carrying their mobile work phone if they give their personal cell phone number to their supervisor for use in contacting them after hours.

Employees on pre-approved leave and during times of illness after their supervisor has been notified are not required to be available for contact after hours.

Dairy Services Policy and Procedure Manual

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Revision: June 1, 2012

Effective: December 1, 2007

Inspector Code Numbers

NAME	FARM INSP	RETAIL FROZEN DESSERT
Beers, John A.	20	NONE
Bonner, D. B.	10	NONE
Dansey, D. L.	16	52
Dorton, William III	26	74
Eye, E. D.	05	58
Hodges, C. M.	21	62
Jones, C. M.	22	65
O'Neill, M. J	28	78
Osborne, T. T.	13	67
Owen, C. T. Jr.	18	68
Wilson, K. A.	29	79
Yankey, S. H.	27	77

Dairy Services Policy and Procedure Manual

Number: 2.4

Date: December 21, 1998

Revision: **January 23, 2012**

Effective: December 1, 2007

Laboratory Address, Phone, and Personnel List

Bureau of Laboratory Services Washington Building 1100 Bank Street, Suite 607 Richmond, VA 23219 Voice: (804)786-9202 FAX: (804)371-2380	Harrisonburg Regulatory Laboratory 261 Mt. Clinton Pike Harrisonburg, VA 22802 Voice: (540)434-3897 FAX: (540)434-3880 Dairy Office: (540)209-9126 FAX: (540)432-1357
Ivor Regulatory Laboratory 34591 General Mahone Blvd. Ivor, VA 23866 Voice: (757)859-6221 FAX: (757)859-6428	Lynchburg Regulatory Laboratory 4832 Tyreeanna Road Lynchburg, VA 24504 Voice: (434)200-9988 FAX: (434)947-2577 Lynchburg Office Building Voice: (434)200-9977
Warrenton Regulatory Laboratory 272 Academy Hill Road Warrenton, VA 20186 Voice: (540)347-6385 FAX: (540)347-6404	Wytheville Regulatory Laboratory 250 Cassel Road Wytheville, VA 24382 Voice: (276)228-5501 FAX: (276)223-1961 Dairy Office: 276-223-1508
HARRISONBURG PERSONNEL	PHONE NUMBER
Beeper	540-568-0201
Baker, Clayton	540-896-2600
Burris, Karen	540-885-1441
Holsinger, Shelia	540-433-5122
Shepard, Amie	
Craig, Elizabeth	

IVOR PERSONNEL	PHONE NUMBER
Beeper	757-629-1307
Kirkland, Ronald	804-796-9753
Magee, Anne	Home: 757-899-8546 Cell: 804-338-4968
Young, Lynn	
Haley, Cara	
LYNCHBURG PERSONNEL	PHONE NUMBER
Beeper	434-856-7192
Dietz, Kelly	434-384-3814
O'Brien, Shelley	540-947-2454
Ramsey, Lisa	Home: 434-525-8035 Cell: 434-610-5428
Coghill, Ann	
WARRENTON PERSONNEL	PHONE NUMBER
Beeper	540-224-0120
Bache-Schumate, DeDe	Home: 540-547-2539 Cell: 540-229-0212
Wassenaar, Christine	540-439-4444
Brown, Susan	
WYTHEVILLE PERSONNEL	PHONE NUMBER
Davidson, Maranda	276-228-5501

Dairy Services Policy and Procedure Manual

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Dairy Industry Addresses and Contacts

Ashe County Cheese 106 East Main Street West Jefferson, NC 28649 Steve Hendrix Josh Williams/Mike Jones	Phone: 336-246-2501 FAX: 336-246-6135
Bland Correctional Center 256 Bland Farm Road Bland, VA 24315 Donald Musick, Plant Manager Kathy Penley, Quality Assurance	Phone: 276-688-3341 ext 5062
Cobblestone Milk Cooperative 2625 Oxford Rd. Chatham, VA 24531 Carol Walker	Phone: 434-927-4447 Phone: 540-588-0024
Cooperative Milk Producers Association P. O. Box 540 116 South Main St. Blackstone, Va. 23824 Michael Myatt Ralph Bagley, Matt Marker	Phone: 434-292-6400 Fax: 434-292-6453
Dairy Farmers of America, Inc. (DI-R) 84 Executive Circle, Suite 1 Roanoke, Va. 24012-8939 Vickie Leavens	Phone: 540-977-1900 FAX: 540-977-3100
Dairy Farmers of America, Inc. (DI-R) 10411 Cogdill Road Knoxville, TN 37932 Bobby Shipley, Area Manager CELL: 865.599.9855 Rick Hinds – 865-218-8500 Mike Todd – 704-929-9408 Matt Thomas – 540-810-2405 Chase Scott – 276-780-2695	Dispatch: 800-735-5051 Office: 800-735-6455 Fax: 423-675-1537

Dairy Farmers of America, Inc. (NE) Dairy Marketing Services P. O. Box 4810 Syracuse, NY 13206 Robin Breeding Julie Stone	Phone 315-431-1352 Dispatch: 888-589-6455 Fax: 315-433-2345
Dairy Fresh, H. P. 1350 W. Fairfield Road High Point, NC 27263 John Hutchins, QC	Phone: 336-431-7193 Fax: 336-861-3298
Dairy Fresh, LLC 2221 Patterson Ave. Winston-Salem, NC 27105 Roland Goldston, Plt. Mgr. Velda Elsea, QA Supervisor	Phone: 336-723-0311 Lab: 336-714-9036 Fax: 336-723-0353
Duchess Dairy Products 439 Glenow Road Rural Retreat, VA 24368 James Huffard, President	Phone: 276-724-0067
H P Hood 160 Hoodway Winchester, VA 22602 Cindy Coulter, Quality Director ESL/Aseptic Plants Laurel Chapman, Quality Manager Steve Packer	Phone: 540-869-0045 Lab: 540-868-7707 Fax: 540-868-0374
Homestead Creamery, Inc. 7254 Booker T. Washington Hwy. P. O. Box 506 Wirtz, VA 24184 Marlin Bowman Jeff Beckner, Plant Manager Doug Wray, Production Manager – cell: 540-598-8004 Edward Switzer, Retail Manager	Phone: 540-721-2045 Fax: 540-721-5808
Hunter Farms 1900 North Main Street High Point, NC 27262 Gale Walton, Lab Supervisor	Phone: 336-822-2300 Lab: 336-822-2388 FAX: 336-822-2347
James River State Dairy James River Correctional Center – State Farm State Farm, VA 23160 , Quality Assurance-Agribusiness 804-598-4251 ext 4395 Frank Baber III, JRCC Agribusiness Director	Phone: 804-784-3551, ext. 2330

<p>Lanco-Pennland Quality Milk Producers 1260 Maryland Ave, Suite 104 Hagerstown, MD 21740 J. Robert Morris, Dir. Daily Operations Sample reports: Douglas Kennedy Field person: Steven P. Biser - 717-372-0978 Dick Main, Administrative Manager, Cell: (301) 514-4938 Robert Ziegler</p>	<p>Phone: 301-393-5554 Fax: (301) 393-5585</p>
<p>Land O'Lakes 405 Park Drive Carlisle, PA 17015 Don Breiner, Mgr. Quality Control, phone ext: 2213 Kathy Barrett, Milk Transcripts, Phone ext: 2215 Jane Upperman, Fieldperson Dean Horst, Field person</p>	<p>Phone: 800-888-6455 Fax: 717-486-3730</p>
<p>Loudoun Milk Transportation, Inc. P. O. Box 850 Purcellville, VA 22132 Thomas F. Rust Delmar Lineweaver</p>	<p>Harrisonburg: 540-434-8766 Purcellville: 540-338-7156 Fax: 540-338-6216</p>
<p>Maola Milk and Ice Cream Co. P.O. Drawer S New Bern, NC 28563 John Bjorklund, Quality Assurance Manager</p>	<p>Phone: 252-672-8046</p>
<p>Marva Maid Dairy 5500 Chestnut Ave. Newport News, VA 23605 Rick Meier, Plant Manager Taisha Burrell, Quality Control Supervisor</p>	<p>Phone: 757-245-3857 Lab: extension 440 Fax: 757-928-2449</p>
<p>Md. and Va. Milk Producers Association, Inc. 1985 Isaac Newton Square, West Reston, Virginia 20190-5094 Jay Bryant, General Manger , Asst. General Manager Grace Williams/Ethan Davidson, QA: 703-742-7450 Larry Seamans, Member Relations, 540-239-0470</p>	<p>Office: 703-742-6800 Fax 703-742-7459</p>
<p>Milkco, Inc. Box 16160 Asheville, NC 28816 John Patterson, Ext. 27 Steve Luse, QC</p>	<p>Phone: 800-842-8021 828-254-9560 Fax: 828-252-6052</p>
<p>Mountain Milk Hauling, Inc. 4724 Early Road Mount Crawford, VA 22841 Mr. Phil Peery, President Debbie Trobaugh</p>	<p>Phone: 540-432-1760</p>

<p>Pet – Division of Land-O-Sun PI O. Box 1349 Konnarock Road Kingsport, TN 37662 Jim Frandsen, QC Manager</p>	<p>Phone: 423-245-5154 FAX: 423-245-1661</p>
<p>Pet Dairy P.O. Box 4527 Spartanburg, SC 29305 Lenny McDole, QC</p>	<p>Phone 864-576-6280 FAX: 864-574-9605</p>
<p>Pet Dairy - Richmond 1505 Robin Hood Road Richmond, Va. 23220 Todd Stuver, Quality Control – 804-204-1114</p>	<p>Phone: 804-204-1115</p>
<p>Piedmont Milk Sales P. O. Box 296 Blountville, Tenn. 37617 Bill Moore Jim Byington</p>	<p>Phone: 423-323-9817 Fax: 423-323-0858</p>
<p>Shenandoah's Pride Dairy 5325 Port Royal Road Springfield, Virginia 22151 Bill Hogan, General Manager John Plumber, Plant Manager Denise Cavanaugh, QC Manager</p>	<p>Phone: 703-321-9500 Lab: 703-321-3126 Fax: 703-321-0573</p>
<p>Southern Marketing Agency, Inc. P. O. Box 1168 Waxhaw, NC 28173 Jim Howie, Director of Organic Sales</p>	<p>Office: 704-843-4067 Cell: 704-534-7958 Fax: 704-843-0268</p>
<p>Spring Gap Mountain Creamery 7 Pansy Lane Paw Paw, WV 25434 Penelope Sagawa psagawa@yahoo.com</p>	<p>Office: 304-947-5414</p>
<p>Sunshine's Pride Dairy Ester Alvarado, President 801 North Kent Street Winchester, VA 22601 Norberto Bernabeu 516-250-3041 or 540-818-8247</p>	<p>Office: 540-535-0004 Fax: 540-535-0014</p>
<p>Superbrand Dairy Products, Inc. P. O. Box 7448 High Point, NC 27264 Keith Pardue, Plant Manager Judy Eshaghi, QC</p>	<p>Phone: 336-431-7193 Fax: 336-861-3298</p>

Valley Milk Products P. O. Box 271 Strasburg, Va. 22657 Don Utz, Plant Manager	Phone: 540-465-5113 Fax: 540-465-4042
Virginia State Dairymen's Association, Inc. P. O. Box 29 104 N. Main Street Bridgewater, VA 22812 Eric T. Paulson, Executive Secretary	Phone: 540-828-6960 Fax: 540-828-6962 Cell: 540-246-2839
Westover Dairy 2801 Fort Ave. Lynchburg, Va. 24506 Mark Deis Mary Barksdale, QA Manager	Phone: 434-528-2560 Lab: 434-528-2597 Fax: 434-528-2590
White Wave Foods 6364 South Valley Pike P. O. B. 218 Mt. Crawford, Va. 22841 Vanessa Breeden, QA Super 540-434-7328 ext 57287 Bill Morrow, QA Super 540-434-7328 ext 57331	Phone: 540-434-7328 Lab: 540-437-2277 Fax: 540-434-7342

Dairy Services Policy and Procedure Manual

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REPORTING

Take care to print or write all reports so that they will be legible and neat. Use caution in composition so that the assemblage of words will clearly convey to the reader the message intended. **Use only black ball point pens.**

The following procedures must be followed when completing the report indicated:

1. Official Warning and Suspension Notices

A. The official warning or suspension notice should be handed to the permit holder. If the permit holder can not be located at the time of issuance of the official notice then the notice, notice of right to a fact finding conference, inspection report, sanitary observation reports, and other appropriate correspondence should be mailed to the permit holder by certified mail (return signature card to Richmond Office). Copies should also be left on the farm, and a copy mailed to the Richmond office. Refer to procedures for notification for right to a informal fact-finding conference contained in Part 3.2 on page 3 for more details.

B. Copies:

1. Send a copy of the report to the Richmond office.
2. Present the original report to the dairyman.
3. Retain a copy for personal use.

2. Water Transcript

A. Furnish all of the information necessary to complete the transcript.

1. When a water sample is collected at a farm that does not possess a permit, write "New Shipper" at the top of the transcript. Mark the transcript to have all copies sent to the inspector. After the dairy has been inspected and approved for a permit, attach the water transcript to the permit application and send to the Richmond office.
2. Send at least one copy of all water transcripts to the Richmond office.

1. Send a copy of the report to the Richmond office.
 2. Give the original to the plant manager.
 3. Retain a copy for personal use.
2. As well, a sanitary observation sheet can be used when observing a milk hauler at a dairy farm or a plant. It does not take the place of the milk hauler evaluation sheet but is a good supplemental form to use when you observe some of a milk haulers handling practices on a dairy, inspect a farm bulk milk tanker on the farm or at a receiving room at a dairy plant. The sanitary observation sheet should be made to the milk hauler with observations written in narrative form in the body of the sheet and signed by the dairy inspector.

A. Copies

1. Send a copy of the report to the Richmond office.
2. Give the original to the milk hauler.
3. Retain a copy for personal use.
4. Provide a copy of the sheet to the contract hauler/employer of the milk hauler.

Dairy Services Policy and Procedure Manual

Number: 3.2

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Procedures to Inform Clients of Their Right to a Fact-Finding Conference:

EFFECTIVE DATE: January 19, 1994

Virginia Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-140 States:

Interpretation and enforcement.

- A. This chapter is based on the "Grade A Pasteurized Milk Ordinance—2005 recommendations." Except as otherwise provided in this regulation, the provisions of this regulation shall be interpreted in a manner consistent with interpretations accorded the "Grade A Pasteurized Milk Ordinance--2005 recommendations".
- B. The administrative procedures used to conduct case decisions under this regulation shall be consistent with the provisions of the Virginia Administrative Process Act.
- C. The State Regulatory Authority shall comply with the following administrative procedures when summarily suspending a grade A permit as specified in 2 VAC 5-490-31(B):
 1. The State Regulatory Authority shall serve upon the grade A permit holder a written notice of suspension. The written notice of suspension shall specify the violations in question and inform the grade A permit holder of the right to appear before the State Regulatory Authority in person, by counsel, or by other qualified representative at a fact-finding conference for the informal presentation of factual data, arguments, and proof to appeal this determination of violation;
 2. Upon receipt of written application from any person whose grade A permit has been summarily suspended (within 30 days after the effective date of the summary suspension) the State Regulatory Authority shall within seven days after the date of receipt by the State Regulatory Authority of a written application from any person whose grade A permit has been summarily suspended proceed to hold an informal fact-finding conference to ascertain the facts of the violations in question and upon evidence presented at the informal fact-finding conference shall affirm, modify, or rescind the summary suspension;
 3. The State Regulatory Authority shall, unless the parties consent, ascertain the

fact basis for their decisions of cases through informal conference proceedings. Such conference proceedings include the rights of parties to the case: (i) to have reasonable notice thereof, (ii) to appear in person or by counsel or other qualified representative before the State Regulatory Authority for the informal presentation of factual data, argument, or proof in connection with any case, (iii) to have notice of any contrary fact basis or information in the possession of the agency which can be relied upon in making an adverse decision, (iv) to receive a prompt decision of any application for license, benefit, or renewal thereof, and (v) to be informed, briefly and generally in writing, of the factual or procedural basis for an adverse decision in any case;

4. No person whose grade A permit has been summarily suspended may be granted an informal fact-finding conference by the State Regulatory Authority unless the State Regulatory Authority receives the person's written application within 30 days after the effective date of the summary suspension;
5. From any adverse decision of an informal fact-finding conference, the grade A permit holder may request a formal hearing under §2.2-4020 of the Code of Virginia (1950), as amended, by writing the Director, Division of Dairy and Foods within 30 days stating the request and by providing the State Regulatory Authority with a statement of the issues in dispute. If the request for a formal conference is denied, the State Regulatory Authority shall notify the grade A permit holder in writing and further may affirm or modify the decision of the informal fact-finding conference; and
6. If a formal fact-finding conference is denied, the State Regulatory Authority shall notify the grade A permit holder of the right to file an appeal in the circuit court.

Essential to an understanding of the legal ramifications of this statement are the following points:

1. The PERMIT HOLDER must be served with a notice of suspension or a notice of intent to suspend the permit;
2. In the case of a SUSPENSION the permit holder must respond in writing within 30 days after the effective date of the suspension to request a fact-finding conference. The regulatory agency must offer to proceed to a conference within 7 days after the receipt of the request for a fact-finding conference;
3. In the case of a NOTICE OF INTENT TO SUSPEND the permit holder must respond in writing within 30 days after the date of the notice to request a fact-finding conference;
4. In the case that any item is marked in violation on the INSPECTION SHEET or SANITARY OBSERVATION SHEET the permit holder must request in writing within 30 days after the date of the inspection or sanitary observation sheet to request a fact-finding conference; and

5. Failure for the regulatory agency to comply with these requirements is a violation of due process provisions under the regulations.

In order for Dairy Services to comply with these requirements the following procedures have been developed.

NOTICE TO PERMIT HOLDER:

Whenever an Official Notice is issued the PERMIT HOLDER must be notified. If the permit holder is available on the premises at the time the notice is issued, the permit holder's name should be recorded on the Official Notice form under "issued to" and the time of day recorded.

Whenever the permit holder is not available on the premises to receive the Official Notice and some other responsible person is, the inspector should record the name of that person and the time on the Official Notice under "issued to". A copy of the Official Notice and inspection report must be mailed to the permit holder via certified mail. The receipt for the certified mail will serve as our record of attempt to notify the permit holder and can be used to establish time frames in which the conference must be held.

IN NO CASE IS THE OFFICIAL NOTICE TO BE SIMPLY POSTED IN THE MILKROOM. This would not constitute notification of the permit holder.

1. The following statement must be attached to every Grade "A" dairy farm Inspection Sheet, Sanitary Observation Sheet, Official Notice Warning, Stop-Sale Notice, product degrades and product condemnations (but not suspensions):

"Pursuant to §2.2-4020 of the Code of Virginia (1950), as amended, you have the right to appear before the agency in person, by counsel, or by other qualified representative at a fact-finding conference for the informal presentation of factual data, argument, and proof to appeal this determination of violation. Unless an Official Notice has been issued with respect to this violation, no action against your permit will be taken if the deficiencies noted are corrected. Should you wish to have a fact-finding conference convened, please notify Program Supervisor, Dairy Services, Virginia Department of Agriculture and Consumer Services, P. O. Box 1163, Richmond, Virginia, 23218, in writing within thirty days after the date of this inspection." (Copy of §2.2-4020 of the Code of Virginia (1950), as amended is to be attached)

These statements may be copied and attached to the inspection sheet. Future inspection and sanitary observation sheets will have this information printed on the reverse side of the forms.

The fact that a producer did not request a fact-finding conference within thirty days is not reason to deny a fact-finding conference. The purpose of the thirty

day time limit is to encourage prompt response.

2. To every Official Notice Suspension issued the following statement must be attached:

TO: Grade A Dairy Farm Permit Holders

SUBJECT: Notice of Suspension and Opportunity for a Fact-Finding Conference

The Regulations Governing Grade "A" Milk(2 VAC 5-490-10), requires that whenever the Virginia Department of Agriculture and Consumer Services summarily suspends a grade A permit that you also be notified of your opportunity for a fact-finding conference.

Pursuant to §2 VAC 5-490-140(C) of Regulations Governing Grade "A" Milk, you have the right to appear before the agency in person, by counsel, or by other qualified representative at a fact-finding conference for the informal presentation of factual data, argument, and proof to appeal this Notice of Suspension.

Should you wish to have a fact-finding conference convened, please notify Mr. John A. Beers, Program Supervisor, Dairy Services at Virginia Department of Agriculture and Consumer Services, P. O. Box 1163, Richmond, Virginia, 23218 in writing within thirty days after the effective date of the summary suspension, or by facsimile transmission at (804) 371-7792. A copy of §2 VAC 5-490-140(C) is enclosed.

If you notify us within 30 days after the effective date of the summary suspension, this informal fact-finding conference will be held within seven business days after the date of receipt by the agency.

No person whose grade A permit has been summarily suspended may be granted an informal fact-finding conference by the agency unless the agency receives the person's written application within 30 days after the effective date of the summary suspension.

If you fail to request a conference, this Agency will assume that you agree with all allegations made in the Notice.

UPON RECEIPT OF AN APPLICATION FOR CONFERENCE:

1. The Program Supervisor, Dairy Services will notify the appropriate supervisor.
2. When requested, supervisors will arrange for a meeting place in the county in which the dairy farm is located. A quiet, private office with a table and three chairs should be adequate. Potential sites to hold conferences are extension offices, county

administrative offices, health department offices, etc. All conferences must be recorded on tape so that transcripts may be produced.

3. When requested supervisors will make all arrangements to hold a conference and contact the client to notify them of the location and time.
4. The program supervisor or designee will ordinarily preside at the fact-finding conference. Supervisors will be responsible for recording the proceedings on tape and transcribing the words if necessary.
5. The program supervisor or designee will respond to the client in writing after the fact-finding conference to notify them of the decision reached and to inform them briefly and generally of the factual or procedural basis for that decision.

If, after a fact-finding conference, a client wishes to contest the findings; they have the right to request an adjudicative conference. This adjudicative conference will normally be held by the Program Manager. In the event such a conference is requested, there are no specific time frames in which the conference must be held. Official Notices which initiated a request for a fact-finding conference may be enforced after the date of the initial fact-finding conference. Any second conference should be convened as promptly as possible or within 30 days of the request. All requests for a second fact-finding conference must be made in writing.

The Program Manager or Commissioner's designee is responsible for obtaining a site to hold the adjudicative conference, notification of the client, conduct of the fact-finding conference, preparation of the written summary, findings of fact and the final Agency decision.

To any final Agency decision, the following statement must be included:

"As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty (30) days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a Notice of Appeal with (name of the agency secretary or other appropriate person). In the event that this decision is served on you by mail, three (3) days are added to that period."

WARNING AND SUSPENSION LETTERS ISSUED BY THE RICHMOND OFFICE:

All warning letters issued by the Richmond Office for violations of the quality standards will include the identical notice of right to a fact-finding conference as is required for Official Notices Warning.

All suspension letters issued by the Richmond Office for violation of the quality standards will include the identical notice of right to a fact-finding conference as is required for Official Notices Suspension.

All applications for a fact-finding conference must be made to the Program Supervisor. The Program Supervisor or his/her designee will preside at all first fact-finding conferences and the Program Manager or Commissioner's designee will preside at all adjudicative conference proceedings.

Dairy Services Policy and Procedure Manual

Number: 3.3

Date: May 4, 2000

Revision: October 1, 2007

Effective: December 1, 2007

Routine Biosecurity Measures for On-site Farm Visits or Other Livestock Concentration Points

Biological security measures are becoming standard in many agricultural sectors. These controls, meant to minimize the risk of disease introduction and spread, can vary greatly according to operation and type of site visit. VDACS personnel must take steps to ensure a reasonable level of biosecurity. When owners/producers have more stringent biosecurity measures than the following, those owner/producer requirements should be followed.

Minimum Biosecurity Measures

- Avoid livestock areas, pens, barns, etc., unless it is necessary to complete the goal of the visit.
- Park your vehicle on paved or concrete areas, away from production sites on farm, to avoid contact with dirt, mud or manure. If not possible, be certain that tires are free of dirt and debris by hosing the tires and wheel wells before leaving the premises. If this does not clean the tires adequately, take the vehicle to a nearby pressure car wash.
- Wash hands with soap and water or an antibacterial gel before entering and after leaving the premises to avoid transmitting disease agents from person to person.

Biosecurity Levels

Routine levels of biosecurity measures are described below. When in doubt as to which level of biosecurity is needed, choose the higher level. These steps should be repeated for each premises that is visited.

Level 1- Visits to farms or ranches that entail office or home visits only. No contact with livestock or their housing (including pet horse or work dog).

- Use the minimum measures outlined above

Level 2- Visits to farms or ranches where minimal contact with livestock or their housing (barns, pens, hutches, etc) is unavoidable to attain the goal of the visit, i.e. tour of production facilities. Contact constitutes walking through animal housing or pastures where the animals are not within reach.

- Apply minimum biosecurity measures **plus**
- Immediately put on clean rubber or new plastic boots upon exiting the vehicle.

- After returning to your vehicle, clean and disinfect any equipment used with a brush and approved EPA disinfectant solution (see listed supplies).
- Clean rubber boots with Virkon-S diluted in accordance with label instructions. Scrub the bottoms of the boots with a brush to remove all dirt or debris.
- If wearing plastic boots, place them in a plastic bag that should be left on the premises for disposal or place in a designated "dirty" area of your vehicle.
- Dispose of disinfectant solution according to the label. Unused disinfectant solution should not be discarded on ground.

Level 3- Visits to farms/ranches where there will be close contact with livestock. This includes contact such as walking through narrowly confined pens/ lots where animals are within reach or actually handling/inspecting the animals.

- Pre-plan the needed supplies and clothing for daily visits. Use a pair of clean coveralls for each premise.
- Designate a "dirty" area in your vehicle for clothing and equipment that has been used on the farm.
- Park your vehicle on paved or concrete surfaces away from production facilities.
- Put on clean coveralls and rubber boots immediately upon exiting the vehicle.
- After returning to your vehicle, clean and disinfect all equipment used (including eyewear) and place all disposable supplies in a plastic bag to leave with the owner/producer for disposal. If not possible, place plastic bag in the "dirty" area of the vehicle and dispose of in a manner that prevents exposure to other livestock.
- Clean rubber boots with Virkon-S diluted in accordance with label instructions. Scrub the bottoms of the boots with a brush to remove all dirt or debris. Dispose of disinfectant solution according to the label. Unused disinfectant solution should not be discarded on ground.
- Remove coveralls so that they are inside out and place in a garbage bag.
- Place the clean equipment and boots in the designated "clean" area of the vehicle.
- At the end of the day, dispose of all plastic bags that contain dirty supplies in a manner that prevents exposure to other livestock. Launder all coveralls. Personal hygiene should include shampooing hair and cleaning under fingernails.

Cleaning

No disinfectant can work effectively in the presence of organic material. "Organic material" means manure, urine, blood, pus, milk, plant material, soil, saliva, or any other animal/plant contaminant. It is therefore imperative that all surfaces are cleaned thoroughly prior to immersion in an appropriate disinfectant solution. Always scrub the bottoms and sides of boots. Dirt, debris, and organic matter must be removed from all supplies, equipment and vehicles. All

cloth clothing (coveralls, hats, jackets, gloves, etc.) must be laundered, preferably with hot water or a disinfectant soap prior to wearing at another site.

Disinfecting

Disinfecting solution should be prepared with several things in mind. Among them:

- Proper dilution of the disinfectant to provide efficacy.
- Contact time necessary to completely disinfect.
- Usage of the disinfectant consistent with its label.
- Disposal of the disinfectant consistent with its label.

All contaminated items used at a site must be disinfected after cleaning. If the disinfectant solution becomes contaminated with debris or organic matter, it must be discarded and replaced with new solution. Avoid splashing exposed skin with solution, as it may be irritating. Prepare and use disinfectant solution close to the vehicle so you do not become re-exposed to contaminants after disinfecting. Allowing boots and equipment to dry completely after disinfecting will reduce the survival of many disease-causing organisms.

Disinfectants

- Virkon-S is the recommended disinfectant. Read and follow the label instructions.

Supplies

Supplies for proper biosecurity should be purchased through each office or section. Local APHIS

Veterinary Services officials or the State Veterinarian's office may assist in locating product vendors. Depending on the Biosecurity Level, the following supplies may be needed and should be carried in the vehicle in preparation for site visits:

- Disposable (Tyvex) or washable outerwear (coveralls, jackets, hats, gloves, etc.)
- Rubber or plastic disposable boots (multiple pairs)
- Latex exam gloves (box)
- Large water container
- Virkon-S
- Long handled brush
- Trash bags or large plastic containers (store clean/dirty clothes)
- Paper towels (roll, etc.)
- Spray bottle w/ water (two)
- Liquid and/or gel antibacterial soap
- Bucket, pail or plastic footbath

Dairy Services Policy and Procedure Manual

Number: 3.4
Date: May 4, 2000
Revision: October 1, 2007
Effective: December 1, 2007

Sanitizing Boots Between Farms

Please sanitize your boots as soon as you leave your vehicle when you arrive at the farm and again just prior to entering your vehicle when you leave the farm.

Virkon sanitizer:

1. It is a powder that must be mixed with water. We have found that using a heaping teaspoon to a quart of water will give you the required 1% or greater strength solution.
2. The sanitizer is good for only seven days once water is added. It is fairly expensive, so mix up only what you expect to use in a 7 day period each time.
3. This sanitizer has not been approved for uses on food contact surfaces so don't use it to sanitize sample dippers.
4. We have not experienced this, but we have been told that it is corrosive on metal surfaces.
5. Virkon looks and smells like TANG—so if you take some home with you in the small plastic bottles provided, make sure to properly label the bottle and keep it out of the reach of small children.

Dairy Services Policy and Procedure Manual

Number: 3.5

Date: December 21, 1998

Revision: October 1, 2007

Effective: December 1, 2007

THERMOMETERS USED BY DAIRY INSPECTION PERSONNEL

1. The dial or digital type thermometer graduated in two degree intervals shall be the type used by the Bureau of Dairy Services. Mercury filled thermometers will be used only in specific areas such as checking pasteurization equipment and other similar types of work where a thermometer graduated in intervals of less than two degrees is required.
2. Each person using a thermometer shall be responsible for seeing that their thermometer is checked initially and rechecked for accuracy at least once every six months. Thermometers may be certified by VDACS Laboratory personnel or certified by Bureau personnel other than the inspector themselves. To certify a thermometer it should be placed in a constantly stirred ice and water bath. If the thermometer reads 32°F then it may be certified. If the thermometer does not read 32°F, it should be adjusted to read correctly. Digital thermometers can not be adjusted and should be replaced. Bureau personnel certifying a thermometer should sign the thermometer certification sheet kept in the inspector's producer record book.
3. Each Regional Supervisor shall assume the responsibility of seeing that the inspectors in their region maintain accurate records in their producer record book of temperature accuracy checks for their thermometers.

Dairy Services Policy and Procedure Manual

Number: 3.6

Date: May 24, 2007

Revision: October 1, 2007

Effective: December 1, 2007

Grade "A" Dairy Farm
Citations to Dairy Farm Inspection Report

Inspectors should use the table below to cite specific sections of the regulations when issuing Official Notices. Inspectors should record all citations applicable to each item marked on the inspection sheet. Regulations cited below are:

2 VAC 5-501, Regulations Governing the Cooling, Storing, Sampling and Transporting of Milk; and

2 VAC 5-490, Regulation Governing Grade "A" Milk effective May 23, 2007

Inspection Item	Citation
1a – b	2 VAC 5-490-50(B)(1)(c)
1c	2 VAC 5-490-50(B)(1)(l) Use if equipment is not reasonably clean
2a – e	2 VAC 5-490-50(B)(1)(d)
3a – b	2 VAC 5-490-50(B)(1)(e)
4a – d	2 VAC 5-490-50(B)(1)(f)
5a – r	2 VAC 5-490-50(B)(1)(g) 2 VAC 5-501-40(A)
6a – b	2 VAC 5-490-50(B)(1)(h)
7a – d	2 VAC 5-490-50(B)(1)(i)
8a – c	2 VAC 5-490-50(B)(1)(j)
9a – e	2 VAC 5-490-50(B)(1)(k)
10a	2 VAC 5-490-50(B)(1)(l)
11a	2 VAC 5-490-50(B)(1)(m)
12a – c	2 VAC 5-490-50(B)(1)(n)
13a – e	2 VAC 5-490-50(B)(1)(o)
14a – g	2 VAC 5-490-50(B)(1)(p)
15a – e	2 VAC 5-490-50(B)(1)(q)
16a – b	2 VAC 5-490-50(B)(1)(r)
17a – b	2 VAC 5-490-50(B)(1)(s)
18a	2 VAC 5-490-50(B)(1)(t) 2 VAC 5-501-50(A) Cooling temperature and storage requirements.
18b	2 VAC 5-490-50(B)(1)(a)

18c	2 VAC 5-501-60(B) Indicating thermometer provided and accurate; bulk milk tank installation requirements. 2 VAC 5-501-60(C) Recording thermometer requirements. 2 VAC 5-501-60(H) Interval Timer requirements.
19a – h	2 VAC 5-490-50(B)(1)(u)

Dairy Services Policy and Procedure Manual

Number: 3.7

Date: February 2006

Revision: October 1, 2007

Effective: December 1, 2007

Manufactured Grade Dairy Farm
Citations to Dairy Farm Inspection Report

Inspectors should use the table below to cite specific sections of the regulations when issuing Official Notices. Inspectors should record all citations applicable to each item marked on the inspection sheet. NOTE: Item 18c contains citations applicable to Grade "A" dairy farms only. Regulations cited below are:

2 VAC 5-501, Regulations Governing the Cooling, Storing, Sampling and Transporting of Milk; and

2 VAC 5-531, Regulation Governing Milk for Manufacturing Purposes

Inspection Item	Citation
1a – b	2 VAC 5-531-70(B)(1)(a)
1c	2 VAC 5-531-70(B)(2)(j) Use if equipment is not reasonably clean
2a – e	2 VAC 5-531-70(B)(1)(b)
3a – b	2 VAC 5-531-70(B)(1)(c)
4a – d	2 VAC 5-531-70(B)(1)(d)
5a – r	2 VAC 5-531-70(B)(1)(e) 2 VAC 5-501-40(A)
6a – b	2 VAC 5-531-70(B)(1)(f)
7a – d	2 VAC 5-531-70(B)(1)(g)
8a – c	2 VAC 5-531-70(B)(1)(h)
9a – e	2 VAC 5-531-70(B)(1)(i)
10a	2 VAC 5-531-70(B)(1)(j)
11a	2 VAC 5-531-70(B)(1)(k)
12a – c	2 VAC 5-531-70(B)(1)(l)
13a – e	2 VAC 5-531-70(B)(1)(m)
14a – g	2 VAC 5-531-70(B)(1)(n)
15a – e	2 VAC 5-531-70(B)(1)(o)
16a – b	2 VAC 5-531-70(B)(1)(p)
17a – b	2 VAC 5-531-70(B)(1)(q)
18a	2 VAC 5-531-70(B)(1)(r) 2 VAC 5-501-50(A)

18b	2 VAC 5-531-70(B)(1)(h)
	2 VAC 5-501-60(B) Indicating thermometer provided and accurate; bulk milk tank installation requirements.
18c	2 VAC 5-501-60(C) Grade "A" Only – Recording thermometer requirements. <u>Do not cite for a manufactured grade dairy farm.</u> 2 VAC 5-501-60(H) Grade "A" Only – Interval Timer requirements. <u>Do not cite for a manufactured grade dairy farm.</u>
19a – h	2 VAC 5-531-70(B)(1)(s)

Dairy Services Policy and Procedure Manual

Number: 3.8
Date: December 21, 1998
Revision: October 1, 2007
Effective: December 1, 2007

Guidance for Legally Acceptable Permit Names

All permits must be issued to legal entities that can be held responsible for their actions in a court of law. If a permit were to be issued to a made-up name with no legal identity the agency would not be able to take any legal action because the permit was issued to a non-person.

The definition of "person" under 2 VAC 5-490, Regulations Governing Grade "A" Milk means any individual, plant operator, partnership, corporation, company, firm, trustee, or institution.

Permits must be issued to a "person". If the "person" is a partnership, corporation, company, firm, trustee, or institution they must prove they are a legal entity.

Examples:

Issue permit to: **Robert R. Roberts;** **OK** because he is a human person.

Issue permit to: **Robert R. Roberts and Son;** **Not OK** unless the permit application is accompanied with documentation that the permit holder "Robert R. Roberts and Son" is a legal entity. This could be proven by providing a copy of the articles of incorporation. If the son is eighteen years of age, the permit could be issued to both "Robert R. Roberts" and "his son's name". If the son is not eighteen years of age, "Robert R. Roberts and Son" could be listed as the trading-as name.

Issue permit to: **Robert R. Roberts, John J. Johns, and Willie W. Willie;** **OK** as long as each person listed is eighteen years old and signs the permit application. All persons listed must sign; no exceptions.

Issue permit to: **Robert R. Roberts and John J. Johns, Limited Partnership;** **OK** as long as accompanied by articles of incorporation and documentation showing who the officers of the corporation are.

Issue permit to: **Milking Enterprises, Inc.;** **OK** as long as accompanied by articles of incorporation and documentation showing who the officers of the corporation are. Only officers of the corporation can sign for the corporation.

Dairy Services Policy and Procedure Manual

Number: 3.9
Date: December 21, 1998
Revision: October 1, 2007
Effective: December 1, 2007

Permit Name Changes

2 VAC 5-490, Regulations Governing Grade "A" Milk and 2 VAC 5-531, Regulations Governing Milk for Manufacturing Purposes provide that: "No permit holder may transfer a permit to another person or another location."

This section prevents us from making name changes to existing grade A or manufactured grade permits without reissuing a new permit under a different permit number. In the event someone wants to add, delete, or change a name currently on a permit, a completed cancellation form, new signed permit application, inspection, and water sample will be required. The previous dairy permit will be cancelled and their records retired. The permit will start off with a clean record.

To prevent producers from avoiding permit suspensions caused by poor quality records, the Dairy Services program may deny the issuance of new permits inspectors do not believe are legitimate. Request for permit name changes that inspectors believe are being requested for the purpose of avoiding warning letters should be discussed with their supervisors. If warranted, an informal fact-finding conference would be offered to the permit holder to show cause as to why the new permit should not be denied.

Dairy Services Policy and Procedure Manual

Number: 3.10
 Date: July 25, 2007
 Revision: September 16, 2011
 Effective: December 1, 2007

Dairy Services Program Inspection Frequencies
 Based on 2009 PMO for Grade A

Grade A Dairy Inspections	Frequency Not to Exceed
Processing Plant – Fluid Milk Products	Once each three months*
Processing Plant – Dry or Condensed Milk	Once each three months*
Appendix N Testing Laboratory	Once each three months*
Receiving Room	Once each three months*
Transfer Station	Once each six months*
Wash Station	Once each six months*
Pasteurization Equipment	Once each three months*
Farm Pick-up Tank	Once each twelve months
Milk Transport Tank	Once each twelve months
Milk Hauler Evaluation	Once each twenty-four months
Dairy Farm	Once each six months*
Manufactured Milk Program Inspections	Frequency Not to Exceed
Processing Plant	Once each three months*
Appendix N Testing Laboratory	Once each three months*
Pasteurization Equipment	Once each three months*
Dairy Farm	Once each six months*
Frozen Desserts Program Inspections	Frequency Not to Exceed
Processing Plant	Once each three months**
Virginia Food Law Inspections	Frequency Not to Exceed
Dipshop	Once each six months

*Inspections will be considered as being performed on-time if performed by the end of the month in which they are due.

** Inspections will be considered as being performed on-time if performed within seven calendar days after the 90 day period has ended.

Dairy Services Policy and Procedure Manual

Number: 3.11

Date: July 25, 2007

Revision: October 1, 2007

Effective: December 1, 2007

Dairy Services Program Sampling Frequencies
Based on 2005 PMO for Grade A

Grade A Plant	Frequency Not to Exceed
Heat Treated Milk Products	4 times in any 6 month period
Fluid Milk Products	4 times in any 6 month period
Raw Milk for pasteurization	4 times in any 6 month period
Water Supply (Private)	1 time each 6 months
Grade A Dairy Farm	Frequency Not to Exceed
Raw Milk for Pasteurization	4 times in any 6 month period
Water Supply – Private	1 time every 2 years
Water Supply with Buried Well Seal	1 time every 6 months
Cooling Water	1 time each 6 months
Aflatoxin	3 times each 12 months (follow schedule)
Manufactured Milk Plant	Frequency Not to Exceed
Water Supply (Private)	1 time each 6 months
Appendix N Testing Laboratory	1 time each 3 months (Screening Lab Only)
Cheese	1 time each 3 months (Follow Schedule)
Manufactured Dairy Farm	Frequency Not to Exceed
Raw Milk for Pasteurization	4 times in any 6 month period
Water Supply	1 time every 2 years
Cooling Water	1 time each 6 months
Frozen Desserts Plant	Frequency Not to Exceed
Ice Cream & Frozen Desserts	4 times in any 6 month period
Ice Cream Mix	4 times in any 6 month period
Water Supply (Private)	1 time each 6 months
Virginia Food Law	Frequency Not to Exceed
Dipshop Produced Frozen Desserts	As indicated by inspection findings

Dairy Services Policy and Procedure Manual

Number: 3.12

Date: July 25, 2007

Revision: October 1, 2007

Effective: December 1, 2007

**MINIMUM NUMBER OF DAIRY FARMS TO BE SELECTED AT RANDOM FOR
INCLUSION IN A RATING
OR
MINIMUM NUMBER OF RECORDS TO BE REVIEWED DURING AUDITS**

<u>Number or farms in BTU</u> <u>Number of Records</u>	<u>Number to be</u> <u>Rated or Reviewed</u>
1 to 24	All
25 to 54	25
55 to 59	26
60 to 64	27
65 to 71	28
72 to 78	29
79 to 86	30
87 to 94	31
95 to 105	32
106 to 116	33
117 to 130	34
131 to 147	35
148 to 167	36
168 to 191	37
192 to 222	38
223 to 262	39
263 to 316	40
317 to 394	41
395 to 514	42
515 to 725	43
726 to 1,192	44
1,193 to 5,000	50
5,001 to 10,000	100
10,001 an Over	200

Dairy Services Policy and Procedure Manual

Number: 3.13

Date: July 25, 2007

Revision: August 15, 2012

Effective: December 1, 2007

Dairy Services Forms Listing

Inspectors should use only the current versions of the forms listed below. All prior forms should be destroyed.

Dairy Farm Inspection Forms	Revision Date
Abnormal Milk Survey Report	None
Application for a Dairy Farm Permit	June 21, 2012
Application for Reinstating A Permit	June 17, 2011
Application to Install a Pipeline Milking System in a Milking Parlor	None
Dairy Farm Inspection Report	February 2006
Form to be Used When Requesting Permit Changes	July 25, 1996
Official Suspension Notice	January 25, 2007
Official Warning Notice	January 25, 2007
Grade "A" Plant Inspection Forms	
Appendix "N" Receiving Location Report	None
Application for a Grade "A" Receiving Station, Transfer Station or Wash Station Permit	August 2005
Receiving Station, Transfer Station and Bulk Tank Cleaning Facility Inspection Report	August 2007
Manufactured Milk Plant Inspection Forms	
Application for a Permit to Receive, Process and Handle Milk for Manufacturing Purposes	May 2009
Application for Reinstating A Permit	June 17, 2011
Dairy Manufacturing Plant Inspection Report	None
Vat Pasteurization Equipment Test Report	July 1, 2009
Raw Milk Cheese Transfer Record	None
Frozen Desserts Plant Inspection Forms	
Frozen Dairy Products Plant Inspection Form	None
Frozen Desserts Permit Application	August 2005
Milk and Milk Product Sampling Forms	
Analysis of Cheese Products Report	June 12, 2012
Analysis of Milk and Milk Products Report (16-A)	June 2008
Analysis of Raw Milk Report (16-E)	July 24, 2012
Aflatoxin Screening Testing Milk and Feed Sample Submission Form	July 3, 2012
Herd Size for BRT Testing	None

Virginia Individual Dairy Farm Milk Sample Submission Form	October 1, 2007
Water Sampling Forms	
Report of Bacteriological Examination of Water	None
Milk Hauler and Sampler Forms	
Application for a Permit to Transport Milk Samples	September 2007
Bulk Milk Hauler/Sampler Evaluation Report, Form FDA 2399a Modified to include "Virginia SYSREGNO"	October 2008
Bulk Milk Pickup Tank and Transport Milk Tank Permit Application	April 11, 2005
Contract Milk Hauler Permit Application	April 11, 2005
Milk Sample Collector Evaluation Report, Form FDA 2399 Dairy Plant Sampling – Raw and Pasteurized Milk Modified to include "Virginia SYSREGNO"	October 2008
Milk Sampling Permit Application	October 2010
Milk Tank Truck Inspection Report, Form FDA 2399b Modified to include "Virginia SYSREGNO"	October 2008
Retail Frozen Desserts Inspection Forms	
Retail Frozen Dessert Establishment Inspection Report	February 21, 2008
Retail Frozen Desserts Registration	March 2012

Dairy Services Policy and Procedure Manual

Number: 3.14
Date: September 16, 2011
Revision: none
Effective: September 16, 2011

Dairy Services Use of Personal and Work Email

Agency policy prohibits the conduct of official business through the use of personal email accounts. State policy prohibits the storage of state data or communications records on personal computers because it would not be available in case the records were requested under the Freedom of Information Act. Dairy Services Program was audited during August 2011 and communication between inspectors and clients in the field was noted as being in violation of state policy.

To correct this situation all inspectors will have work email accounts set up for them to use for all official correspondence. Inspectors will also be given a 4GB encrypted thumb drive to provide storage for any files you need to store. Under no circumstances should any email or files be stored on your personal computer.

You may access your email through the agency website from your personal computer.

To do this open your browser and go the VDACS website at: www.vdacs.virginia.gov
From the "Home Page" click on "About VDACS";
After the page opens scroll down and click on "Outlook Web Access"; and
When the VITA Hosted Email page opens, key in your email address and password.

You should log on to your email account at least once a week.

Dairy Services Policy and Procedure Manual

Number: 4.1

Date: December 21, 1998

Revision: October 1, 2007

Effective: December 1, 2007

PROCEDURE FOR COMPLETION OF DAIRY FARM INSPECTION REPORT D&F 19

The *Dairy Farm Inspection Report* form is to be used to report both Grade "A" and manufactured grade dairy farm inspections.

Spaces 1, 2, 3, 5, 6, 7, 8, 10 and 11 must be completed for each inspection (see the numbered copy following these instructions).

Space 9 should be checked whenever a "milking time inspection" is performed. Milking Time Inspections should be recorded in the inspector's producer record book.

Space 4 should be checked whenever the inspection being performed is a required inspection as the result of an official notice, warning letter, suspension, or other enforcement activity.

Violations should be marked by an (X) beside the appropriate debit on the inspection sheet. This information should be recorded in the inspector's producer record book.

Whenever the "Remarks" area is not sufficient to contain all the documentation required by the inspector, a *Sanitary Observation Sheet* should be completed.

The original inspection sheet should be left on the dairy farm and one copy must be sent to the Regional Supervisor.

Inspectors are asked to copy information directly from their producer record books and not from a past inspection sheet to avoid continuing errors inspection after inspection.

VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
DIVISION OF ANIMAL AND FOOD INDUSTRY SERVICES

PERMIT NO.	1					DATE	2	
NAME	3					REQUIRED INSPECTION FILE IN FOLDER	4	
ADDRESS	5							
POST OFFICE	6			ZIP CODE	7		NAME OF BUYER	8
SIR: An inspection of your dairy farm has this day been made and you are notified of the violations marked below with a cross (x). SEE REVERSE FOR YOUR NOTICE OF OPPORTUNITY FOR A FACT-FINDING CONFERENCE.								

<p style="text-align:center;">COWS AND MILKING ANIMALS</p> <p>1. Abnormal Milk: MAX (5) + SCC (5) = (10) Cows and milking animals secreting abnormal milk milked last or in separate equipment (5)..... (1a) Abnormal milk properly handled and disposed of (5)..... (1b) Proper care of abnormal milk handling equipment (5)..... (1c)</p> <p style="text-align:center;">MILKING BARN, STABLE, OR PARLOR</p> <p>2. Construction: MAX (5) Floors, gutters, and feed troughs of concrete or equally impervious materials; In good repair (1)..... (2a) Walls and ceiling smooth, painted or finished adequately; in good repair; ceiling dust tight (1)..... (2b) Separate stalls or pens for horses, calves, and bulls; no overcrowding (1). (2c) Adequate natural and/or artificial light; well distributed (1)..... (2d) Properly ventilated (1)..... (2e)</p> <p>3. Cleanliness: MAX (3) Clean and free of litter (3)..... (3a) No swine or fowl (3)..... (3b)</p> <p>4. Cowyard or Animal-yard: Max (3) Graded to drain; no pooled water or waste (3)..... (4a) Cowyard or animal-yard clean; animal housing areas and manure packs properly maintained (3)..... (4b) No swine (3)..... (4c) Manure stored inaccessible to cows or milking animals (3)..... (4d)</p> <p style="text-align:center;">MILKHOUSE OR ROOM</p> <p>5. Construction and Facilities: MAX (8) Floors Smooth; concrete or other impervious material; in good repair (1)..... (5a) Graded to drain (1)..... (5b) Drains trapped, if connected to sanitary system (1)..... (5c) Walls and Ceiling Approved material and finish (1)..... (5d) Good repair (1)..... (5e) Lighting and Ventilation Adequate natural and/or artificial light; properly distributed (2)..... (5f) Adequate ventilation (2)..... (5g) Doors and windows closed during dusty weather (2)..... (5h) Vents and lighting fixtures properly installed (2)..... (5i) Miscellaneous Requirements Used for milkhouse operations only; sufficient size (2)..... (5j) No direct opening into living quarters or barn, except as permitted by regulation (2)..... (5k) Liquid waste properly disposed of (2)..... (5l) Proper hoseport where required (2)..... (5m) Acceptable surface under hoseport (2)..... (5n) Suitable shelter for transport truck as required by regulation (2)..... (5o)</p>	<p style="text-align:center;">CLEANING FACILITIES</p> <p>Two-compartment wash and rinse vat of adequate size (2)..... (5p) Suitable water heating facilities (2)..... (5q) Water under pressure piped to milkhouse (2)..... (5r) 6. Cleanliness: MAX (4) Floors, walls, windows, tables, and similar non-product contact surfaces clean (4)..... (6a) No trash, unnecessary articles, animals or fowl (4)..... (6b)</p> <p style="text-align:center;">TOILET AND WATER SUPPLY</p> <p>7. Toilet: MAX (4) Provided; conveniently located (4)..... (7a) Constructed and operated according to regulation (4)..... (7b) No evidence of human waste about premises (4)..... (7c) Toilet room in compliance with regulation (4)..... (7d) 8. Water Supply: (2 or 5) Max (5) Constructed and operated according to regulation (2 or 5)..... (8a) Complies with bacteriological standards (5)..... (8b) No connection between safe and unsafe supplies; no improper submerged inlets (5)..... (8c)</p> <p style="text-align:center;">UTENSILS AND EQUIPMENT</p> <p>9. Construction: MAX (4) Smooth, impervious, nonabsorbent, safe materials; easily cleanable; seamless hooded pails (4)..... (9a) In good repair; accessible for inspection (9b) Approved single-service articles; not reused (4)..... (9c) Utensils and equipment of proper design (4)..... (9d) Approved CIP milk pipeline system (4)..... (9e)</p> <p>10. Cleaning: MAX (5) Utensils and equipment clean (5)..... (10a)</p> <p>11. Sanitization: MAX (5) All multi-use containers and equipment subjected to approved sanitization process (5)..... (11a)</p> <p>12. Storage: MAX (2) All multi-use containers and equipment properly stored (2)..... (12a) Stored to assure complete drainage, where applicable (2)..... (12b) Single-service articles properly stored (2)..... (12c)</p> <p style="text-align:center;">MILKING</p> <p>13. Flanks, Udders, and Teats: MAX (5) Milking done in barn, stable, or parlor (5)..... (13a) Brushing completed before milking begun (5)..... (13b) Flanks, bellies, udders, and tails of cows and milking animals clean at time of milking; clipped when required (5)..... (13c) Teats treated with sanitizing solution and dried, just prior to milking (5)..... (13d) No wet hand milking (5)..... (13e)</p>	<p style="text-align:center;">TRANSFER AND PROTECTION OF MILK</p> <p>14. Protection from Contamination: MAX (3) No overcrowding (3)..... (14a) Product and CIP circuits separated (3)..... (14b) Improperly handled milk discarded (3)..... (14c) Immediate removal of milk (3)..... (14d) Milk and equipment properly protected Sanitized milk surfaces not exposed to contamination (3)..... (14f) Air under pressure of proper quality (3)..... (14g)</p> <p>15. Drug and Chemical Control: Max (7) Cleaners and sanitizers properly identified (2)..... (15a) Drug administration equipment properly handled and stored (2)..... (15b) Drugs properly labeled (name and address) and stored (2)..... (15c) Drugs properly labeled (directions for use, cautionary statements, active ingredients) (5)..... (15d) Drugs properly used and stored to preclude contamination of milk (5)..... (15e)</p> <p style="text-align:center;">PERSONNEL</p> <p>16. Hand-Washing Facilities: Max (2) Proper hand-washing facilities convenient to milking operations (2)..... (16a) Wash and rinse vats not used as hand-washing facilities (2)..... (16b)</p> <p>17. Personnel Cleanliness: Max (1) Hands washed clean and dried before milking or performing milk house functions; re-washed when contaminated (1)..... (17a) Clean outer garments worn (1)..... (17b)</p> <p>18. COOLING: MAX (5) Temp. _____ Milk _____ Recorder _____ Gauge _____ Temp. _____ Milk _____ Recorder _____ Gauge _____ Milk cooled to 40° F or less within 2 hours after milking (5)..... (18a) Recirculated cooling water from safe source; properly protected; and complies with bacteriological standards (5)..... (18b) Interval timer, recording thermometer, and indicating thermometer in good repair; thermometers accurate (1)..... (18c)</p> <p style="text-align:center;">PEST CONTROL</p> <p>19. Insect and Rodent Control: MAX (9) Fly breeding minimized by approved manure disposal methods (3)..... (19a) Manure packs properly maintained (3)..... (19b) All milkhouse openings effectively screened or otherwise protected; doors tight and self-closing; screen doors open outward (2)..... (19c) Milkhouse free of insects and rodents (2)..... (19d) Approved pesticides, used properly (2)..... (19e) Equipment and utensils not exposed to pesticide contamination (2)..... (19f) Surroundings neat and clean; free of harborage and breeding areas (2)..... (19g) Feed storage not attraction for birds, rodents or insects (2)..... (19h)</p>
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CONTACT YOUR INSPECTOR PRIOR TO INSTALLING EQUIPMENT OR ALTERING CONSTRUCTION OF FACILITIES			
Remarks:			

Milking Time Inspection	9	Inspector	/0	Inspector No.	//
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Form effective date: February 2006

Dairy Services Policy and Procedure Manual

Number: 4.2

Date: December 21, 1998

Revision: October 1, 2007

Effective: December 1, 2007

MILKING TIME INSPECTIONS

A milking time inspection will be made on at least twenty percent of the farms assigned to each inspector each year. Whenever a milking time inspection is made, the appropriate box on the inspection report should be marked and "MTI" entered in the inspector's record book. The inspector's record book will be checked by the regional manager during quarterly surveys to determine compliance with this requirement. For the purposes of this requirement, the year will be from September 1st through August 30th of the following year so that it will coincide with the performance evaluation cycle.

A milking time inspection will be made on each farm as soon as practical whenever two of the last four somatic cell counts exceed the legal limit and the producer is issued a Somatic Cell Warning Letter. During this inspection, the Abnormal Milk Survey Report will be completed along with the regular inspection report. **An abnormal milking time inspection is optional if the producer has had two previous somatic cell warning letters within the last 12 months.** The follow-up milk sample must be taken within the time frame designated in the warning letter. These inspections may count toward the twenty percent requirement mentioned above.

ABNORMAL MILK SURVEY REPORT

Name _____ Date _____
 Address _____ Permit # _____

Cows in Herd _____ # Milking _____ # Lbs. Milk Produced Daily _____

GENERAL INFORMATION

	Check One
	Yes No
Are SCC monitored by CMT or DHI SCC?	<input type="checkbox"/> <input type="checkbox"/>
Are adequate breeding records maintained?	<input type="checkbox"/> <input type="checkbox"/>
Have cows been examined recently for abnormal milk by veterinarian?	<input type="checkbox"/> <input type="checkbox"/>
Has milk from infected cows been cultured/ sensitivity test conducted by lab?	<input type="checkbox"/> <input type="checkbox"/>
Type bacteria _____	
Drug sensitivity _____	
Are all cows dry treated?	<input type="checkbox"/> <input type="checkbox"/>
What drug used? _____	
Is milk from fresh cows discarded for at least 3 days after freshening?	<input type="checkbox"/> <input type="checkbox"/>
Are cows dried off 60 days prior to calving?	<input type="checkbox"/> <input type="checkbox"/>
Results of analysis on milk from herd past 4 months.	
Date _____	
Bacteria _____	
SCC _____	

MILKING PROCEDURES

	Check One
	Yes No
Are cows thoroughly washed with sanitizing solution?	<input type="checkbox"/> <input type="checkbox"/>
Are cows dried with individual paper towels /cloths prior to units being attached?	<input type="checkbox"/> <input type="checkbox"/>
Are units attached approx. 1 minute after preparation?	<input type="checkbox"/> <input type="checkbox"/>
Is an approved pre-dip used?	<input type="checkbox"/> <input type="checkbox"/>
Name of product _____	
Are teats clean when pre-dip is applied?	<input type="checkbox"/> <input type="checkbox"/>
Is adequate contact time allowed before pre-dip is wiped off?	<input type="checkbox"/> <input type="checkbox"/>
Are cows dipped with approved dip?	<input type="checkbox"/> <input type="checkbox"/>
Name of product _____	
When dip is applied, is at least the lower 1/2 of all teats covered?	<input type="checkbox"/> <input type="checkbox"/>
Is fore milk removed and examined with strip cup?	<input type="checkbox"/> <input type="checkbox"/>
Is unit removed promptly when milking completed?	<input type="checkbox"/> <input type="checkbox"/>
Is vacuum shut off from unit before it is removed?	<input type="checkbox"/> <input type="checkbox"/>
Are units sanitized between cows?	<input type="checkbox"/> <input type="checkbox"/>

MILKING EQUIPMENT

Is equipment clean & in good repair?	<input type="checkbox"/> <input type="checkbox"/>
Are inflations changed as recommended by mfg?	<input type="checkbox"/> <input type="checkbox"/>
Has milking equipment been checked by serviceman within last 6 months?	<input type="checkbox"/> <input type="checkbox"/>
Are vacuum controllers clean & operating properly?	<input type="checkbox"/> <input type="checkbox"/>
Are vacuum pump belts tight & in good repair?	<input type="checkbox"/> <input type="checkbox"/>
Is system free from excessive leaks?	<input type="checkbox"/> <input type="checkbox"/>
Are pipelines & vacuum lines of adequate size & sloped properly?	<input type="checkbox"/> <input type="checkbox"/>
Are pulsators clean & appear to be operating properly?	<input type="checkbox"/> <input type="checkbox"/>
Are teat ends in general healthy condition?	<input type="checkbox"/> <input type="checkbox"/>

ENVIRONMENT

Are cows clean?	<input type="checkbox"/> <input type="checkbox"/>
Is housing clean & free from sources of injury?	<input type="checkbox"/> <input type="checkbox"/>
Are pastures & exercise lots well drained & free from stagnant ponds/streams?	<input type="checkbox"/> <input type="checkbox"/>
Are dry cows housed separately from lactating cows?	<input type="checkbox"/> <input type="checkbox"/>
Are stalls long & wide enough? Dimensions? _____	<input type="checkbox"/> <input type="checkbox"/>
Is bedding adequate, clean, & dry?	<input type="checkbox"/> <input type="checkbox"/>

RECOMMENDATIONS:

Dairy Services Policy and Procedure Manual

Number: 4.3
Date: March 6, 2006
Revision: September 3, 2009
Effective: December 1, 2007

ANIMAL HEALTH

The procedures outlined under this section will serve as a guide to the enforcement of §2 VAC 5-490-60 of the Grade "A" regulation and §2 VAC 5-531-90 of the Manufactured Grade regulation.

1. The diagnosis of diseases of dairy cattle shall be based upon the finding of Virginia licensed veterinarians or of veterinarians in the employ of the Virginia Department of Agriculture and Consumer Services or of the U. S. Department of Agriculture.
 - A. In the confirmation of any such diagnoses, the State Veterinarian may require such physical, chemical, or bacteriological testing as he may deem necessary.
 - B. All diseased animals disclosed by such diagnoses and/or testing shall be handled and disposed of as the State Veterinarian may direct.

2. Each Grade "A" and manufactured grade cow's milk producer shall be routinely screened by means of the Heat Inactivated Ring Test (HIRT) at least **two** times per year at approximately equal intervals as requested by the dairy inspector on the milk transcript. The Heat Inactivated Ring Test shall be conducted in the Regulatory Laboratories of the Virginia Department of Agriculture and Consumer Services, Division of Animal and Food Industry Services. **HIRT tests should be requested by the inspector for all routine milk samples submitted to VDACS laboratories during the months of January, April, July, and October.** Immediately following each of these months the inspector should review his record book and determine which dairy farms do not have any HIRT test results reported during the month. Each inspector will be responsible to ensure that each of the dairy farms identified as not having a HIRT test result will have a milk sample submitted for HIRT testing during the month following the HIRT testing month. Regional managers should review each inspector's record book as part of their performance survey to monitor compliance with this provision.
 - A. Reactions to the screening test shall be interpreted either as "Negative" or as "Positive".
 - B. "Negative" and "Positive" results are to be recorded on the milk transcript.

3. Blood Test: Any herd showing any "Positive" reactions on the HIRT retest, shall be subjected to an agglutination blood test of the entire herd, within 30 days of receipt by the producer of written notice to that effect.
 - A. Blood samples for agglutination testing will be drawn by a veterinarian in the employ of the Virginia Department of Agriculture and Consumer Services, at no cost to the producer.
 - B. Those herd owners whose herd is positive to the Heat Inactivated Milk Ring Test and who do not permit the State or Federal veterinarian to bleed their herd, such veterinarian shall notify the respective dairy inspector and coordinator, Animal and Food Industry Services, at Richmond headquarters.
4. Upon being notified of failure on the part of the milk producer to comply with all requirements of the regulations governing tuberculosis, brucellosis, and other diseases of the dairy herd, the dairy inspector shall issue an official notice to the producer stating that he must comply with the requirements in order to maintain his permit. The producer must be notified of the right to an informal fact-finding conference.

Dairy Services Policy and Procedure Manual

Number: 4.4

Date: December 21, 1998

Revision: October 1, 2007

Effective: December 1, 2007

STORAGE OF EQUIPMENT IN OPEN-ENDED MILKING PARLORS

Milking parlors without four walls may be approved as long as the requirement prohibiting animals and fowl from entering the parlor is satisfied. However, if milking equipment is stored in the parlor, the following guidelines apply.

Whether or not parlor doors or openings must be kept closed or may be left open is determined by the areas adjacent to the openings.

- A. When milking equipment is stored in a milking parlor or barn that is connected to a cattle housing or feeding area, the parlor openings into that area must be kept closed at all times when not in use.
- B. When milking equipment is stored in a milking parlor that opens into a closed area that is not used for feeding or housing cattle, the parlor openings into that area may be left open provided the adjoining area meets the same requirements as the milking parlor. If the adjoining closed area does not meet the same requirements as the parlor, then the parlor openings to that area must be kept closed when not in use.
- C. When milking equipment is stored in a milking parlor which opens into an open area or an area that has a roof but does not have walls, the parlor openings may be left open.

Dairy Services Policy and Procedure Manual

Number: 4.5
Date: December 21, 1998
Revision: October 1, 2007
Effective: December 1, 2007

TOILET

Each Grade "A" and manufactured grade dairy farm is required to have toilet facilities conveniently located to the dairy. Requirements for the toilet are given in Appendix C of the PMO (2005 edition). If no hired help is employed, the toilet in the home of the dairyman will meet this requirement if it is located within 300 feet of the dairy facilities.

If non-family labor is employed, toilet facilities must be provided and conveniently located to the dairy.

Flush toilets must be discharged to an approved septic system. Raw human sewage may not be discharged into an animal waste system.

Inspectors should note that some counties do not approve pit privies.

Regulations Governing Grade "A" Milk References:

Page 40 - §2 VAC 5-490-50(B)(1)(i): requirement for toilet

Page 20 - §2 VAC 5-490-30(D): exception for domestic use; 300 foot rule.

Milk for Manufacturing Purposes References:

Page 22 - §2 VAC 5-531-50(w): exception for domestic use; 300 foot rule.

Page 29 - §2 VAC 5-531-70(B)(1)(g); requirement for toilet.

Dairy Services Policy and Procedure Manual

Number: 4.6
Date: December 21, 1998
Revision: August 15, 2012
Effective: December 1, 2007

WATER SUPPLIES

Water for milkhouse and milking operations shall be from a supply properly located, protected, and operated, and shall be easily accessible, adequate, and of a safe sanitary quality.

1. All water supplies for Grade A dairy farms shall comply with the administrative procedures under Item 8r of the PMO (2009 Edition) and shall also comply with requirements outlined in Appendix D and bacteriological standards outlined in Appendix G of the PMO (2009 Edition). In addition all supplies must comply with the Grade "A" Regulation, Section 2 VAC 490-50 (B)(1)(J) Item 8r on page 41.
2. Water supplies for manufactured grade dairy farms shall comply with Section 2 VAC 5-531-70(B)(1)(h) on page 29 of the *Regulations Governing Milk for Manufacturing Purposes*.
3. All well casings shall terminate 2 feet above the ground level with the exception of existing approved pit installations. No buried well seals shall be permitted.
4. Frost-proof hydrants are not approved unless they are installed in a high, dry area and there is no indication of surface pooling around them. No frost-proof hydrants should be located less than 10 feet from any water supply.
5. Water booster pumps shall not be used unless they can be installed and operated in such a manner as to preclude the possibility of contamination of the dairy farm water supply. At the present time, the only acceptable methods of protection are:
 - A. A minimum-pressure switch installed on the pump on the water intake line. This pressure switch must be set at a minimum of ten pounds per square inch and should be electrically interlocked with the pump so that the pump will not operate whenever the pressure on the water system is below ten pounds per square inch;
 - B. A water storage barrel connected to the intake line of the pump; provided that the water feed line from the sanitary water source discharges into the barrel at least one inch above the highest point water in the barrel will reach before overflowing;
or
 - C. A separate water supply from that potable water supply which is used for

washing dairy equipment and the cows.

6. Vacuum breakers shall be properly installed and accessible for inspection. Such devices may not be installed in a pit unless the pit has a drain to the top of the ground.
7. Water inlets to wash vats shall not be submerged.
8. Samples of water from supplies shall be taken upon initial approval of the physical structure and at a frequency not to exceed **two** years thereafter or whenever any repair or alteration in the water supply system has been made. Prior to approving an application for a permit a satisfactory test result shall be obtained of the water supply.
9. No sample shall be taken prior to the inspection and approval of the physical protection of the water supply.
10. Samples of water from water supplies approved physically which test positive shall be re-inspected and if no physical corrections are necessary, the supply shall be disinfected, re-inspected, and sampled not before five days after disinfection. If the sample collected after five days is positive, the supply shall be re-inspected and sampled. If the third sample collected is still positive, the water supply shall be properly treated continuously by some method to render the water potable or a new, approved water supply made available. Before sampling a supply after it has been disinfected a test will be made for chlorine residual.

The three methods that are approved for systems that must be continuously disinfected are: (i) chlorination; (ii) iodination; and (iii) treatment with ultra-violet light. On any farm where the water supply must be continuously treated, the inspector should inspect the treatment equipment and test the water; *if possible*, to ascertain that the treatment system is properly operating. It is emphasized that this should be done on every farm inspection.

In cases where a ultra-violet light is used, it is important that the manufacturer's recommendations be followed and the bulb changed as recommended by the manufacturer. A tag should be attached to each unit indicating: (1) the date the unit was installed; (2) who made the installation; (3) the date the bulb was changed; and (4) who changed the bulb each time the bulb is changed.

11. When an inspection is made on a farm having the last water sample positive, Item 8b shall be marked. When necessary, due to poor cooperation, the inspector may issue an official notice to the producer, specifying a definite period of time to make corrections in order to render the water supply safe or obtain a new water supply. After the issuance of the official notice, if the water supply is not safe as determined by inspection of physical supply or by laboratory test, the producer's permit shall be

suspended.

12. When public water supplies are used as the water source for dairy farms, the inspector shall determine the responsible authority for the water supply and obtain reasonable assurance that the water supply is approved. Public water supplies not located on the dairy farm shall not be sampled or inspected.
13. Whenever a water sample is drawn anywhere other than in the milkroom, the place from which the sample was drawn must be indicated on the water sample transcript.
14. The responsible agency for approval of water supplies for a producer-distributor shall be the Health Department, unless separate water supplies are provided. The Health Department has the responsibility to sample the water supply of the producer-distributor. Debits on surveys which pertain to the water supply go against the agency being surveyed.

WATER SAMPLE COLLECTION PROCEDURES FOR DAIRY INSPECTORS

These procedures apply to the taking of water samples from dairy farms, cheese plants, and other establishments. Procedures to be used for sampling "sweet" water are covered in the following "Farm and Plant Cooling Water Sample Testing Procedures" section.

Inspectors should try to schedule all water samples to be delivered to the laboratory on Monday, Tuesday, or Wednesday. The persons doing the testing in the laboratory are required to begin processing the sample within 30 hours of the time of collection. This should be considered when scheduling delivery times with the laboratory so that adequate time is allowed for the testing to begin before the 30 hour deadline.

Samples should be collected in the sealed, sterile bottles containing thiosulfate that are provided by your supervisor.

Samples should be collected from the milkhouse from one of the cold water lines that is most frequently used. Avoid collecting samples from rubber hoses and from faucets that have screens or filters.

Turn on the water to a moderate rate with a stream about the size of your little finger and allow running at least 5 minutes. Break the seal and remove the cap from the sampling bottle, taking care not to touch the inside of the bottle or inside of the cap. Do not rinse the bottle. Carefully fill the bottle to the fill line. Do not overfill and avoid splashing water on the outside of the bottle. Tighten the cap securely, properly identify the sample, and place it in a clean cooler. A clean cooler will ensure that the samples are kept in a clean environment and the cooler will also protect the samples from extreme heat or cold and sunlight.

Complete the water transcript. If it is necessary to collect the sample at a location other

than the milkroom, note the location on the transcript. If the supply is treated with chlorine or iodine, test the supply and note the strength on the transcript. If it is treated with a UV light, note this on the transcript.

Chain of custody rules should be applied to the handling of the sample.

Deliver the sample to the laboratory as soon as practical. If the sample is not delivered to the laboratory the same day as collected, the sample should be placed on ice in the cooler. A temperature control sample should be included if the samples are placed on ice. Take care to make sure that the water sample bottles are not submerged in the ice.

There is no specific requirement that the samples be maintained at a certain temperature. However, it is recommended they be kept at a temperature of 50 degrees or less, but not frozen.

Farm Cooling Water and Plant Cooling Water Sample Testing Procedures

In order to comply with the requirements of the Pasteurized Milk Ordinance farm and plant cooling water samples must be performed using the Multiple Tube Fermentation (MTF) technique. There is a need to test only limited numbers of cooling water samples each six months; therefore, only the Harrisonburg laboratory is certified for this test method.

Cooling water is water that is stored and reused many times for cooling raw milk or milk products on the dairy farm or in a processing plant. Cooling water is recirculated from a tank through a plate or tube cooler and requires testing once each six months. Cooling water may contain additives to prevent bacterial growth. Water that passes through a plate or tube cooler one time and is discarded, used for rinsing equipment, used to wash up the parlor, or supplied to watering troughs is not cooling water and does not require sampling.

Because of the limited number of cooling water samples and the quality control required to run the MTF method we will need to **provide a minimum of two weeks notice to the Harrisonburg laboratory prior to delivery of any cooling water samples**. This notice will provide laboratory personnel the time needed to order supplies and prepare to run the test.

The following procedures will be utilized to submit cooling water samples to the Harrisonburg laboratory:

1. Schedule your cooling water sample submissions with the Harrisonburg laboratory at least two weeks in advance of water sample delivery;
2. Cooling water samples will be accepted on Mondays and Tuesdays only. Samples shipped from other labs must be collected on Monday and shipped that day for

UPS receipt in Harrisonburg on Tuesday;

3. Cooling water samples must be collected in the "Colisure" water sample bottle. Sample size must be a little more than 100ml to allow for loss during pipetting. Fill the water sample container a little above the fill line and leave room for agitation;
4. Collect and submit a temperature control sample with each group of cooling water samples submitted. Samples must be shipped on wet ice with a temperature control. The Harrisonburg lab must receive the samples within thirty hours after the time of collection; and
5. A properly completed water transcript with the date and time collected must accompany each sample to the laboratory.

If there is a situation where a cooling water sample can not be collected and shipped on Monday, please bring this your supervisor's attention. We will work with Laboratory Services to resolve the issue.

Dairy Services Policy and Procedure Manual

Number: 4.7
Date: December 19, 1996
Revision: October 1, 2007
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Booster Pump Protection policy

During our December 10, 1996 meeting in Roanoke, Mr. Peter Baker indicated that FDA approved methods of preventing contamination of the water supply by booster pumps on grade A dairy farms could be protected by:

1. Installing the booster pump on a separate water supply;
2. Maintaining an air gap between the water supply and the supply of water feeding the booster pump;
3. Installing a low pressure cut off switch to shut the booster pump off when the water supply line loses water pressure; and
4. Any other method approved by the state regulatory authority responsible for water supplies on dairy farms.

The Office of Dairy Services is the state regulatory authority for water supplies on dairy farms. Currently, Dairy Services does not have a formal policy regarding approved methods for protecting water supplies from contamination when booster pumps are installed on the supply. In order for there to be consistent application of booster pump requirements the following policy is instituted:

For Grade A and Manufactured Grade dairy farms holding Virginia permits, the only approved methods for protecting water supplies from contamination when booster pumps are used, are the three methods approved by FDA (separate supply, low pressure switch, or air gap).

Dairy Services Policy and Procedure Manual

Number: 4.8

Date: January 1, 2008

Revision:

Effective: January 1, 2008

Approved Sanitizers – Hydrogen Peroxide

Sanitizers used on dairy processing equipment must comply with the requirements of 21 CFR 178.1010. Chemical sanitizers not included in this section of the CFR may not be used on dairy farms or in dairy plants to sanitize dairy equipment.

In general every approved sanitizer will be labeled with an “EPA Registration Number” and include complete instruction on how to mix and use the product to obtain varying concentrations of the specific chemical. Any sanitizer container that is not labeled with an “EPA Registration Number” and instructions for its use may not be used.

Hydrogen Peroxide

Sometimes hydrogen peroxide is sold for use as a sanitizer and/or equipment cleaner for use on dairy farms. Hydrogen peroxide is not approved for either use. 21 CFR 178.1005 allows the use of an aqueous solution containing a maximum of 35% hydrogen peroxide for “sterilization” of food contact surfaces of certain food packages (shelf-stable milk cartons). Hydrogen peroxide is extremely corrosive and represents a significant safety hazard to people at concentrations of 35% and above.

Whenever hydrogen peroxide is discovered on a dairy farm for sanitizing or cleaning purposes the inspector should immediately find out the source of the hydrogen peroxide and contact information so that the supplier can be contacted and educated concerning the lack of approval for use as a sanitizer or cleaner and the safety concerns involved with its use. This information should be reported to the inspector’s regional manager as soon as possible.

See front panel If product label for First Aid and Precautionary Statements.

This product can be used on hard non-porous surfaces in farms, dairies, and food processing plants. Exercise care in handling. Check to make sure bottle is always tightly capped. Product should be carried and stored in an upright position to avoid spillage. Do not use this product full strength for cleaning surfaces. Always dilute strictly in accordance with label directions. Wear gloves when cleaning for prolonged periods.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

RESTAURANTS, TAVERNS, SODA FOUNTAINS, DAIRIES, ETC.

Directions for Sanitizing Eating and Drinking Utensils:

Prepare sanitizing solution immediately prior to use.

1. Scrape and pre-wash utensils and glass whenever possible.
2. Wash with good detergent or compatible cleaner.
3. Rinse with clean water.
4. Sanitize in solution of 1 oz to 2 % gallons of water (200 ppm).
5. Immerse utensils at least 2 minutes or for contact time specified by governing sanitary code.
6. Do not reuse sanitizing solution.

-Sanitizing Nonporous Food Contact Surfaces - Prepare a sanitizing solution by thoroughly mixing 2 Tbsp. (1 oz.) of this product with 2 % gallons of water to provide approximately 200 ppm available chlorine by weight. Clean all surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

-To Sanitize Milking Equipment - Prepare sanitizing solution as above immediately prior to use. All surfaces to be sanitized should be properly cleaned before application of chlorine solution. Milking utensils should be submerged in the solution for at least 2 minutes and allowed to drain. Do not rinse equipment with water after treatment. If solution contains less than 50 ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to reestablish a 200 ppm residual. Sanitizers used in automated systems may be used for general cleaning but may not be reused for sanitizing purposes.

-Sanitizing Porous Food Contact Surfaces - Prepare a solution of approximately 600 ppm by thoroughly mixing 6 Tbsp. (3 ozs.) of this product with 2 % gallons of water. Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact with the sanitizer for at least 2 minutes. Prepare a 200 ppm sanitizing solution by thoroughly mixing 2 Tbsp. (1 oz.) of this product with 2% gallon of water. Prior to using equipment, rinse all surfaces with 200 ppm available chlorine solution. Do not rinse with water and do not soak equipment overnight.

FARM PREMISES

Remove all animals, poultry, and feed from premises, vehicles, and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities occupied or transversed by animals or poultry. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. To disinfect, saturate all surfaces with a solution of at least 1000 ppm available chlorine for a period of 10 minutes. A 1000 ppm solution can be made by thoroughly mixing 21.3 oz. of this product with 10 gallons of water. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals or poultry, as well as the cleaned forks, shovels, and scrapers used for removing litter and manure. Ventilate buildings, cars, boats, and other closed spaces. Do not house livestock or poultry or employ equipment until chlorine has been dissipated. All treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers must be rinsed with potable water before reuse.

Food Egg Sanitization - Thoroughly clean all eggs. Thoroughly mix 4.25 oz. of this product with 10 gallons of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130 degrees F. Spray with warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable water rinse. The solution should not be re-used to sanitize eggs.

CLOROX SERVICE BULLETIN

CLOROX LIQUID BLEACH FOR DAIRY AND CREAMERY SANITATION

CLOROX liquid bleach is effective as a chemical sanitizer of milk utensils, containers and equipment. CLOROX bleach dissolves milk solids and other protein material and is a quick and effective deodorizer.

An exposure period of at least 1 minute to a solution of $\frac{1}{2}$ oz. CLOROX liquid bleach to 4 gallons water (50 p.p.m. available chlorine) should be maintained when the solution temperature is 75 degrees F. Lower solution temperatures result in slower action; for each 18 degrees F. drop in temperature, approximately double the exposure time is needed to achieve equivalent bactericidal action with same strength of solution. You can also compensate for lower temperatures by increasing the concentration of CLOROX bleach.

It is important to clean out large deposits of milk or other organic matter before applying CLOROX bleach/water solution. A sharp decline in the available chlorine content of the solution following circulation through milk processing equipment is usually regarded as evidence of inadequate cleaning of the equipment and should be promptly investigated. When a spray is used instead of circulation or immersion, the above specified concentrations of available chlorine should be doubled. (Source: Grade "A" Pasteurized Milk Ordinance... U.S. Department of Health, Education and Welfare.)

RUBBER TEAT CUPS AND TUBES—Before each milking, prepare sanitizing solution by thoroughly mixing 1 oz. CLOROX liquid bleach with each 4 gallons water. This gives approximately 90 p.p.m. available chlorine in an average 70 degree F. solution. Dip teat cups into this solution before transferring them from one cow to another.

To Sanitize—SOAKING METHOD: After each milking, rinse cups and tubes with cold water. Brush thoroughly with detergent solution. Prepare sanitizing solution by thoroughly mixing 1 oz. CLOROX bleach with each 4 gallons water in earthenware, glass, porcelain or stoneware containers. Submerge cups in this solution, holding ends of tubes; coil tubes slowly into solution between milkings; drain thoroughly before using.

To maintain sanitizing solution at proper strength, add $\frac{1}{2}$ oz. CLOROX liquid bleach daily (in hot weather, 1 oz.) for each 3 gallons water; mix well. Protect solution from light. Renew solution bi-weekly. Old solution may be utilized in deodorizing and making floors and drains sanitary; for this purpose, add 1 oz. CLOROX bleach for each 5 gallons old solution; mix well.

To Sanitize—RACK METHOD: After each milking, rinse cups and tubes in cold water. Wash in detergent solution. Prepare sanitizing solution by thoroughly mixing $\frac{1}{2}$ oz. CLOROX liquid bleach with each 2 gallons water; place solution in bottle above rack. Place tubes and cups in rack; fill with solution and let stand between milkings; drain thoroughly before using. Old solution may be utilized in deodorizing and making floors and drains sanitary.

METAL TEAT CUPS AND TUBES—Before each milking, prepare sanitizing solution by thoroughly mixing 1 oz. CLOROX liquid bleach with each 4 gallons water. Dip teat cups into this solution before transferring them from one cow to another.

To Sanitize: After each milking, rinse cups and tubes with cold water. Wash in detergent solution; rinse in solution prepared by thoroughly mixing 1 oz. CLOROX liquid bleach with each 4 gallons water; drain thoroughly. (Metal cups should not be left in CLOROX bleach solution.)

TO CLEAN AND SANITIZE MILKING MACHINES AND UTENSILS: Immediately after milking, flush equipment with clean, lukewarm water. Dismantle equipment after each milking and wash it (including all rubber parts and stanchion hoses) and all utensils with a solution prepared by thoroughly mixing 1 oz. CLOROX liquid bleach to each 4 gallons of your regular detergent solution. Water temperature should be 100 degrees F. to 130 degrees F. (DO NOT MIX CLOROX BLEACH WITH ACID CLEANERS OR MILK STONE REMOVERS.) Rinse equipment and utensils thoroughly with clean, clear water; drain. Immediately before use, sanitize according to directions at bottom of page.*

CLEANING IN PLACE—BULK STORAGE TANKS, DAIRY PIPELINES, TRANSFER STATIONS: Immediately after emptying milk, flush surfaces with a large volume of clean, lukewarm water until water runs completely clear. Thoroughly mix solution of ½ oz. CLOROX liquid bleach with each 2 gallons of your regular detergent solution. Hot water should be used if available, and temperature of the solution should be maintained at 120 degrees F. to 160 degrees F. throughout the entire circulation. (DO NOT USE CLOROX BLEACH WITH ACID CLEANERS OR MILK STONE REMOVERS.) Circulate the sanitizing solution through the system for 10 to 15 minutes. (Brush-wash with solution all parts not coming in contact with solution as it circulates.) Rinse thoroughly with clean, clear water; allow to drain. Seal this equipment to help protect against contamination. Immediately before use, sanitize according to directions at bottom of page.*

SEPARATORS, STRAINERS, MILK CANS, PAILS, CHURNS, PASTEURIZERS—to clean and sanitize: After using, rinse immediately with clean, cold water; then scrub or pressure-spray with solution of 1 oz. CLOROX liquid bleach mixed with each 2 gallons of your regular detergent solution. Rinse with clean, clear water; drain thoroughly. Immediately before use, sanitize according to directions at bottom of page.*

MILK BOTTLES —To sanitize, rinse and thoroughly wash; immerse for 5 minutes in solution prepared by thoroughly mixing 1 oz. CLOROX liquid bleach with each 4 gallons cold or lukewarm water; drain; fill. If bottles are not filled promptly, rinse again with same strength CLOROX bleach solution immediately before filling; drain thoroughly. Ordinarily, 12 gallons of this strength solution will sanitize 5000 clean quart bottles. Keep CLOROX bleach solution clean and free from milk particles.

ICE CREAM FREEZERS —to clean and sanitize: After using, flush with warm water until water runs clear. Scrub or pressure-spray with solution prepared by thoroughly mixing 1 oz. CLOROX liquid bleach with each 2 gallons of regular detergent solution. Rinse thoroughly with clean, clear water; drain. Immediately before use, sanitize according to directions shown below.*

*BEFORE USE—rinse with sanitizing solution prepared by thoroughly mixing 1 oz. CLOROX liquid bleach with each 4 gallons of water; drain thoroughly.

MEASUREMENT TABLE: P.P.M. (Parts Per Million Available Chlorine)

1 oz. CLOROX liquid bleach	— to One Gallon Water	= 400 P.P.M.
½ oz. (1 tablespoon) CLOROX liquid bleach	— to One Gallon Water	= 200 P.P.M.
1 drop CLOROX liquid bleach	— to One Gallon Water	= 2/3 P.P.M.

THE CLOROX COMPANY
Consumer Services Department
P.O. Box 24305
Oakland, California 94623



ULTRA CLOROX® BLEACH FOR DAIRY AND CREAMERY EQUIPMENT SANITATION (EPA Reg. No 5813-50)

This product is effective as a chemical sanitizer of milk utensils, containers and equipment. This product dissolves milk solids and other protein material and is a quick and effective deodorizer.

An exposure period of at least 2 minutes to a 200 ppm available chlorine solution should be maintained when the solution temperature is 75° F. Use chlorine test strips to adjust solution to desired strength. Lower solution temperatures result in slower action; for each 18° F drop in temperature, approximately double the exposure time is needed to achieve equivalent bactericidal action with same strength of solution. You can also compensate for lower temperatures by increasing the concentration of this product.

It is important to clean out large deposits of milk or other organic matter before applying this product/water solution. A sharp decline in the available chlorine content of the solution following circulation through milk processing equipment is usually regarded as evidence of inadequate cleaning of the equipment and should be promptly investigated.

RUBBER TEAT CUPS AND TUBES - Before each milking, prepare a 200 ppm available chlorine sanitizing solution. Dip teat cups into this solution for 2 minutes before transferring them from one cow to another.

To Sanitize - SOAKING METHOD: After each milking, wash cups and tubes by brushing thoroughly with detergent solution. Rinse cups and tubes with cold water. Prepare a 200 ppm available chlorine sanitizing solution in earthenware, glass, porcelain or stoneware containers. Submerge cups in this solution for 2 minutes, holding ends of tubes; coil tubes slowly into solution between milkings; drain thoroughly before using.

To maintain sanitizing solution at proper strength, add 1/2 oz of this product daily (in hot weather, 1 oz) for each 3 gallons water; mix well. Protect solution from light. Renew solution daily. Old solution may be utilized for deodorizing and making floors and drains sanitary; for this purpose, add 1 oz of this product for each 5 gallons of old solution; mix well.

To Sanitize - RACK METHOD: After each milking, rinse cups and tubes in cold water. Wash in detergent solution, then rinse. Prepare a 200 ppm available chlorine sanitizing solution; place solution in bottle above rack for 2 minutes. Place tubes and cups in rack; fill with solution and let stand between milkings; drain thoroughly and air dry before using. Old solution may be utilized in deodorizing and making floors and drains sanitary.

METAL TEAT CUPS AND TUBES - Before each milking, prepare a 200 ppm available chlorine sanitizing solution. Dip teat cups into this solution before transferring them from one cow to another.

To Sanitize: After each milking, rinse cups and tubes with cold water. Wash in detergent solution; rinse in a 200 ppm available chlorine solution for 2 minutes; drain thoroughly and dry before using. (Metal cups should not be left in bleach solution.)

TO CLEAN AND SANITIZE MILKING MACHINES AND UTENSILS: Immediately after milking, flush equipment with clean, lukewarm water. Dismantle equipment after each milking and wash it (including all rubber parts and stanchion hoses) and all utensils with a solution prepared by thoroughly mixing 1 oz of your [regular] [powdered] detergent with each gallon of a 200 ppm available chlorine solution. Water temperature should be 100° F to 130° F. (DO NOT MIX THIS PRODUCT WITH ACID CLEANERS OR MILK STONE REMOVERS.) Rinse equipment and utensils thoroughly with clean, clear water; drain. Air dry. Immediately before use, sanitize according to directions shown below.*

**CPPC ULTRA BLEACH 2 (EPA Reg. No67619-8)
FOR DAIRY AND CREAMERY EQUIPMENT SANITATION**

This product is effective as a chemical sanitizer of milk utensils, containers and equipment. This product dissolves milk solids and other protein material and is a quick and effective deodorizer.

An exposure period of at least 2 minutes to a 200 ppm available chlorine solution should be maintained when the solution temperature is 75° F. Use chlorine test strips to adjust solution to desired strength. Lower solution temperatures result in slower action; for each 18° F drop in temperature, approximately double the exposure time is needed to achieve equivalent bactericidal action with same strength of solution. You can also compensate for lower temperatures by increasing the concentration of this product.

It is important to clean out large deposits of milk or other organic matter before applying this product/water solution. A sharp decline in the available chlorine content of the solution following circulation through milk processing equipment is usually regarded as evidence of inadequate cleaning of the equipment and should be promptly investigated.

RUBBER TEAT CUPS AND TUBES - Before each milking, prepare a 200 ppm available chlorine sanitizing solution. Dip teat cups into this solution

To Sanitize - SOAKING METHOD: After each milking, wash cups and tubes by brushing thoroughly with detergent solution. Rinse cups and tubes with cold water. Prepare a 200 ppm available chlorine sanitizing solution in earthenware, glass, porcelain or stoneware containers. Submerge cups in this solution for 1 minute, holding ends of tubes; coil tubes slowly into solution between milkings; drain thoroughly before using.

To maintain sanitizing solution at proper strength, add 1 1/2 oz of this product daily (in hot weather, 3 oz) for each 10 gallons water; mix well. Protect solution from light. Renew solution daily. Old solution may be utilized for deodorizing and making floors and drains sanitary; for this purpose, add 1 teaspoon of this product for each gallon of old solution; mix well.

To Sanitize - RACK METHOD: After each milking, rinse cups and tubes in cold water. Wash in detergent solution, then rinse. Prepare a 200 ppm available chlorine sanitizing solution; place solution in bottle above rack for 1 minute. Place tubes and cups in rack; fill with solution and let stand between milkings; drain thoroughly and air dry before using. Old solution may be utilized in deodorizing and making floors and drains sanitary.

METAL TEAT CUPS AND TUBES - Before each milking, prepare a 200 ppm available chlorine sanitizing solution. Dip teat cups into this solution before transferring them from one cow to another.

To Sanitize: After each milking, rinse cups and tubes with cold water. Wash in detergent solution; rinse in a 200 ppm available chlorine solution for 1 minute; drain thoroughly and dry before using. **(Metal cups should not be left in bleach solution.)**

TO CLEAN AND SANITIZE MILKING MACHINES AND UTENSILS: Immediately after milking, flush equipment with clean, lukewarm water. Dismantle equipment after each milking and wash it (including all rubber parts and stanchion hoses) and all utensils with a solution prepared by thoroughly mixing 1 oz of your [regular] [powdered] detergent with each gallon of a 200 ppm available chlorine solution. Water temperature should be 100° F to 130° F. **(DO NOT MIX THIS PRODUCT WITH ACID CLEANERS OR MILK STONE REMOVERS.)** Rinse equipment and utensils thoroughly with clean, clear water; drain. Air dry. **Immediately before use, sanitize according to directions shown below.***

CLEANING IN PLACE - BULK STORAGE TANKS, DAIRY PIPELINES, TRANSFER STATIONS: Immediately after emptying milk, flush surfaces with a large volume of clear, lukewarm water until water runs completely clear. Thoroughly mix solution of 1 oz of your [regular] [powdered] detergent with each gallon of a 200 ppm available chlorine solution. Hot water should be used if available, and the temperature of the solution should be maintained at 120-160° F throughout the entire circulation. **(DO NOT USE THIS PRODUCT WITH ACID CLEANERS OR MILK STONE REMOVERS.)** Circulate the sanitizing solution through the system for 10 to 15 minutes. (Brush-wash with solution all parts not coming in contact with solution as it circulates.) Rinse thoroughly with clean, clear water; allow to drain. Air dry. Seal this equipment to help protect against contamination. **Immediately before use, sanitize according to directions shown below.***

SEPARATORS, STRAINERS, MILK CANS, PAILS, CHURNS, PASTEURIZERS - to clean and sanitize: After using, rinse immediately with clear, cold water; then scrub or pressure-spray with solution of 1 oz of your [regular] [powdered] detergent thoroughly mixed with each gallon of 200 ppm available chlorine solution. Rinse with clean, clear water; drain thoroughly. Air dry. **Immediately before use, sanitize according to directions shown below.***

MILK BOTTLES - To sanitize: Clean and rinse, then immerse for 5 minutes in a 200 ppm available chlorine solution prepared with cold or lukewarm water; drain; fill. If bottles are not filled promptly, rinse again with same strength bleach solution immediately before filling; drain thoroughly. Air dry. Ordinarily, 12 gallons of this strength solution will sanitize 5000 clean quart bottles. Keep this bleach solution clean and free from milk particles.

ICE CREAM FREEZERS - To clean and sanitize: After using, flush with warm water until water runs clear. Scrub or pressure-spray with solution prepared by thoroughly mixing 1 oz of [regular] [powdered] detergent with each gallon of 200 ppm available chlorine solution. Let stand 2 minutes. Rinse thoroughly with clean, clear water; drain. Air dry. **Immediately before use, sanitize according to directions shown below.***

***BEFORE USE** -rinse with a 200 ppm available chlorine sanitizing solution; drain thoroughly.

CPPC ULTRA BLEACH 2 (EPA Reg. No. 67619-8) DISINFECTING GUIDE

This product - a positive, powerful germicide, - is a 6.15% sodium hypochlorite solution containing approximately 5.84% available chlorine by weight. In addition to being a highly effective liquid chlorine bleach for laundering and disinfecting, it is widely used in sanitation of poultry and livestock houses and equipment, dairies, creameries, restaurants and taverns, as well as for purification of drinking water and disinfection of water for swimming and wading pools.

IMPORTANT: Always thoroughly mix with water as directed before using.

Do not allow undiluted product to come in contact with any fabric. (If it does, rinse out immediately with clear, cold water.)

Do not apply with natural sponge.

Do not use on non-stainless steel, aluminum, silver, or chipped enamel.

If used on metal, solution should be allowed to stand for no more than 5 minutes, and then rinsed off thoroughly with clear water; otherwise, it may slightly discolor and eventually corrode the metal.

If a metal sprayer is used to apply the solution, rinse sprayer thoroughly after use with clear water, and then oil the plunger.

Dairy Services Policy and Procedure Manual

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COOLING

The procedures outlined under this section are based on the Grade "A" Regulations §2 VAC 5-490-50 B(1)(t), Item 18r; Milk for Manufacturing Purposes §2 VAC 5-531-70(B)(r) and the Bulk Tank Regulations, Section 2 VAC 5-501-50.

The following procedures are to be followed when violations involving temperature are noticed:

1. Any farm bulk tank milk found to be above 50 degrees Fahrenheit, except during the first milking; will be treated as a public health hazard. The inspector will immediately suspend the producers permit. See example notice in Part 4.15 on page 19. The producer's permit may be reinstated after the bulk tank is empty.
2. When farm bulk tank milk is found to be above 40 degrees Fahrenheit, but not above 50 degrees Fahrenheit two hours after the completion of any milking, the inspector will mark the violation on the inspection sheet, notify the producer and return after the time deemed necessary to correct the violation to check for compliance. If on the follow-up inspection the violation has not been corrected the inspector will issue an Official Warning Notice.
3. NOTE: No enforcement action is to be taken as the result of temperatures recorded on a recording thermometer chart.
4. When recording thermometer charts show that milk in the farm tank is exceeding 50°F during any milking except the first milking the inspector will arrange to return during milking time to check the temperature of the milk in the bulk tank. Any violation will be treated as a public health hazard.
5. An official notice shall be issued to the milk hauler picking up milk when the temperature of the milk in the farm bulk milk tank exceeds 45 degrees Fahrenheit. When a temperature check indicates that the milk in a farm bulk milk pickup tank or transport milk tank exceeds 45 degrees Fahrenheit an Official Warning Notice is to be issued to the person in possession of the milk. A tag stating that this milk shall not be used as Grade "A" milk shall be attached to the outlet valve of the tank.

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RECORDING THERMOMETERS

The procedures outlined under this Section are based on the requirements of The Bulk Tank Regulations, Section 2 VAC 5-501-60.

1. All tanks, new or used, in use on Grade A dairies will be fitted with recording thermometers.
2. General Procedures:
 - A. A recording thermometer is required on each grade "A" dairy in Virginia and should be inspected during routine farm inspections. Should the recorder not reflect the temperature of the milk within plus or minus 1 degree F as required, the inspector will mark it as a violation on the inspection sheet under item 18c.
 - B. The inspector will review the recording charts stored on the farm during farm inspections to establish compliance with these requirements. Failure of the producer to provide a supply of recorder charts, to properly store recorder charts under protected conditions, to maintain the recorder marking device, to maintain the recorder in good repair or other violations of these requirements will be handled like all other violations discovered during inspections. The item will be marked on the inspection sheet and routine enforcement procedures will be used.
3. Installation Requirements:
 - A. All recording thermometers installed on Grade "A" dairy farms will meet all requirements of the regulation.
 - B. All recording thermometers shall be installed in the milkroom on the wall or suspended by rigid metal brackets from the ceiling or the floor.
 - C. Installation of a recording thermometer does not void the requirement for an indicating thermometer on the bulk tank.
4. Construction:

- A. Sensor bulbs must be so located as to record the temperature of milk volume in accordance with 3-A Standards. (3-A Standards permit 20 percent of tank volume).
- B. Acceptable chart sizes will be 8, 10, or 12 inches and strip charts or as approved by the Richmond office.

5. Handling of Recorder Charts:

- A. The milk producer shall maintain an adequate supply of recording charts. A chart available for the next pickup will be considered adequate.
- B. Recorder charts shall be held on the farm as spelled out in the Bulk Tank Regulations, Section 2 VAC 5-500-60, (60 days), unless approval to handle charts in a different manner is approved from the dairy program supervisor.

6. Notification When Device Becomes Inoperable:

- A. Violation of this requirement shall be handled the same as any other violation, (notification by inspection, official notice, etc.).
- B. Inspectors are not to adjust recording thermometers!

NOTE: INSPECTORS DO NOT TAKE OFFICIAL ACTION AS A RESULT OF MILK TEMPERATURE INFORMATION RECORDED ON THERMOMETER CHARTS. HOWEVER, WHEN INFORMATION ON THE CHART INDICATES COOLING PROBLEMS, AN INVESTIGATION WILL BE MADE BY THE DAIRY INSPECTOR.

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INTERVAL TIMING DEVICE

The procedures outlined under this Section are based on the requirements of the Bulk Tank Regulations.

1. Effective Dates: All tanks, new or used, in use on Grade A dairies will be fitted with an interval timing device.
2. Construction Requirements:
 - A. Interval timers shall be set and adjusted so that the milk will be agitated for not less than five minutes at least once every hour.
 - B. The installation and operation of interval timing devices shall be the responsibility of the milk producer.
3. General Procedures: Inspectors will note during inspections if interval timing devices are installed as required by these regulations. If review of recorder charts or physical inspection reveals the absence of an interval timing device on a milk tank or its faulty operation the violation will be noted on the inspection sheet. Established enforcement procedures will be followed to gain compliance on this item.

Dairy Services Policy and Procedure Manual

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Use of Floor Mats on Cow Standing Surfaces in the Milking Area

This policy should be provided in its entirety to each dairyman considering the installation of floor mats on the cow standing surfaces of his milking area.

The use of floor mats (or cow mats) on cow standing surfaces in the milking area is acceptable only under the following conditions:

1. The outside surfaces of the floor mats (or cow mats) shall be relatively smooth;
2. The material from which the floor mats (or cow mats) are manufactured shall be:
 - a. Impervious to moisture;
 - b. Easily cleanable; and
 - c. In good repair;
3. The outside surfaces of the floor mats (or cow mats) and the floor underneath shall be maintained in a clean condition;
4. The floor mats (or cow mats) shall not be permanently fastened to the floor;
5. The floor mats (or cow mats) shall be installed so they may be easily lifted, inspected and cleaned underneath by a single person without help.
6. The floor mats (or cow mats) shall not be installed as one long continuous section;
7. The floor mats (or cow mats) shall be replaced or removed when they become cracked, cut, worn, or frayed; and
8. The floor underneath the floor mats (or cow mats) shall be smooth, in good repair and graded to drain.

Public Health Concern for each requirement:

1. Floor mats must have smooth surfaces because they are easier to clean than rough or irregular surfaces.
- 2a. Floor mats must be impervious to moisture to allow moisture to drain away and to prevent them from harboring bacteria, soils, and odors.
- 2b,c. Floor mats must be manufactured from materials that are easily cleanable and maintained in good repair to promote regular and thorough cleaning.
3. The surface of the floor mats and the floor underneath must be maintained in a clean condition to prevent odors, maintain drainage channels on the underside of the mats, and to prevent harboring bacteria.

4. Floor mats may not be permanently fastened to the floor because the floor mats and the floor underneath can not be inspected or cleaned.
5. Floor mats shall be easy to lift and inspect by a single person to facilitate cleaning and inspection.
6. Floor mats shall not be installed as one long continuous section to allow for ease of inspection and cleaning.
7. Floor mats shall be replaced or removed when they become cracked, cut, worn, or frayed to facilitate cleaning.
8. The floor underneath all floor mats and the entrance and exit lanes in milking barns and parlors must be maintained smooth, in good repair and graded to drain to allow moisture to drain from underneath the floor mats, to facilitate cleaning and to eliminate areas where moisture, soils and bacteria may pool. Floor mats are placed on top of the floor and shall not be considered "as the floor of the milking area" to comply with inspection requirements.

Inspection and Enforcement:

Dairy Inspectors shall inspect floor mats and the floor underneath for cleanliness on every inspection. The floor and the floor mats shall be "reasonably clean" and "easily inspected" to comply with inspection requirements.

To be considered "reasonably clean":

- 1) The topmost surfaces of the floor and the floor mats visible from above shall be practically free of any soil or foreign material; and
- 2) The underneath side of the floor mats, the grooves in the mat and the floor underneath the floor mats shall be cleaned frequently enough to:
 - 1) Prevent an accumulation of soils, straw, silage, and other materials;
 - 2) Prevent the accumulation of discolored water containing manure; and
 - 3) Prevent the emission of strong odors when the floor mats are raised for inspection.

To be considered "easily inspected":

Dairy Inspectors should be able to complete an inspection of the entire floor underneath the floor mats within twenty minutes including the lifting and replacing of floor mats.

Whenever the floor or the area underneath the floor mats is marked for not being "reasonably clean" on two consecutive inspections, the Dairy Inspector shall issue an official notice to the permit holder requiring correction within a maximum of three days. Inspectors should return after the date in the official notice to determine compliance.

Once an official notice has been issued because the floor underneath the floor mats was not being maintained in a reasonably clean condition, the Dairy Inspector is

encouraged to increase the inspection frequency on the farm to monthly for the purposes of checking on compliance with this item.

Dairy Inspectors shall mark construction and installation items not in compliance (floors not smooth or graded to drain, mats fastened to floor, etc.) on the inspection sheet. Whenever this item has been marked on two consecutive inspections, the Dairy Inspector shall issue an official notice to the permit holder allowing sufficient and reasonable time for the corrections to be made.

Recommendations concerning the installation of floor mats to dairymen considering them for cow standing surfaces in the milking area:

Each dairyman needs to evaluate the suitability of floor mats (or cow mats) on cow standing surfaces on his dairy farm. The installation of floor mats does not eliminate the need to clean under the floor mats or change the requirements for parlor and barn floors to be smooth, in good repair, and graded to drain. Floor mats may not be installed over floors that are not smooth, in good repair, and sloped to drain. The floor must be repaired first, before the floor mats may be installed. The advantages that floor mats offer in cow comfort and prevention of injuries caused by slippery floors must be considered against the manual labor and time that will be necessary to keep the floor and floor mats clean for inspection purposes. Floor mats need to be easy for one person to move and pick-up to promote ease of cleaning and inspection. The frequency of cleaning underneath the floor mats must also be considered. Cleaning needs to be frequent enough to keep the floor underneath the floor mats reasonably clean.

The Dairy Services program **DOES NOT RECOMMEND** the installation of heavy floor mats that lock together and require tools like a screwdriver to pry apart because of the time it takes to “unlock” the edges using a tool and the difficulty for one person to lift the section of floor mat (some of which are one inch thick, measure four feet by six feet and weigh in excess of 50 pounds). Experience has shown that these types of mats do allow the accumulation of manure, straw, debris and discolored liquids under the mats.

The impact of this situation for the dairyman is that he will almost certainly lose three points off of his dairy farm inspection score and Interstate Milk Shipper rating because the area underneath the floor mats is not maintained reasonable clean.

This policy **DOES NOT PROHIBIT** the installation of floor mats (or cow mats) on the cow standing surfaces of milking areas. Individual dairymen must make their own decision on the installation of floor mats, its benefits, disadvantages, and cost of maintenance.

PMO Item 15r. Drug and Chemical Control Quick Reference Card

Minnesota Department of Agriculture — Dairy Inspection Program

General Guidelines:

- Drug administration equipment cannot be cleaned in wash vats
- Drug administration equipment must be stored so as not to contaminate milk or milk contact surfaces
- Non-lactating drugs must be separated from lactating drugs using separate shelves or cabinets
- Non-lactating drugs NOT needing refrigeration cannot be stored in milkroom
- All drugs must be stored so as not to contaminate milk or milk contact surfaces
- Drugs must be labeled properly (see label requirements below)
- Locked drug cabinets must be made accessible to inspection
- Drugs for other animal species than cattle cannot be stored in dairy facility
- All bottles or packages in case lots must be properly labeled
- Any non-lactating drugs found in a working milkhouse refrigerator must require refrigeration

Drug Labeling Requirements:

OTC Drugs:

- Name of Drug
- Active ingredients
- Directions for use
- Withholding/withdrawal times (*even if zero*)
- Name of manufacturer or distributor

Prescription (Rx) drugs:

- “Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian”
- Name of the drug
- Active ingredients
- Directions for use
- Withholding/withdrawal times (*even if zero*)
- Name of manufacturer or distributor
- Any special cautionary statements
- Name and address of dispensing veterinarian (clinic name alone is NOT ENOUGH)

Extra-labeled drugs:

- Name and address of prescribing veterinarian
- Name of the drug
- Class/species ID or animal, herd, flock, pen, lot or other group ID
- Directions for use including dosage, frequency, route of administration and duration of therapy
- Veterinarian specified withholding/withdrawal or discard time for meat or milk (*even if zero*)

Prohibited Drugs and Substances:

These drugs and substances are not to be used or stored on dairy farms. The drugs are not eligible for extra-label privileges by veterinarians.

- Chloramphenicol
- Clenbuterol
- Diethylstilbestrol (DES)
- Dimetridazole
- Iprnidazole
- Other Nitroimidazoles
- Furazolidone, Nitrofurazone, other Nitrofurans
- Sulfonamide drugs in lactating dairy cattle (except approved use of sulfadimethoxine, sul-fabromomethazine, and sulfaethoxy-pyridazine)
- Fluoroquinolones
- Glycopeptides
- Phenylbutazone (in dairy animals 20 months of age or older) - effective 5/29/2003

Other Substances:

- Dimethylsulfoxide (DMSO)
- Ionophores (Lasalocid) in lactating dairy cattle rations
- Dipyrone
- Colloidal Silver
- Estradiol Cypionate (ECP)

Other Drug Notes:

- A180 (danofloxacin mesylate) – fluoroquinolone drug prohibited from extra-label use in lactating dairy cattle (including breeding bulls) CANNOT BE STORED IN DAIRY FACILITY!
- Baytril 100 (enrofloxacin) – fluoroquinolone drug prohibited for use in cattle intended for dairy or veal production (Including breeding bulls) CANNOT BE STORED IN DAIRY FACILITY!
- NuFlor Injectable Solution (florfenicol) – an approved prescription drug that is not labeled for use in cattle 20 months of age or older or veal calves. May be extra-labeled for use in lactating dairy cattle.
- Gentamicin—prescription drug that must be extra-labeled for use in lactating or non-lactating dairy cattle.
- Sulfamethazine—cannot be used in dairy cattle 20 months of age or older and cannot be extra-labeled.
- Estradiol Cypionate (ECP) – Is not considered to be an animal drug and cannot be used in animals in any form.
- Ceftiofur Sodium (Naxcel) – intramammary infusion is an extra-label use of this drug. Spectramast LC is form of this drug approved for intramammary infusion in lactating cows
- Excede – Another ceftiofur containing drug that is approved for use in lactating cows; approved only for injection subcutaneously at the base of the ear
- Micotil (tilmicosin) – an approved prescription drug that is not labeled for lactating cattle. May be extra-labeled for use in lactating dairy cattle.

Side 1

PMO Item 15r. Drug and Chemical Control Quick Reference Card
Minnesota Department of Agriculture — Dairy, Food and Meat Inspection

Other Drug Notes, cont'd:

- **Aloe Vera**—if no directions for animal use on label, consider product misbranded and violation of Item 15r.
- **Homeopathic drugs**—no FDA approval for these drugs
- Drugs packaged for injection or udder infusion but labeled for oral or topical use — violation of Item 15r.

Prostaglandins and Pituitary Hormones:

These are prescription drugs; however, they are exempt from PMO labeling enforcement. MDA does not enforce the State veterinary laws that require the name and address of prescribing veterinarian. Evidence of misuse should be reported to CVM.

Prostaglandins:

- Cloprostenol (Estrumate)
- Dinoprost (Lutalyse)
- Generic forms of these drugs (Prostamate, etc.)

Pituitary hormones:

- Oxytocin
- Luteinizing Hormones (P.L.H.)
- Chorionic Gonadotropin (CG, HCG)
- Corticotropin (ACTH)
- Foillicle Stimulating Hormones (FSH, LH)

Dosage form vitamins and/or mineral products:

Exempt from labeling requirements; must be stored properly.

Topical antiseptics and wound dressings:

Exempt from labeling requirements unless intended for direct injection into teat. Must meet proper storage requirements of Item 15r.

NOTE: *Furazolidone aerosol powder (Topazone, Furox) and Nitrofurazone topical powder for pinkeye and wounds (NFZ Puffer, P.E. 7) ARE NO LONGER EXEMPTED FROM THE PROHIBITED DRUG LIST.* As a result they are no longer eligible for extra-label use in food-producing animals.

Topically applied systemic acting drugs:

Not exempt from labeling requirements in the PMO Item 15r footnote. Pour-on dewormers would be examples of these drugs. Check label to determine if they are for lactating or non-lactating cattle to determine proper storage requirements.

Vaccines and other biologics:

Exempt from PMO labeling requirements. Storage requirements do apply.

Medicated cattle feed and blocks:

If labeled for non-lactating cattle they must be stored so they are inaccessible to lactating dairy cattle.

Footbath concerns:

Locate on exit side of milking area so cattle walk through AFTER milking. Any antibiotics used in footbath must be extra-labeled by prescribing veterinarian.

rBST Surveillance:

Are producers using rBST shipping to rBST-free buyer? If so follow up investigation is needed.

Ruminant Feed (BSE) Concerns:

Mammalian protein prohibited in feeds for ruminant animals.

Debiting PMO Section 15r violations:

Item 15r(b) - Drug administration equipment properly handled and stored (2 points)

- Calf bolus administration gun stored in or above hand wash sink
- Drug syringes stored in or above wash vat or hand wash sink
- Drug syringes stored on top of filter cabinet
- Producer found washing drug administration equipment in wash vat or hand sink

Item 15r(c)- Drugs properly labeled (name and address) and stored (2 points)

- Boxes or bottles of Rx drugs not labeled with vet's name and address
- Improper segregation of lactating/non-lactating drugs
- Box of dry cow treatment stored in milkroom

Item 15r(d) - Drugs properly labeled (directions for use, cautionary statements, active ingredients) (5 points)

- Extra-labeled drug label lacking a withhold time, species indication or treatment duration
- Extra-labeled drug label with no indication of active ingredient

Item 15r(e) -Drugs properly used and stored to preclude contamination of milk (5 points)

- Properly labeled drug used improperly (I.e., Naxcel injected into teat)
- Properly labeled drug stored on top of bulk tank or over wash vat
- Drugs stored above milk filters (*Revised June 2007*).

Dairy Services Policy and Procedure Manual

Number: 4.14
Date: May 23, 2000
Revision: October 1, 2007
Effective: December 1, 2007

Regulatory Issues for Automatic Milking Systems 23 May 2000

1. Location of milking system

a. A reasonable separation will be maintained between areas where milking is performed and manure storage. The main concerns are protection of the milk from contamination by odors, insects or vermin. There was discussion about the possibility of defining two levels of separation distance for temporary manure storage, such as a collection gutter in a barn and long-term storage such as manure pits either under or near housing barns.

b. Milking equipment will be protected from contamination during cleaning and storage. Present requirements for milking parlors require that the area where the milking units are stored be separated from animal housing areas when they are not being used for milking. A similar requirement would be to provide a means to separate milking units from the animal housing area either through the use of a door or a sealed storage location.

c. Milking equipment will be assessable through a clean pathway. People should be able to access the milking machine through a pathway that does not pass through animal housing or feeding areas.

New ideas: Provide positive pressure ventilation in milking area to keep insects and odors out. In Europe the rules are different for each country - England requires 15 feet of solid floor before slats but the area near the robot entrance becomes dirtier. CP: Suggested a separation between the pit under the robot and the pit under the barn with positive ventilation of robot pit. Separation of milk residues may also be an issue. The intention of the rule is to keep the milking area 'reasonably' clean and free of odors. What about the time when agitation of pits occurs? Floor scrapers should move manure away from the milking area. Floors should be sloped to move water and manure away from robot and entrances/exits. CP: It would be wise to keep initial installations away from manure pits. The cost of ventilating pits may be prohibitive. Capability to wash down area in milking area and near entrances/exits should be provided. Slats under cow with collection for manure and water draining away are acceptable. Area where cows are milked will be kept reasonable clean and cleanable surfaces, similar to milk house standards now.

2. Separation of milking and cleaning circuits. Refer memo distributed by CP: M-a-76 Supplement 1.

a. Cleaning solutions must not enter milk. The cleaning circuit (any parts of the system which contain cleaning solutions such as detergents and acids) shall be separated from milk handling surfaces by either 1. A physical break (disconnect piping) or 2. A block

i) and bleed valve system (double block valves with a bleed or drain valve between).

ii) Consideration was given to developing a second category for rinsing solutions similar to the present requirements for back flush systems. Some automated cleaning systems will perform a periodic rinse of parts of the system and a less frequent wash of the entire system. The periodic rinsing may be done with water or a sanitizing solution. These rinsing systems must be protected by a failure detectable apparatus

iii) whereas the cleaning circuit should be protected by a more stringent fail-safe apparatus

3. Milk quality detection and separation of abnormal milk

The detection and separation of abnormal milk has 3 aspects

1) Accuracy of sensors for identification of abnormal milk. This is a technical issue unique to each machine and must be evaluated under field conditions.

2) Accuracy of cow identification. This is an issue particularly for cows treated with antibiotics. The management computer will make the decision to separate the milk from these cows if it has been given the proper information and if cow identification is accurate. (Refer to interpretation in Europe about identification of cows must be traceable by computerized systems. Management issues and training of users is essential)

3) Adequacy of systems to remove antibiotic residues from milk contact surfaces. The adequacy of each type of machine will need to be assessed. This may require some field validation. Cow not identified should not be milked. The milk contact surfaces are rinsed after milking treated cows. This would require a change in our rules; currently they require a wash and sanitize not just a rinse. There may be differences between uncontrolled rinse with cold water and controlled wann/hot water rinse for robotic systems. Milk withholding periods need to be generous as a management issue. (Review reports from Rasmussen and Selvig and some data from FDA on the ability of water rinse to remove antibiotic residues).

4. Vacuum requirements for milking and cleaning

The performance requirement state that vacuum pump capacity shall be sufficient to maintain vacuum stability during milking to +/- 2 kPa during milking and the system will have sufficient vacuum capacity for cleaning. As the cleaning systems for automatic milking systems are quite different than milk pipeline systems, this will have to be assessed; however the basic intention still applies. ASAE standard S518 will be studied to determine if any modifications of the current performance requirement are necessary.

5. Washing Frequency

It was suggested that a minimum washing frequency for the entire systems be established 3 x per day in regular intervals to comply with European regulations. (JR indicated that this was not common practice??) The various strategies to provide intermittent rinsing of parts of the system may not need further specification but should be adequate to maintain low bacteria counts. Allowance for refrigerated parts of system, differences between materials, e.g. ss and plastic. Technically the cleaning of milking machines is referred to as mechanical washing (not CIP) because there are parts of the system that must be disassembled and hand washed

periodically. True CIP requires automated monitoring systems and has stricter hardware requirements. The US law requires manufacturers to specify a cleaning regime for every system.

There was considerable discussion over the need to remove the milk filter before wash. If this is required, then each complete system wash will likely require human intervention and could not be performed 'automatically' (see point 7 below). Current regulations do not require the use of milk filters, although it is considered desirable and is widely practiced. This point needs further clarification. Milk filters are apparently mandatory in Netherlands and forbidden in France?

6. Teat washing and disinfections

- a. Teats shall be effectively cleaned before milking.
- b. Cleaning solutions shall be effectively removed from the teats before teat cups are attached.
- c. Concerns and/or sanitizing were noted about systems that use the same teatcup for cleaning and milking. All milk contact surfaces that come into contact with teat cleaning solutions shall be effectively cleaned and sanitized before milking.

As a point of clarification, there is no objection to some residual sanitizer remaining on the teat. This is addressed by requiring that the teats be 'reasonably' dry before unit attachment.

7. Idle Time

All milk contact surfaces must be effectively cleaned if the milking machine stands idle for more than x hours (x = 1.5 to 2 hours was the suggested range). There was considerable discussion again about the need to remove the milk filters during these potentially 'unattended' washings. There was some discussion regarding how much of the machine would have to be washed.

Suggested need for targeted test. Perhaps 2 stage - rinse idle interval and wash idle interval. Rinsing with raw water will be an issue. Targeted study on pi and rinse? May be an issue allowing raw water for rinsing. May need to require some sanitizer in rinse water.

8. Sanitary Design

Milk contact surfaces shall comply with sanitary design as specified by the 3A standards. Exterior surfaces shall also be of washable material and design.

Slip joints on short hoses are allowable as they are classified as hand clean areas. True sanitary fittings are required for pipes and long hoses. Slip fittings are not allowed in dairy plants unless they are disassembled at each wash. Europe may require sanitary fittings at all locations in milking machines in the near future.

9. Air under pressure

Air under pressure, which is introduced to milk contact surfaces, shall be filtered in accordance with 3A standards (a pre-filter and second replaceable filter at the point of connection to sanitary parts of the system). The filter can be remote if the connection path from filter is of sanitary design.

10. Bulk milk storage tanks

No special requirements for bulk milk storage were noted. They would be subject to the same regulations as for other milking machines. Would buffer tanks be treated

separately? No different than farms with 2 tanks. No objection as long as they meet sanitary design.

11. Milk Temperature

There was some discussion about time and temperature requirements for milk that may be standing in lines while milking is not occurring. Milk that is cooled near the point of milking could potentially be allowed to remain longer in milklines than milk that is not cooled. This issue needs further clarification.

12. Milk transfer lines

There are materials and drainage requirements. Lines must be drained completely of milk, cleaning and rinsing solutions either by slope or by other means.

Dairy Services Policy and Procedure Manual

Number: 4.15

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Revision: May 21, 2009

Effective: January 1, 2008

SUSPENSION AND REINSTATEMENT OF PERMITS

I. VIOLATIONS MARKED ON FARM INSPECTION SHEET

Inspectors should comply with the following guidelines to enforce the sanitation and inspection requirements contained in the Grade "A" Regulations:

1. If any violation is marked on an inspection sheet for the first time the inspector must determine the most appropriate enforcement action from the following options:
 - A. Check for compliance during the next scheduled inspection;
 - B. Issue an official notice if in the judgment of the inspector the violation is significant; or
 - C. Issue an official notice suspending the grade A permit if a human health hazard exist.
2. If any identical violation is marked on two successive inspections the inspector must issue an official notice to enforce the regulation except when the second inspection is required by warning letter, drug residue follow-up, or other official action.

"Identical violation" means the same item as documented on the first inspection is also documented on the second inspection.

EXAMPLE: The most recent prior inspection marked item 6a because the outside of the milk tank was not clean. On the current inspection the inspector marks item 6a because the floor is not clean. No official notice is required. If the inspector had marked the outside of the milk tank both times an official notice would be necessary.

3. Whenever the inspector suspends a grade A permit:
 - A. they will notify the appropriate milk marketing cooperative and the milk hauler by telephone as soon as possible;

- B. and there is milk in the bulk tank; the inspector will tag the tank with a notice to the milk hauler indicating that the milk is not "grade A milk" or "not for human consumption"; and
 - C. they will mail copies of the inspection sheet and official notice to the Richmond office the same day.
4. Whenever the inspector reinstates a grade A permit:
- A. for any violation except animal drug residues, the bulk tank will be empty; and
 - B. the producer must request the reinstatement by contacting the inspector. Inspectors should carry a supply of reinstatement request forms with them for the signature of the producer. Producers may contact the inspector by telephone and request reinstatement. In the event a producer will not be available in person to sign a reinstatement request, the request may be made by telephone and this fact noted on the reinstatement form by the inspector.

In order to avoid additional trips to the farm the inspector may:

- A. Collect the milk sample for reinstatement;
- B. Complete a farm inspection report making sure to check on any violations marked on the most recent inspection report. In the remarks section write "Your Grade "A: Permit Is Reinstated Pending Satisfactory (name of test) Test Results From Your Milk Sample Collected (DATE)." Be sure to put the date of the reinstatement on the inspection sheet;
- C. Insure the milk tank is empty prior to leaving the farm;
- D. If the milk sample test is satisfactory then the inspector can telephone the producer and the milk hauler. No return trip to the farm is necessary; and
- E. If the milk sample test is unsatisfactory then the inspector discards the farm inspection report. The inspector then contacts the producer and arranges to collect another sample. The process starts over again with step one.

This procedure will save time and expense when a sample is required for reinstatement and the bulk tank can be emptied while the inspector is present on the farm.

5. SUSPENION PENALTIES FOR REPEAT OFFENDERS:

2 VAC 5-490-31 D provides the authority to impose a penalty if a permit holder's permit has been suspended more than three times within a twelve-month period. Upon the forth suspension within twelve months the permit holder's permit may

not be reinstated for three days and six days upon the fifth suspension within twelve months with three days being added to each suspension thereafter. This authority is permissive and should only be used for chronic offenders who have been notified by the inspector that this would apply upon future inspections.

If an inspector wishes to apply this penalty he should notify his supervisor and request that a warning letter be sent to the permit holder by the Program Supervisor placing him on notice that his permit would not be reinstated for a period of three days if he is suspended more than three times within a twelve-month period with an additional three days being added for each additional suspension within a twelve-month period.

6. EXTENDED OFFICIAL WARNING NOTICE FOR CHRONIC VIOLATORS:

2 VAC 5-490-31 E provides the authority to issues an *Official Warning Notice of Intent to Suspend* a person's permit covering a six-month period of time if two written notices of intent to suspend the person's permit have been issued for failure to correct the same deficiency within any 12-month period. The inspector may issue a third written notice of intent to summarily suspend the person's permit at anytime within six months from the date of the third written notice if the same deficiency is found to exist on any inspection during the six months specified in the third written notice. See example official notice on page18 of Part 4.15.

II. BACTERIA SUSPENSION AND REINSTATEMENT:

The producer will receive a warning letter any time 2 out of the last four samples violate the bacteria standard. The inspector will make a farm inspection and collect a follow-up milk sample. The required farm inspection may be made any time after the date of the last positive sample, must be scheduled to allow three days to lapse prior to sample collection, and the sample must be collected on or before the date specified in the warning letter.

The producer will receive a suspension letter any time 3 out of the last five samples violate the bacteria standard. After the inspector receives a copy of the suspension letter the inspector will notify the producer's milk hauler and the main office of the dairy cooperative to discontinue pick-ups at the farm until the permit is reinstated. After the producer has contacted the inspector to request reinstatement the inspector must collect a sample for reinstatement purposes. This sample should be clearly marked in the remarks area with "COLLECTED FOR REINSTATEMENT". Inspectors should request an estimated bacteria count(Direct Microscopic Bacteria Count) when submitting samples to VDACS laboratories for reinstatement purposes in order to get results the same day.

In order to reinstate the producer's permit the inspector: (i) must perform a farm inspection; (ii) insure the bulk tank is empty at the time of inspection; and (iii) record in

the remarks area of the inspection sheet the phrase "PERMIT TEMPORARILY REINSTATED TODAY", and "POUNDS OF MILK LOST ON FARM (RECORD POUNDS OF MILK LOST)" or use the procedure described in Section I - Violations Marked On Farm Inspection Sheet, Part 4.15, Page 1, Paragraph 4 for reinstatement of permits. After reinstating the producer's permit the inspector will notify the producer's milk hauler and the main office of the dairy cooperative. All paperwork should be mailed to the Richmond office by the inspector the same day.

III. SOMATIC CELL SUSPENSION AND REINSTATEMENT:

The producer will receive a warning letter any time 2 out of the last four samples violate the somatic cell standard. The inspector will make a Milking Time Inspection, complete the Abnormal Milk Report and collect a follow-up milk sample. The required milking time inspection may be made any time after the date of the last positive sample, must be scheduled to allow three days to lapse prior to sample collection, and the sample must be collected on or before the date specified in the warning letter.

The producer will receive a suspension letter any time 3 out of the last five samples violate the somatic cell standard. After the inspector receives a copy of the suspension letter the inspector will notify the producer's milk hauler and the main office of the dairy cooperative to discontinue pick-ups at the farm until the permit is reinstated. After the producer has contacted the inspector to request reinstatement the inspector must collect a sample for reinstatement purposes. This sample should be clearly marked in the remarks area with "COLLECTED FOR REINSTATEMENT".

In order to reinstate the producer's permit the inspector: (i) must perform a farm inspection; (ii) insure the bulk tank is empty at the time of inspection; and (iii) record in the remarks area of the inspection sheet the phrase "PERMIT TEMPORARILY REINSTATED TODAY", and "POUNDS OF MILK LOST ON FARM (RECORD POUNDS OF MILK LOST)" or use the procedure described in Section I - Violations Marked On Farm Inspection Sheet, Part 4.15, Page 1, Paragraph 4 for reinstatement of permits. After reinstating the producer's permit the inspector will notify the producer's milk hauler and the main office of the dairy cooperative. All paperwork should be mailed to the Richmond office by the inspector the same day.

IV. CHEMICAL RESIDUES, AFLATOXIN RESIDUES, SULFA DRUG RESIDUES SUSPENSIONS AND REINSTATEMENTS:

The inspector will be notified by the Richmond office or their regional manager. When producers exceed the violative levels established for milk, the inspector will suspend the producer's permit by completion of an Official Suspension Notice. The inspector will notify the producer's milk hauler and the main office of the dairy cooperative. The inspector will conduct an investigation to determine the cause of the violation and will report findings to their regional manager or the Richmond office. The inspector will collect another sample for laboratory examination. If the sample results are satisfactory the inspector will reinstate the producer's permit. At the time of reinstatement, all milk

on the farm may be shipped Grade "A" as long as it is within the time and temperature requirements.

In order to reinstate the producer's permit the inspector: (i) must perform a farm inspection; and (ii) record in the remarks area of the inspection sheet the phrase "PERMIT TEMPORARILY REINSTATED TODAY", and "POUNDS OF MILK LOST ON FARM (RECORD POUNDS OF MILK LOST)" or use the procedure described in Section I - Violations Marked On Farm Inspection Sheet, Part 4.15, Page 1, Paragraph 4 for reinstatement of permits. After reinstating the producer's permit the inspector will notify the producer's milk hauler and the main office of the dairy cooperative. All paperwork should be mailed to the Richmond office by the inspector the same day.

V. CRYOSCOPE SUSPENSION AND REINSTATEMENT:

Whenever a positive cryoscope result is obtained on an official milk sample, appropriate persons at each regional laboratory will notify the Richmond dairy office by telephone. If it is the producer's first positive sample, he will be sent a warning letter that will remain in effect for two years.

If the positive cryoscope test is the producer's second violation within the last two years, the farm inspector will be notified by telephone by the program supervisor or his representative. As soon as practical after receiving this notification, the inspector will make an "observed" milking time inspection and collect an official milk sample at the farm. The purpose of this "observed" milking time inspection and sample collection is to determine the freezing point of the milk from that herd of cows when it is known that no water has been accidentally or purposefully added to the milk.

The following guidelines should be followed when making the "observed" milking time inspection:

1. The inspector should contact the producer to make arrangements to conduct the "observed" milking time inspection as soon as practical after being notified of the positive cryoscope test result. The inspection should be timed to begin when the bulk tank is empty due to normal milk pick-up practices.
2. If the dairyman is present, the inspector may inform him of the positive test result but should be sure not to accuse or imply to the dairyman that he is adding water to his milk.
3. The inspector should arrive at the farm prior to the beginning of milking to be sure that the bulk tank, pipeline, receiver jar, units, milk hoses, and all other parts of the milking system are well drained of water before milking begins.
4. The entire milking process should be observed from start to finish and the inspector should make sure that no practices are followed that could introduce water into the milk.

5. It is a good idea to position yourself so that the milking parlor and the milkroom may both be observed at all times. If the layout is such that this is not possible and you suspect the intentional addition of water, notify your regional manager so that arrangements may be made to have another inspector assist you.
6. Do not overlook tube or plate coolers as possible contributors to the problem.
7. Check the milk in the tank to make sure is being properly cooled and is not freezing.
8. As soon as the milking is completed, and the inspector is confident that the milk is free of added water an official milk sample should be taken and delivered to a VDACS laboratory for cryoscope testing.
9. The inspector will document their investigation, observations, recommendations, and findings in a report to the producer. A copy of this report should be mailed to their regional manager and the Dairy Services Program Supervisor.

IF THE RESULT OF THE CRYSCOPE TEST IS POSITIVE:

If the result of the cryoscope test on this sample of milk is positive (above $-.530$ degrees Hortvet), we will conclude that the abnormal freezing point of milk from that herd is due to factors other than the addition of water. The freezing point of this sample will become the **temporary** standard for that farm. A tolerance of $.002$ degrees Hortvet will be allowed. After the problems causing the abnormal freezing point have been corrected and the cryoscope reading returns to normal, the standard for the herd will return to $-.530$ degrees Hortvet. This determination will be made by the program supervisor. The program supervisor will notify the producer and their inspector of the new standard for the herd. The producer will also be informed of factors that could be causing the abnormal cryoscope test result. Factors such as freezing, inadequate nutrition, season of the year, and others may influence their freezing point of milk. The letter to the producer will also advise him to obtain assistance from his veterinarian, nutritionist, fieldman, or dairy extension agent to correct the problem. The inspector should post the new standard for the herd in his/her farm record book until notified by the program supervisor to change it back to $-.530$ degrees Hortvet.

IF THE RESULT OF THE CRYSCOPE TEST IS NEGATIVE:

If the result of the cryoscope test taken at the end of the "observed" inspection is negative, the producer's permit will be suspended. This test result indicates that the milk from that herd, when free of added water, freezes at or below $-.530$ degrees Hortvet. (The permit will be suspended because of the previous positive cryoscope violation that caused the inspector to make the "observed" inspection.) The program supervisor or his representative will call the inspector and notify him/her that the suspension letter has been mailed. After the inspector has received the suspension letter, he/she should notify the producer's milk hauler and the main office of the dairy

cooperative to discontinue pick-ups until the permit is reinstated.

After the producer has contacted the inspector to request reinstatement, the inspector must collect a sample of milk for reinstatement purposes. This sample should be clearly marked in the remarks area with "COLLECTED FOR REINSTATEMENT".

In order to reinstate the producer's permit the inspector: (i) must perform a farm inspection; (ii) insure the bulk tank is empty at time of inspection; and (iii) record in the remarks area of the inspection sheet the phrase "PERMIT TEMPORARILY REINSTATED TODAY", and POUNDS OF MILK LOST ON FARM (RECORD POUNDS OF MILK LOST)" or use the procedure described in Section I - Violations Marked On Farm Inspection Sheet, Part 4.15, Page 1, Paragraph 4 for reinstatement of permits. After reinstating the producer's permit the inspector will notify the producer's milk hauler and the main office of the cooperative. All paperwork should be mailed to the Richmond office the same day.

VI. INHIBITORY SUBSTANCES SUSPENSION AND REINSTATEMENT:

ORIGINAL EFFECTIVE DATE: JANUARY 19, 1994; Revised and Effective: January 2, 1996, January 2, 1997, July 25, 2007 and **January 1, 2008**

I. PURPOSE:

To detect and remove animal drug contaminated milk from the food supply.

II. PROGRAM DESCRIPTION:

Grade A milk plants, receiving stations, and transfer stations must screen every load of bulk tank raw milk received prior to processing for beta lactam drugs. Grade A milk plants, receiving stations, and transfer stations will keep records of all screening-tests and report summary information to VDACS each month for inclusion in the national milk drug residue database system. Positive loads of milk and individual producer milk samples will be screened and confirmed by industry and the results reported to VDACS as soon as available. Producers whose milk tests positive for drug residues will be subject to permit suspension and a negative follow-up test prior to reinstatement.

III. VDACS, OFFICE OF DAIRY SERVICES PROCEDURES:

A. National Milk Drug Residue Database Reporting:

The Office of Dairy Services will receive, compile, and report to the National Milk Drug Residue Database System all drug residue testing information on a statewide basis each month.

B. Dairy Farm Follow-up Procedures for milk samples reported by VDACS laboratories.

Inspectors responsible for following-up on producers who confirm positive will:

- a. Immediately contact the producer by phone to notify him of the situation and make arrangements for follow-up testing;
- b. Suspend the producers permit, collect a sample of the producers milk for retesting, and deliver samples to the designated VDACS laboratory or other designated location without undue delay or within the time frame agreed to with the program supervisor or one of the regional managers;
- c. Conduct an investigation on the farm and document the cause of the violation;
- d. The producer's permit may be temporarily reinstated as soon as the follow-up sample taken at the farm is negative;
- e. Keep the appropriate regional manager or program supervisor informed of the situation and report promptly all paperwork directly to the Richmond office;
- f. Contact the milk hauler and main office of the milk marketing cooperative each time a grade "A" permit is suspended and again as soon as the producer can resume shipment;

Cell Phones:

Dairy inspectors and managers are expected to carry cell phones and to respond promptly during normal business hours.

IV. INDUSTRY RESPONSIBILITIES:

All milk plants receiving milk in Virginia will be certified to confirm load and producer milk samples for animal drug residues effective January 1, 2008. Effective January 1, 2008 **milk plants** will report incidents of positive milk to both the milk marketing cooperative by phone and fax and Dairy Services by fax. Each **milk marketing cooperative** responsible for a positive load of milk will be responsible to cease milk pickups from the farm of the positive producer, collect and test reinstatement milk samples, determine when the producer will be picked up after negative test results and report the results of milk testing and the date milk pickups ceased and resumed to the Richmond Office.

V. REGULATORY RESPONSIBILITIES:

The Richmond Office will contact the appropriate inspector and provide the necessary information to them to go to the farm and issue the farm suspension and reinstatement and conduct an investigation to document the cause of the violation. Each inspector will confirm the information provided at the farm of the positive producer and monitor Industry compliance with Appendix N requirements.

The only positive animal drug-residue follow-ups Dairy Inspectors will make will be the result of positive drug-residue testing performed in VCACS labs on routine milk samples.

In the event a dairy inspector or supervisor is contacted by industry concerning positive producer follow-ups, the inspector or supervisor should notify the Richmond Office of the information.

A. Milk Drug Residue Testing:

1. Each milk plant, receiving station, and transfer station is required to screen each farm pick-up load of commingled raw milk received for beta lactam drugs prior to processing. Milk which is commingled with other milk prior to testing and which later tests positive will result in all milk being considered adulterated.
2. Industry may use any screening-test methods accepted by FDA in M-a-85 or its revisions.
3. Each industry laboratory is expected to: (i) record the results of all tests and maintain these records for a minimum of 6 months; (ii) report records of all results of tests on samples of raw milk to the Office of Dairy Services by the fifteenth day of each month for the preceding month; and (iii) make available to the State Regulatory Authority for inspection and review at the permitted facility records of results of tests on samples of raw milk. Records required to be maintained include:
 - a. The date, time, and place where the test was performed;
 - b. The registration identification of each pickup tanker of bulk raw milk or raw milk sampled;
 - c. The test method;
 - d. A statement as to whether the test results were positive or negative. If the results were positive, the following shall also be recorded:
 1. The identity of each producer contributing to the load from which the positive sample of raw milk was taken;
 2. The name of the person notified at the Office of Dairy Services of the positive tests results;
 3. The date and time of day the person at the Office of Dairy Services was notified of the positive test results; and
 4. The method of notification of the Office of Dairy Services.

4. Each industry laboratory will immediately notify the milk marketing cooperative responsible for the load and the Office of Dairy Services of any shipment of bulk tank raw milk when the raw milk is confirmed to be positive for drug residues.

5. When any bulk tank shipment of raw milk tests positive for drug residues each industry laboratory will:

- a. Test each producer sample of raw milk to determine the farm of origin represented on the load of raw milk;
- b. Collect and record for the Office of Dairy Services the information on the tank load manifest and producer weigh tickets; and
- c. Immediately report to the milk marketing cooperative and the Office of Dairy Services the tests results of the producer samples;

B. National Milk Drug Residue Database Reporting:

1. Each industry laboratory is responsible for reporting summary information concerning drug residue testing to the Office of Dairy Services by the fifteenth day of each month for the preceding month. This information is to be reported on the forms provided for this purpose.

**Procedure for Various Standard Violations
ALL INSPECTION OR OFFICIAL NOTICE REPORTS MUST BE SENT TO THE RICHMOND OFFICE ON THE SAME DAY THE ACTION WAS TAKEN**

Standard	1 st Violation	2 out of last 4	3 out of last 5	How Reinstated	Repeat Violation
Bacteria See Part 4.15 Page 2	No Action	Office sends warning letter requiring another milk sample be collected within 21 days. Inspector shall inspect farm prior to milk sampling. Inspector determines when to inspect – MTI or other. Inspector collects sample by due date in letter but not before the lapse of three days after the date of the inspection. Note: <u>Inspection is always required after warning letter.</u>	Office mails suspension letter and calls inspector. <u>Upon receipt of letter</u> holder and determines when to suspend the permit. Inspector notifies milk hauler and coop when permit is suspended.	Inspector contacts producer and arranges for sample collection. Inspector collects sample for reinstatement and request Direct Microscope Count. Inspector reinstates permit and notifies hauler the standard.	Warning letter in force as long as 2 out of last 4 bacteria sample test results are in violation. Procedures the same as first suspension.
Somatic Cell See Parts 4.2 and 4.15, Page 3	No Action	Office sends warning letter requiring another milk sample be collected within 21 days. Inspector shall conduct a Milking Time Inspection (MTI) and complete the Abnormal Milk Report prior to sampling. Inspector will collect sample by due date in letter but not before the lapse of three days after the inspection. Note: <u>MTI is optional if two have been performed within the past year.</u>	Office mails suspension letter and calls inspector. <u>Upon receipt of letter</u> Inspector contacts permit holder and determines when to suspend the permit. Inspector notifies milk hauler and coop when permit is suspended.	Inspector contacts producer and arranges for sample collection. Inspector collects sample for reinstatement and request Direct Microscope Somatic Cell Count. Inspector reinstates permit and notifies hauler and coop if test results within standard.	Warning letter in force as long as 2 out of last 4 somatic cell sample test results are in violation. Procedures the same as first suspension.
Cryoscope See Part 4.15, Page 4	Office sends warning letter to producer. <u>No inspection is required after first violation.</u>	If producer has a second violative cryoscope test result within two years after the date of the last violation, the office will notify the inspector to conduct a cryoscope inspection and collect another sample for testing. Inspector collects the sample and notifies Richmond Office of the sample results. If cryoscope test from observed milking is violative a temporary cryoscope standard for the producer will be set. If the cryoscope test from the observed milking is negative, the Richmond Office will issue a suspension letter and call the inspector. <u>Upon receipt of letter</u> Inspector contacts permit holder and determines when to suspend the permit. Inspector notifies milk hauler and coop when permit is suspended.	Inspector contacts producer and arranges for sample collection. Inspector collects sample for reinstatement and request cryoscope test. Inspector reinstates permit and notifies hauler and coop if test results within standard.	Inspector contacts producer and arranges for sample collection. Inspector collects sample for reinstatement and request cryoscope test. Inspector reinstates permit and notifies hauler and coop if test results within standard.	Handle the same as the first violation.
Chem., Aflatoxin, and Sulfadiazine Residues See Part 4.15, page 4 Inhibitory Substances at VDACS Lab	Inspector notified producer exceeds violative levels. Inspector suspends permit. See Part 4.15, page 7		Inspector collects sample for retest and reinstates permit after negative test result and notifies the milk hauler and the coop. Inspector conducts investigation on the farm and documents cause of violation.	Inspector collects sample for retest and reinstates permit after negative test result and notifies the milk hauler and the coop. Inspector conducts investigation on the farm and documents cause of violation.	Handle the same as the first violation.
Inhibitory Substance -- Industry Follow-up	Inspector notified by supervisor that producer exceeded violative levels and provided results of reinstatement sample and dates of suspension and reinstatement. See Part 4.15, Page 8		Inspector travels to farm, issues suspension and reinstatement and conducts investigation into the cause of the violation.	Inspector travels to farm, issues suspension and reinstatement and conducts investigation into the cause of the violation.	Handle the same as the first violation.
Inspection	See Inspection in Part 4.15 Pg 1				

ENFORCEMENT PROCEDURES AND EXAMPLE OFFICIAL NOTICES:

I. FARM INSPECTION VIOLATIONS:

Citing The Grade A Milk Regulations On Official Notices

The Virginia Administrative Process Act requires the Agency to serve upon the grade A permit holder a written notice prior to taking any action. The written notice must specify the violations in questions. In order for written notices to state the violations clearly, each notice should include the section(s) of the regulation violated. For uniformity, the name of the regulation is: Regulations Governing Grade "A" Milk

Items 1 through 19 of the grade A farm inspection sheet correspond to Section 2 VAC 5-490-50(B)(1)(c) through 2 VAC 5-490-50(B)(1)(u) of Regulations Governing Grade "A" Milk. To cite an inspection violation of the regulations marked on the inspection sheet the inspector needs to record the lettered section which corresponds to the item numbers marked on the inspection sheet after the phrase "**Section(s) 2 VAC 5-490-50(B)(1)**".

If you marked: items 2a, 2c, 6a, 14d, and 16b on the inspection sheet;

you would cite: **Sections 2 VAC 5-490-50(B)(1)(d), (h), (p), and (r) on the**

official notice. You may determine the appropriate letter(s) to use from the

chart in Part 3.6 for Grade "A" Milk and Part 3.7 of Manufacturing Milk.:

Example citations follow for several frequently issued official notices:

1. Cow Clipping Warning Notice:

An official inspection made today of Your Grade A Dairy Farm

Shows that you are violating Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-50(B)(1)(o).

as follows See violation(s) indicated by items marked (X) on inspection sheet dated (date of this notice).

Remarks: Your failure to correct all violations marked (X) on inspection before (DATE) will/may result in suspension of your grade A permit.

2. Cow Clipping Suspension Notice:

An official inspection made today of Your Grade A Dairy Farm

Shows that you are violating Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-50(B)(1)(o).

as follows See violation(s) indicated by items marked (X) on inspection sheet dated (date of this notice). See also inspection sheet and official notice dated (date of last inspection/notice).

Remarks: Your permit to sell grade "A" milk in Virginia is suspended. Submit application for reinstatement to inspector when corrections are made.

3. Unclean Milking Equipment Warning Notice:

An official inspection made today of Your Grade A Dairy Farm

Shows that you are violating Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-50(B)(1)(l) and (m).

as follows See violation(s) indicated by items marked (X) on inspection sheet dated (date of this notice).

Remarks: Your failure to correct items 10 and 11 marked (X) on inspection before (DATE) will result in suspension of your grade A permit.

4. Unclean Milking Equipment Suspension Notice:

An official inspection made today of Your Grade A Dairy Farm

Shows that you are violating Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-50(B)(1)(l) and (m)

as follows See violation(s) indicated by items marked (X) on inspection sheet dated (date of this notice). See also inspection sheet and official notice dated (date of last inspection/notice).

Remarks: Your permit to sell grade A milk in Virginia is suspended. Submit application for reinstatement to inspector when corrections are made.

5. Immediate Suspension Notice Without Warning Notice For Unclean Equipment:

An official inspection made today of Your Grade A Dairy Farm

Shows that you are violating Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-50(B)(1)(l) and (m).

as follows See violation(s) indicated by items marked (X) on inspection sheet dated (date of this notice).

Remarks: Your permit to sell grade A milk in Virginia is suspended. Submit application for reinstatement to inspector when corrections are made.

6. Farm Bulk Cooling Violation (milk above 50°F any time 2 hours after the completion of the first milking):

An official examination made today of Milk in your bulk tank.

Shows that you are violating Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-50(B)(1)(t).

as follows Milk temperature = (fill in thermometer reading). Raw milk which is warmer than a temperature of 50°F after the first milking or any subsequent milking is a public health hazard.

Remarks: Your permit to sell grade A milk in Virginia is suspended. Submit application for reinstatement to inspector when corrections are made.

7. Farm Bulk Cooling Violation (milk above 40°F but below 50°F two hours after the completion of any milking):

An official examination made today of Milk in your bulk tank.

Shows that you are violating Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-50(B)(1)(t).

as follows Milk temperature = (fill in thermometer reading). Milk in bulk tank is in violation of cooling requirements. Milk not cooled to 40°F within 2 hours after the completion of milking.

Remarks: Your failure to comply with cooling temperature requirements before (date) will result in suspension of your grade A permit.

8. Official Suspension Notice when milk in bulk tank does not properly agitate after the first milking:

An official inspection made today of Your Grade "A" Dairy Farm.

Shows that you are violating Regulations Governing Grade "A" Milk, Sections 2 VAC 5-490-50(B)(1)(tt) and 2 VAC 5-490-31(B).

as follows Milk in bulk tank does not cover the agitator paddle sufficiently to facilitate proper cooling and sampling after the completion of the first milking.

Remarks: Your Grade "A" permit is suspended. Submit application for reinstatement to inspector when corrections are made. No milk may be sold or offered for sale for human consumption nor can your permit be reinstated until the milk in the bulk tank covers the agitator paddle sufficiently to facilitate proper cooling and sampling after the completion of the first milking.

9. Official notice suspension for positive animal drug residue:

An official EXAMINATION made today of milk from your supply collected on (date and time)

Shows that you are violating Regulations Governing Grade "A" Milk, Sections 2 VAC 5-490-50(A)(3)(d) AND 2 VAC 5-490-31(A)(13).

as follows: Laboratory test indicate that the milk was adulterated with animal drug residues.

NOTICE: Your Grade A permit is suspended. Your Grade A permit may be temporarily reinstated after your milk test negative for animal drug residues.

10. Inspection reinstatement after positive animal drug residue:

Record in the "**REMARKS**" area of the inspection sheet:

Permit temporarily reinstated today. Follow-up milk sample collected (Date) tested negative for animal drug residues. Pounds of milk lost on farm: See Official Notice Dated (Date of Official Notice Suspension).

11. Official Warning Notice When Milk in Bulk Tank is Between 52 and 76 Hours Old:

An official INSPECTION made today of Your Grade "A" Dairy Farm

Shows that you are violating Regulations Governing the Cooling, Storing, Sampling and Transporting of Milk or Milk Samples From the Farm to the Processing Plant or Laboratory, 2 VAC 5-501-50(B)

as follows: Milk in bulk tank in excess of 52 hours old.

NOTICE: Milk in bulk tank condemned for Grade "A" use (See red tag attached to tank outlet). Milk in bulk tank may be marketed for manufacturing purposes if it can be picked up before (date and time in the future when milk in the bulk tank will be 76 hours old). Your failure to withhold the milk in your bulk tank from the Grade "A" market or to withhold from marketing milk in your bulk tank after (date and time in the future when milk in the bulk tank will be 76 hours old) will result in the suspension of your Grade "A" Permit. Please contact (Name of inspector) by calling (Telephone number) when your bulk tank has been emptied.

12. Official Suspension Notice When Milk Is Marketed as Grade "A" From the Bulk Tank after an Official Warning Notice has been issued:

An official INSPECTION made today of: Your Grade "A" Dairy Farm

Shows that you are violating: Regulations Governing the Cooling, Storing, Sampling and Transporting of Milk or Milk Samples From the Farm to the Processing Plant or Laboratory, 2 VAC 5-501-30(f)(8)

as follows: Milk in Bulk Tank Marketed on (Date) in violation of Official Warning Notice Issued (Date).

NOTICE: Your Grade "A" Permit is Suspended. Your permit may be reinstated after (Select a date and time in the future equal to the period of time necessary to withhold from the Grade "A" market the same amount of milk marketed as Grade "A" milk in violation of the Official Warning Notice).

Note: The intent is to penalize the permit holder the value they gained by marketing the milk as Grade "A" milk rather than as manufactured grade milk.

13. Official Warning Notice When Milk in Bulk Tank is over 76 Hours Old:

An official INSPECTION made today of Your Grade "A" Dairy Farm

Shows that you are violating Regulations Governing the Cooling, Storing, Sampling and Transporting of Milk or Milk Samples From the Farm to the Processing Plant or Laboratory, 2 VAC 5-501-50(C)

as follows: Milk in bulk tank in excess of 76 hours old.

NOTICE: Milk in bulk tank condemned for human consumption (See red tag attached to tank outlet). Milk in bulk tank may not be marketed. Your failure to withhold the milk in your bulk tank from the market will result in the suspension of your Grade "A" Permit. Please contact (name of inspector) by calling (Telephone number) when your bulk tank has been emptied.

14. Official Suspension Notice When Milk Is Marketed for Human Consumption From a Bulk Tank after an Official Warning Notice has been issued:

An official INSPECTION made today of Your Grade "A" Dairy Farm

Shows that you are violating Regulations Governing the Cooling, Storing, Sampling and Transporting of Milk or Milk Samples From the Farm to the Processing Plant or Laboratory, 2 VAC 5-501-30(f)(8)

as follows: Milk in Bulk Tank Marketed for Human Consumption on (DATE) in Violation of Official Warning Notice Issued (Date).

NOTICE: Your Grade "A" Permit is Suspended. Your permit may be reinstated after (Select a date and time in the future equal to the period of time necessary to withhold from the grade "A" market three times the same amount of milk marketed in violation of the Official Warning Notice).

Note: The reason the suspension time is set at three times the amount of milk marketed in violation of the Official Warning Notice is the fact that during the time of suspension from the Grade "A" market, the producer will be able to market their milk for manufacturing purposes. Because of the difference between the price of manufactured grade milk as opposed to Grade "A" milk, it will take longer to equal the value of the milk sold in violation of the notice. This method also provides a consistent penalty to be applied to all permit holders who ignore an Official Warning Notice to stop the sale of their milk.

15. Six-Month Extended Official Warning Notice:

An official inspection made today of Your Grade A Dairy Farm

Shows that you are violating Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-50() () and 2 VAC 5-490-31 E.

as follows See violation(s) indicated by items marked (X) on inspection sheet dated (date of this notice). See prior Official Warning Notices dated () and ().

Remarks: Your failure to correct and maintain the violation(s) in compliance with the requirements of the regulation shall result in the suspension of your grade "A" dairy farm permit if the violation(s) is marked on any inspection conducted within the next six months after today. This notice will expire on (DATE Six Months in the future).

(Example: If the issue date is February 13th, then the end date is August 12th).
Never exceed the six months by even one day. Always subtract one day from the current date to be sure.

Dairy Services Policy and Procedure Manual

Number: 4.16

Date: December 21, 1998

Revision: October 1, 2007

Effective: December 1, 2007

SEASONAL DAIRY FARM OPERATIONS

When grade A dairy farm permit holders voluntarily stop producing milk for a period of time (i.e. seasonal producers), but intend to restart their operations again in a few months, the inspector should suspend the producer's permit until they actually begin producing and selling milk. Inspectors should consult with the producers involved to explain that all they will need to do is notify their inspector when they are ready to begin shipping milk again. See suspension notice-consenting below.

When grade A dairy farm permit holders do not voluntarily stop producing milk for a period of time or do not consent to the suspension of their permit, the inspector must issue an official warning notice prior to suspending the permit. See example official warning notice below. See official suspension notice-non-consenting below.

The inspector will need to perform a farm inspection, insure the tank is empty at the time of reinstatement, and reinstate the permit on the bottom of the inspection sheet.

Example Official Warning Notice:

An official inspection made today of Your Grade A Dairy Farm Shows that you are violating Regulations Governing Grade "A" Milk, Sections 2 VAC 5-490-31(A)(1), (2), and (4), as follows Your grade A dairy farm is not producing or offering for sale raw milk on a daily basis.
Remarks: Your failure to produce and offer for sale grade A raw milk on a daily basis before (DATE) will result in suspension of your grade A permit.

Example Official Suspension Notice-Non-Consenting:

An official inspection made today of Your Grade A Dairy Farm Shows that you are violating Regulations Governing Grade "A" Milk, Sections 2 VAC 5-490-31(A)(1), (2), and (4), as follows Your grade A dairy farm is not producing or offering for sale raw milk on a daily basis.
Remarks: Your permit to sell grade "A" milk in Virginia is suspended. Submit application for reinstatement to inspector when you plan for milk production and sales to resume.

Example Official Suspension Notice-Consenting:

An official inspection made today of Your Grade A Dairy Farm Shows that you are violating Regulations Governing Grade "A" Milk, Sections 2 VAC 5-490-31(A)(1), (2), and (4).

as follows Your grade A dairy farm is voluntarily not producing or offering for sale raw milk on a daily basis.

Remarks: Your signature on this form signifies your consent to suspended your permit today. Your permit may be reinstated as soon as you begin to offer and sell Grade A raw milk again. Please notify your inspector and submit application for reinstatement when you plan to resume milk production and sales.

Dairy Services Policy and Procedure Manual

Number: 4.16.1

Date: February 3, 2012

Revision:

Effective: February 3, 2012

SEASONAL FARMSTEAD CHEESE OPERATIONS

When cheese makers voluntarily stop producing cheese for a period of time (i.e. seasonal producers), but intend to restart their operations again in a few months, the inspector should suspend the cheese maker's permit until they actually begin producing cheese again. Inspectors should consult with the producers involved to explain that all they will need to do is notify their inspector when they are ready to begin production again. See suspension notice-consenting below.

When cheese makers do not voluntarily stop producing cheese for a period of time or do not consent to the suspension of their permit, the inspector must issue an official warning notice prior to suspending the permit. See example official warning notice below. See official suspension notice-non-consenting below.

The inspector will need to perform a plant inspection at the time of reinstatement, and reinstate the permit on the bottom of the inspection sheet.

Example Official Warning Notice:

An official inspection made today of Your Cheese Processing Plant Shows that you are violating Regulations Governing Milk for Manufacturing Purposes, Sections 2 VAC 5-531-50(C)(1), (2), and (4).
as follows Your Cheese Processing Plant is voluntarily not producing or offering for sale any cheese on a daily basis.
Remarks: Your failure to produce and offer for sale cheese on a daily basis before (DATE) will result in suspension of your permit to Receive, Process and Handle Milk for Manufacturing Purposes.

Example Official Suspension Notice-Non-Consenting:

An official inspection made today of Your Cheese Processing Plant Shows that you are violating Regulations Governing Milk for Manufacturing Purposes, Sections 2 VAC 5-531-50(C)(1), (2), and (4).
as follows Your Cheese Processing Plant is voluntarily not producing or offering for sale any cheese on a daily basis.
Remarks: Your permit to Receive, Process and Handle Milk for Manufacturing Purposes is suspended. Submit application for reinstatement to inspector when you plan to resume cheese production and sales.

Example Official Suspension Notice-Consenting:

An official inspection made today of Your Cheese Processing Plant Shows that you are violating Regulations Governing Milk for Manufacturing Purposes, Sections 2 VAC 5-531-50(C)(1), (2), and (4).

as follows Your Cheese Processing Plant is voluntarily not producing or offering for sale any cheese on a daily basis.

Remarks: Your signature on this form signifies your consent to suspended your permit to Receive, Process and Handle Milk for Manufacturing Purposes today. Your permit may be reinstated as soon as you begin to offer and sell cheese again. Please notify your inspector and submit application for reinstatement when you plan to resume cheese production and sales.

Dairy Services Policy and Procedure Manual

Number: 4.17

Date: December 21, 1998

Revision: October 1, 2007

Effective: December 1, 2007

MILK HAULER RECORDING THERMOMETER CHART PROCEDURES

The procedures outlined under this section are based on the requirements of The Bulk Tank Regulations.

1. Regulatory Requirements: The milk hauler, in making a pickup, shall:
 - A. Properly agitate the milk and remove the chart from the recorder, mark the date and the time of pickup, and sign the chart.
 - B. Write the date and the producer number on a new chart and install it on the recording device.
 - C. File the used chart under protected conditions provided for by the milk producer.
 - D. Identify each lot of milk with the date, time of pickup, and signature when the chart is used for more than one pickup.
 - E. Immediately notify his superior and the milk producer if the recorder chart reveals any temperature variation which would preclude acceptance of the milk from the farm bulk milk cooling or holding tank and record this notification on the chart.
 - F. Note on the recorder chart if the lot of milk is rejected.
 - G. Sign the chart noting the date, time of receipt, and measuring rod reading if the rejected milk is subsequently picked up.
2. General Procedures:
 - A. Inspectors will review recorder charts stored on farms to establish compliance with these requirements during inspections.
 - B. When violations of these requirements are noted, (ie: date, time, signature, rejection statement not recorded or failure to change charts); the inspector will fill out a sanitary observation sheet describing the violation(s) and send copies to the milk hauler, Richmond office and the buyer of the milk (cooperative).

Dairy Services Policy and Procedure Manual

Number: 4.18
Date: August 25, 2000
Revision: May 21, 2009
Effective: December 1, 2007

Animal Drug Follow-up Procedures to Comply With New PMO Requirements

The 1999 PMO established new requirements for inspectors conducting a producer follow-up after a positive animal drug-residue violation. The new procedures require that we conduct an investigation into the cause of the residue violations and document the facts surrounding the incident and our recommendations to the producer to prevent future animal drug-residues on that particular farm. I am enclosing copies of Appendix N from the 1999 PMO and the drug residue avoidance control measures established under Appendix C of the PMO.

Effective immediately, all future animal drug-residue violations will require a written report of the cause of the animal drug-residue violation determined by our investigation and our recommendations to the producer to avoid future animal drug-residue violations for inclusion in their file. The report may be made on a Sanitary Observation Sheet or separate sheet of plain paper. This information will be reviewed by the Regional Milk Specialist as part of Virginia's milk program evaluation.

Virginia Department of Agriculture and Consumer Services
Office of Dairy and Foods
102 Governor Street, Suite 349
Richmond, VA 23219

Follow-up Report for Positive Drug Residues Found in Producer Milk Supply

Date of Violation: _____ Permit Number: _____

Producer Name and Address: _____

Drugs Used: _____

Situation that resulted in drugs being found in milk: _____

Recommendations to producer to prevent positive residues in the future:

Person Interviewed: _____ Date: _____

Inspector: _____ Insp. No: _____

Dairy Services Policy and Procedure Manual

Number: 5.1
Date: December 21, 1998
Revision: October 1, 2007
Effective: December 1, 2007

RECEIVING STATION AND TRANSFER STATION REQUIREMENTS

The procedures outlined under this section are based on the requirements of Regulations Governing Grade "A" Milk, Sections 2 VAC 5-490-50(C)(y), (z) and (a1).

1. The following are applicable requirements for Receiving Stations and Transfer Stations.

A. Construction:

1. The ceiling shall be of such height as to permit easy access to all tanks for manual or automatic cleaning.
2. The milk transfer room in a transfer station shall be large enough to accommodate at least two tanks and shall be long enough to enclose the longest tank and vehicle combination.
3. Transfer stations shall comply with the applicable provisions of items 2p and 3p.

Note: Items 5p, 13p, and 17p as listed in the Rules and Regulations are not applicable to transfer stations.

B. The following items are to be Recommended:

1. Floor drains be no less than six inches in diameter and that a sand trap or clean out basin be provided in the drain line immediately outside the building.
2. Mechanical means of ventilation be installed in receiving stations.

C. Operations:

1. Truck entrance or exit door(s) may remain open on one side of the building provided that there are proper filter(s) on the manhole lid(s) of the farm bulk milk pickup tank(s) or transport milk tank(s) being unloaded and that all openings, including valves and piping attached to milk storage and transport tanks, pumps, etc., are capped or otherwise properly protected.
2. During the loading or the unloading of farm bulk milk pickup tanks or transport milk tanks, overhead protection shall be provided for the manholes of these tanks.
3. Plants with Clean-Out-Of-Place tank operations may not be required to have two compartment wash-and-rinse vats.

D. Frequency of Inspection:

All receiving rooms for Grade "A" milk plants and **receiving stations** must be inspected **once each three months**. All **transfer stations** must be inspected **once each six months**. (See inspection sheet on next page)

Receiving Station, Transfer Station and Bulk Tank Cleaning Facility Inspection Report
 Virginia Department of Agriculture and Consumer Services
 Office of Dairy and Foods, Richmond, Virginia

Permit No:	5	1	-							Date:			
Station Name													
Address													
City								State		Zip			
Sir: An inspection of your permitted facility has this day been made and you are notified of the violations marked below with a cross (X). See reverse for your notice of opportunity for a fact-finding conference.													

- | | | |
|---|--|---|
| <p>1. Floors:
Smooth; impervious; no pools good repair; drains trapped (a) _____</p> <p>2. Walls and Ceilings:
Smooth; washable; light-colored in good repair (a) _____</p> <p>3. Doors and Windows:
All outer openings effectively protected against entry of flies and rodents (a) _____
Outer doors self-closing; screen doors open outward (b) _____</p> <p>4. Lighting and Ventilation:
Adequate in all rooms (a) _____
Well ventilated to preclude odors and condensation; filtered air with pressure system (b) _____</p> <p>5. Separate Rooms:
Separate rooms as required; adequate size (a) _____
No direct opening into barn or living quarters (b) _____
Storage tanks properly vented (c) _____</p> <p>6. Toilet Facilities:
Complies with local ordinances (a) _____
No direct opening to processing rooms; self-closing doors (b) _____
Clean, well lighted and ventilated proper facilities (c) _____
Sewage and other liquid waste disposed of in sanitary manner (d) _____</p> <p>7. Water Supply:
Constructed and operated in accordance with regulation (a) _____
No direct or indirect connection between safe and unsafe water (b) _____
Condensing water and vacuum water in compliance with regulatory requirements (c) _____
Complies with bacterial standards (d) _____</p> | <p>8. Hand Wash Facilities:
Located and equipped as required; clean and in good repair; improper facilities not used (a) _____</p> <p>9. Station Cleanliness:
Neat; clean; no evidence of insects or rodents; trash properly handled (b) _____</p> <p>10. Sanitary Piping:
Smooth; impervious, corrosion-resistant, non-toxic, easily cleanable materials; in good repair; accessible for inspection (a) _____
Clean-in-place lines meet regulatory requirements (b) _____</p> <p>11. Construction and Repair of Containers and Equipment:
Smooth, impervious, corrosion-resistant, non-toxic, easily cleanable materials; in good repair; accessible for inspection (a) _____
Self-draining; strainers of approved design (b) _____</p> <p>12. Cleaning and Sanitizing of Containers and Equipment:
Containers, utensils, and equipment effectively cleaned (a) _____
Mechanical cleaning requirements of regulation in compliance (b) _____
Approved sanitization process applied prior to use of product-contact surfaces (c) _____
Required efficiency tests in compliance (d) _____
Multi-use plastic containers in compliance (a) _____</p> <p>13. Storage of Cleaned Containers and Equipment:
Stored to assure drainage and protected from contamination (a) _____</p> | <p>14. Storage of Single-Service Articles:
Received, stored and handled in a Sanitary manner; paperboard containers not reused except as permitted by regulation(a) _____</p> <p>15. Protection from Contamination:
Operations conducted and located so as to preclude contamination of milk and milk products, ingredients, containers, equipment and utensils(a) _____
Air and steam used to process products in compliance(b) _____
Approved pesticides safely used(c) _____</p> <p>17. Cooling of Milk:
Raw milk maintained at 45°F or less until processed(a) _____
Pasteurized milk and milk products, except those to be cultured, cooled immediately to 45°F or less in approved equipment; all milk and milk products stored thereat until delivered(b) _____
Approved thermometer properly located in all refrigeration rooms and storage tanks(c) _____
Re-circulated cooling water from safe source and properly protected; complies with bacterial standards(d) _____</p> <p>20. Personnel Cleanliness:
Hands washed clean before performing plant functions; re-washed when contaminated(a) _____
Clean outer garments and hair covering worn(b) _____</p> <p>22. Surroundings:
Neat and clean; free of pooled water harborages and breeding areas(a) _____
Tank unloading areas properly constructed(b) _____
Approved pesticides used properly(c) _____</p> |
|---|--|---|

1. A receiving station shall comply with Items 1 to 15, inclusive, and 17, 20, and 22. Separation requirements of item 5 do not apply. 2. A transfer station shall comply with Items 1, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 22 and as climatic and operating conditions require, applicable provisions of Items 2 and 3. In every case, overhead protection shall be required. 3. Facilities for the cleaning and sanitizing of milk tank trucks shall comply with the same requirements for transfer stations.			
Remarks:			
Inspector		Insp. No.	

TO: Receiving Station, Transfer Station and Wash Station Permit Holders

Subject: Notice of Opportunity to Request a Fact-Finding Conference

Pursuant to § 2.2-4019 of the Code of Virginia (1950), as amended, you have the right to appear before the agency in person, by counsel, or by other qualified representative at a fact-finding conference for the informal presentation of factual data, argument, and proof to appeal this determination of violation. Unless an Official Notice has been issued with respect to this violation, no action against your permit will be taken if the deficiencies noted are corrected. Should you wish to have a fact-finding conference convened, please notify Program Supervisor, Dairy Services Program, Office of Dairy and Foods, Virginia Department of Agriculture and Consumer Services, 102 Governor Street, Suite 349, Richmond, Virginia, 23219 in writing within thirty days after the date of this inspection.

§ 2.2-4019. Informal fact finding proceedings.

A. Agencies shall ascertain the fact basis for their decisions of cases through informal conference or consultation proceedings unless the named party and the agency consent to waive such a conference or proceeding to go directly to a formal hearing. Such conference-consultation procedures shall include rights of parties to the case to (i) have reasonable notice thereof, (ii) appear in person or by counsel or other qualified representative before the agency or its subordinates, or before a hearing officer for the informal presentation of factual data, argument, or proof in connection with any case, (iii) have notice of any contrary fact basis or information in the possession of the agency that can be relied upon in making an adverse decision, (iv) receive a prompt decision of any application for a license, benefit, or renewal thereof, and (v) be informed, briefly and generally in writing, of the factual or procedural basis for an adverse decision in any case.

B. Agencies may, in their case decisions, rely upon public data, documents or information only when the agencies have provided all parties with advance notice of an intent to consider such public data, documents or information. This requirement shall not apply to an agency's reliance on case law and administrative

§ 2.2-4021. Timetable for decision; exemptions.

A. In cases where a board or commission meets to render (i) an informal fact-finding decision or (ii) a decision on a litigated issue, and information from a prior proceeding is being considered, persons who participated in the prior proceeding shall be provided an opportunity to respond at the board or commission meeting to any summaries of the prior proceeding prepared by or for the board or commission.

J. In any informal fact-finding or formal proceeding in which a hearing officer is not used or is not empowered to recommend a finding, the board, commission, or agency personnel responsible for rendering a decision shall render that decision within 90 days from the date of the informal fact-finding or formal proceeding or from a later date agreed to by the named party and the agency. If the agency does not render a decision within 90 days, the named party to the case decision may provide written notice to the agency that a decision is due. If no decision is made within 30 days from agency receipt of the notice, the decision shall be deemed to be in favor of the named party. The preceding sentence shall not apply to case decisions before (i) the State Water Control Board or the Department of Environmental Quality to the extent necessary to comply with the federal Clean Water Act, (ii) the State Air Pollution Control Board or the Department of Environmental Quality to the extent necessary to comply with the federal Clean Air Act, or (iii) the Virginia Soil and Water Conservation Board or the Department of Conservation and Recreation to the extent necessary to comply with the federal Clean Water Act. An agency shall provide notification to the named party of its decision within five days of the decision.

C. In any informal fact-finding or formal proceeding in which a hearing officer is empowered to recommend a finding, the board, commission, or agency personnel responsible for rendering a decision shall render that decision within 30 days from the date that the agency receives the hearing officer's recommendation. If the agency does not render a decision within 30 days, the named party to the case decision may provide written notice to the agency that a decision is due. If no decision is made within 30 days from agency receipt of the notice, the decision is deemed to be in favor of the named party. The preceding sentence shall not apply to case decisions before (i) the State Water Control Board or the Department of Environmental Quality to the extent necessary to comply with the federal Clean Water Act, (ii) the State Air Pollution Control Board or the Department of Environmental Quality to the extent necessary to comply with the federal Clean Air Act, or (iii) the Virginia Soil and Water Conservation Board or the Department of Conservation and Recreation to the extent necessary to comply with the federal Clean Water Act. An agency shall provide notice to the named party of its decision within five days of the decision.

D. The provisions of subsection B notwithstanding, if the board members or agency personnel who conducted the informal fact-finding or formal proceeding are unable to attend to official duties due to sickness, disability, or termination of their official capacity with the agency, then the timeframe provisions of subsection B shall be reset and commence from the date that either new board members or agency personnel are assigned to the matter or a new proceeding is conducted if needed, whichever is later. An agency shall provide notice within five days to the named party of any incapacity of the board members or agency personnel that necessitates a replacement or a new proceeding.

\\Dairy Services\forms\Receiving Station, Transfer Station, Bulk Tank Cleaning Facility Insp Report August 2007.doc

Dairy Services Policy and Procedure Manual

Number: 5.2

Date: May 25, 2007

Revision: October 1, 2007

Effective: December 1, 2007

Differences in Plant Permitting Requirements by Regulation

Requirement	Grade A	Manufactured Milk	Frozen Dessert
Separate Rooms Required For:			
Pasteurization	Yes	No	No
Processing	Yes	Yes	Yes
Cooling	Yes	Yes	Yes
Freezing	N/A	Yes	Yes
Packaging	Yes	No	No
Supply	Yes	Yes	Yes
Boiler	Yes	Yes	Yes
Tool	Yes	Yes	Yes
Toilet	Yes	Yes	Yes
Dressing	Yes	Yes	Yes
Case/Bottle/Can Washer	Yes	No	No
Laboratory	No	Yes	No
Starter Facilities	No	Yes	No
Dry Storage	Yes	Yes	Yes
Receiving Milk from Bulk Tank Trucks	Yes	Yes	Yes
Receiving Milk in Cans	Yes	Yes	Yes
Additional Requirements for Cheese Plants*			
Make Room	N/A	Yes	N/A
Drying Room	N/A	Yes	N/A
Paraffining Room	N/A	Yes	N/A
Rind-less Block Wrapping Room	N/A	Yes	N/A
Curing Room	N/A	Yes	N/A
Cutting and Wrapping Room	N/A	Yes	N/A
* Small-scale Cheese Plants are exempt from the separate room requirements.			
Allowed to process in a home kitchen	No	No	Yes

Dairy Services Policy and Procedure Manual

Number: 6.1
Date: August 11, 2006
Revision: October 1, 2007
Effective: December 1, 2007

Definition of "Small-Scale Cheese Plant" Under the Regulations Governing Milk for Manufacturing Purposes

Purpose:

To expand the current definition of "small-scale cheese plant" to maintain exemptions for current and future cheese makers while the agency studies the issue and works with the developing cheese industry in Virginia to develop alternative language to appropriately define what a "small-scale cheese plant" is.

Discussion:

The regulations were drafted with a definition of "small-scale cheese plant" that referenced the size of the vat pasteurization equipment for cheese made from pasteurized milk and the size of the cheese vats used to make cheese from unpasteurized milk. At the time the regulation was drafted the definition included every one of the cheese makers in business and the individuals who were working with us to get started. It was always our intent to include all the farmstead and small cheese makers under the definition. Equipment size was chosen for the definition because it could be readily determined on inspection. We did not receive any comments during the regulation making process regarding the definition of "small-scale cheese plant".

Over time certain of our cheese makers have grown their business and purchased new equipment that allows them to be more efficient and to make more cheese at the same time. Cheese making equipment and newer dual purpose pasteurizers/cheese vat combinations are manufactured only in sizes much larger than the small-scale exemption allows. These newer pieces of equipment also can be equipped with many automated features to customize the process and reduce labor while producing a more consistent product. One cheese maker has purchased a dual purpose pasteurizer/cheese vat combination with a capacity of 100 gallons. Another cheese maker has purchased an automated cheese vat from a Dutch company that holds three hundred and forty-three gallons of milk. The only thing that has changed on these two operations is that they have been successful and expanded production within their existing facilities.

Firms that can not qualify as "small-scale cheese plants" are required to test all of their milk for drug residues prior to processing and to provide separate rooms for cutting and wrapping cheese.

The drug residue testing is very time consuming on small-scale cheese makers because they purchase only small quantities of raw milk from a single source or they use milk from their own animals. Each cheese maker will have to become certified under the laboratory evaluation system to screen raw milk for beta lactam drug-residues. Aside from the cost of the test equipment and standardized thermometers for quality control purposes, they will have to spend up to an hour a day setting up their test equipment, testing standards to ensure the test method is working properly, sample and test all the milk they receive and record all the results in record books that will be audited each three months. Since these individuals are making cheese any drug-residues present will impair the ability of the bacterial cultures needed to make the cheese and ruin the batch. There is no human food safety risk associated with animal drug-residues in milk. Animal drug-residues are an adulteration issue.

The requirement for separate rooms is much more burdensome on the cheese makers because many have already built their cheese making facilities based on one large room being use for most processing and packaging. Most will not be able to subdivide their current facilities because there is not enough space available. Economically, it would likely place some of the cheese makers out of business if required to meet the separate room requirements. Each of the cheese makers was in compliance when he started up and received a permit.

The current definition in the regulation reads:

“Small-scale cheese plant” means any cheese plant that; (1) pasteurizes milk for cheese production in one or more vat pasteurizers with a combined total processing capacity of not more than fifty gallons of milk at one time; or (2) processes cheese from unpasteurized milk in lots not to exceed 200 gallons if the milk is from cows, buffalo, or water buffalo; or (3) processes cheese from unpasteurized milk in lots not to exceed 50 gallons if the milk is from goats, sheep, or other mammals (except cows, buffalo, water buffalo, and humans).

Conclusion:

The existing definition of “small-scale cheese plant” is not properly defined to meet the needs of the developing small-scale cheese industry in Virginia or the intent of the regulation. The agency needs to study the developing and changing cheese industry in Virginia and develop an alternative definition of the “small-scale cheese plant” with the support of the regulated industry.

Procedure:

When a new cheese manufacturing facility is planned and before permitting the inspector will determine if the plant complies with the existing definition of “small-scale cheese plant”. If the plant does not comply with the definition of “small-scale cheese plant” the inspector will evaluate the operation to determine if they should be entitled to the exemptions afforded a “small-scale cheese plant”. The inspector will document the factors they considered important in making this determination. Those factors could include, but should not be limited to: the size of the plant; the amount of production; the

type and size of processing equipment; expected gross sales in dollars; is there a receiving room for bulk milk deliveries; or the number of employees.

Supervisors shall review and approve/disapprove the recommendations from inspectors before the cheese plant is permitted.

Supervisors will forward all recommendations for "small-scale cheese plant" status to the Program Supervisor for use in developing a new definition of "small-scale cheese plant".

Dairy Services Policy and Procedure Manual

Number: 6.2
Date: January 26, 2005
Revision: October 1, 2007
Effective: December 1, 2007

Pasteurization or Aging of Cheeses

21 CFR 133 establishes standards of identity for certain cheese varieties. Included within the standard of identity for each cheese variety is a requirement for pasteurization or aging of each specific cheese variety and the species of milk from which the cheese may be made.

21 CFR 1240.61 restricts the aging of cheese to: (1) only those cheese varieties that have an established standard of identity under 21 CFR 133; and (2) only those cheese varieties that allow for aging under the standard of identity.

All cheeses that do not conform to a standard of identity established under 21 CFR 133 that allows for aging shall be made exclusively from pasteurized milk and dairy ingredients.

Proposed regulation 2 VAC 5-531, Regulations Governing Milk for Manufacturing Purposes will adopt for enforcement in Virginia the above federal requirements and interpretation.

The following tables are provided for a quick reference for determining if a particular cheese may be aged or must be pasteurized.

Pasteurization

Any cheese may be made from pasteurized dairy ingredients. The following cheeses shall be made with pasteurized dairy ingredients:

Cream Cheese	Cows milk only
Cream Cheese with other foods	Cows milk only
High-moisture Jack Cheese	Cows milk only
Low-moisture Mozzarella Cheese	Cow, Water Buffalo
Low-moisture Part-skim Mozzarella Cheese	Cow, Water Buffalo
Low-moisture Part-skim Scamorza Cheese	Cow, Water Buffalo
Low-moisture Scamorza Cheese	Cow, Water Buffalo
Monterey Cheese	Cows milk only
Monterey Jack Cheese	Cows milk only

Mozzarella Cheese	Cow, Water Buffalo
Muenster Cheese	Cows milk only
Munster Cheese	Cows milk only
Neufchatel Cheese	Cows milk only
Part-skim Mozzarella Cheese	Cow, Water Buffalo
Part-Skim Scamorza Cheese	Cow, Water Buffalo
Scamorza Cheese	Cow, Water Buffalo

Note: Cottage cheese and yogurt are grade A dairy products and must be made in a licensed grade A dairy plant under the supervision of the Virginia Department of Health. No person may make cottage cheese or yogurt in their cheese plant if they are regulated under the Virginia Food Laws or the regulations governing milk for manufacturing purposes.

Cooked Cheeses

These cheeses must be heated to high temperatures and held there for specific periods of time as part of the manufacturing process. Because of the high heat processing to make these cheeses, pasteurization of the milk is not required.

Cook Cheese	Nonfat cows milk only	
Gammelost Cheese	Nonfat cows milk only	
Koch Kaese Cheese	Nonfat cows milk only	

Cheeses that may be aged

Only standardized cheeses may be aged if their standard of identity allows for aging. The chart below list the standardized cheeses that may be aged, the minimum length of time each shall be aged above 35° F, and the species of milk they may be made from.

Standardized cheese	Minimum Aging Time	Species of Milk
Asiago Fresh Cheese	60 days	Cow only
Asiago Medium Cheese	6 months	Cow only
Asiago Old cheese	1 year	Cow only
Asiago Soft Cheese	60 days	Cow only
Blue Cheese	60 days	Cow only
Brick Cheese	60 days	Cow only
Caciocavallo Siciliano Cheese	90 days	Cow, goat, sheep, mixture
Cheddar Cheese	60 days	Cow only
Colby Cheese	60 days	Cow only
Edam Cheese	60 days	Cow only
Emmentaler Cheese	60 days	Cow only
Gorgonzola Cheese	90 days	Cow only
Gouda Cheese	60 days	Cow only
Granular and Stirred Curd Cheese	60 days	Cow only

Grated Cheeses	60 days	Depends on type of cheese used
Gruyere Cheese	90 days	Cow only
Hard Cheeses	60 days	Cow, Goat, Sheep, mixture
Hard Grating Cheeses	6 months	Cow, Goat, Sheep, mixture
Limburger Cheese	60 days	Cow only
Low Sodium Cheddar Cheese	60 days	Cow only
Low Sodium Colby Cheese	60 days	Cow only
Nuworld Cheese	60 days	Cow only
Parmesan Cheese	10 months	Cow only
Part-skim Spiced Cheeses	60 days	Cow, Goat, Sheep, mixture
Provolone Cheese	60 days	Cow only
Reggiano Cheese	10 months	Cow only
Romano Cheese	5 months	Cow, Goat, Sheep, mixture
Roquefort Cheese	60 days	Sheep only
Samsoe Cheese	60 days	Cow only
Sap Sago cheese	5 months	Nonfat Cows Milk only
Semisoft Cheeses	60 days	Cow, Goat, Sheep, mixture
Semisoft Part-skim Cheeses	60 days	Cow, Goat, Sheep, mixture
Soaked Curd Cheese	60 days	Cow only
Soft Ripened Cheeses	60 days	Cow, Goat, Sheep, mixture
Spiced Cheeses	60 days	Cow, Goat, Sheep, mixture
Spiced, Flavored Standardized Cheese	Various	Depends on cheese variety
Swiss Cheese	60 days	Cow only
Washed Curd Cheese	60 days	Cow only

Cheese for manufacturing

There are a number of cheese products with standards of identity that are made to use as ingredients in the manufacture of cheeses or are made from one or more cheeses varieties that are blended together and that require heat treatments or pasteurization as part of the manufacturing process. These cheeses are:

- Brick Cheese for Manufacturing
- Cheddar Cheese for Manufacturing
- Colby Cheese for Manufacturing
- Granular Cheese for Manufacturing
- Grated American Cheese Food
- Muenster Cheese for Manufacturing
- Munster Cheese for Manufacturing
- Pasteurized Blended Cheese
- Pasteurized Blended Cheese with Fruits, Vegetables, or Meats
- Pasteurized Cheese Spread
- Pasteurized Cheese Spread with Fruits, Vegetables, or Meats
- Pasteurized Neufchatel Cheese Spread with Other Foods
- Pasteurized Process Cheese

Pasteurized Process Cheese Food
Pasteurized Process Cheese Food with Fruits, Vegetables, or Meats
Pasteurized Process Cheese Spread
Pasteurized Process Cheese Spread with Fruits, Vegetables, or Meats
Pasteurized Process Cheese with Fruits, Vegetables, or Meats
Pasteurized Process Pimento Cheese
Skim Milk Cheese for Manufacturing
Swiss Cheese for Manufacturing
Washed Curd Cheese for Manufacturing

Labeling

Each cheese shall be labeled with the name of the cheese. If the cheese complies with a standard of identity it must be labeled with the name of the standardized cheese (Cheddar cheese). If the cheese does not comply with the standard of identity then it shall not be labeled with the name of the standardized cheese.

Please note that cheese makers can and do manufacture cheeses in the "style" of certain standardized cheeses; however, they may not be labeled with the standardized name and they must be pasteurized. For example, "cheddar cheese" is made exclusively from cows milk. If the cheese were made from goats milk it could not be called "cheddar cheese". It could be called "Cheddar Style Cheese made with Goats Milk" or "Goats Milk Cheddar Style Cheese".

Dairy Services Policy and Procedure Manual

Number: 6.3
Date: January 25, 2005
Revision: August 15, 2012
Effective: December 1, 2007

CHEESE PLANT INSPECTION AND CHEESE SAMPLING

These procedures are based on Regulations Governing Milk For Manufacturing Purposes 2VAC 5-531-10 thru 2 VAC 5-531-160 (Effective January 26, 2005)

New permit applications for cheese plants should be completed on the form APPLICATION FOR A PERMIT TO RECEIVE, PROCESS, AND HANDLE MILK FOR MANUFACTURING PURPOSES (Revised Aug 2005). The application should be accompanied by an inspection report completed as indicated below, and a negative water sample taken within the last 30 days unless the firm uses a Public water supply. (A copy of the application is included at the end of this procedure)

Please keep in mind that if the cheese plant operator is producing his or her own milk, they must also have a permit to produce milk for manufacturing purposes or a grade A farm permit. If they are buying milk, the milk must come from an approved source-that is someone who has a permit to produce milk for sale.

At the beginning of the planning phase, during the construction, and on each inspection, the inspector must evaluate the cheese plant to determine whether or not the permit holder qualifies for a "small scale cheese plant exemption". Requirements to be classified as "small-scale" are included in the definition of "small-scale cheese plant" on page 10 of the regulation. Special "exemptions and requirements" for "small-scale cheese plant" operations are given on page 67 thru 69 of the regulations.

INSPECTIONS

Cheese plants including "farmstead cheese plants" shall be inspected at least once every three months using the report form "DAIRY MANUFACTURING PLANT INSPECTION REPORT". The narrative report "SUPPLEMENT TO CHEESE PLANT INSPECTION REPORT" must also be completed. (Examples of these two reports are included at the end of this procedure).

The following questions should be asked and answered on the narrative report:

1. What products are being manufactured?

2. Have any new products, product packaging or product labels been added since the last inspection?
3. Where are the products being sold?
4. Has any equipment been altered, repaired or added since the last inspection?
5. Have all product labels been reviewed and approved by VDACS?
6. What is the temperature of the milk when received?
7. Is milk being tested for drug residues? What test is being used? Are appropriate records being maintained?
8. Are necessary records on pasteurization, aging, and lot identification being maintained?
9. Is an approved RECALL plan on file?
10. Have there been any other changes to your business since the last inspection? Consider business name changes, new distributors and vendors, Website changes, new markets, mail orders, new ingredients, special request, employee changes, laboratory testing, etc.

The original copy of both of these reports should be left at the cheese plant. The inspector has the option of hand writing the narrative portion or typing the narrative portion and mailing it to the operator within three days of the inspection. If the narrative portion will be mailed to the operator, the inspector must discuss with the operator the items that will be included prior to leaving the firm.

During the inspection the inspector should review the labels of all products for completeness and accuracy and then submit them to his regional supervisor for review and approval. Inspectors should pay particular attention to the ingredient list and make sure that all ingredients used as well as all procedures used are approved and safe.

In cases where both raw milk cheese and cheese from pasteurized milk are manufactured, particular care must be taken to make sure that the raw products do not contaminate the pasteurized products. Raw and pasteurized products should be stored separately and in a manner so that the cheese made from raw milk does not contaminate cheese made from pasteurized milk.

SAMPLING

Cheeses are routinely sampled on a quarterly basis. **Inspectors should collect and submit samples so they are physically received by the Lynchburg laboratory on or before the second Friday of each sampling month. Inspectors will be divided into two groups. Group One will collect their cheese samples in the months of January, April, July and October. Group Two will collect their cheese samples in the months of February, May, August and November.** The samples should be submitted to the Lynchburg laboratory along with a completed Analysis of Cheese Products Report form. The form should be marked at the top for VIDAS testing. The laboratory should

be contacted and made aware that samples are being shipped. Each sample collected should weigh at least eight ounces.

Samples will also be submitted to the Warrenton laboratory for fats and solids testing. Cheese samples submitted to other VDACS labs than Warrenton and Lynchburg will be shipped to the appropriate laboratory for testing. The Analysis of Cheese Products Report form should be marked at the top for Fats and solids testing.

Inspectors should collect a minimum of one sample from any pasteurized cheese being manufactured and one sample from any unpasteurized cheese being manufactured. It is not necessary to collect a sample for every type or variety of cheese being made. The inspector should use his own judgment as to the number of samples to collect from each manufacturer. It is suggested that only one sample be collected from a small producer making only a few cheeses and perhaps two or three from a larger producer making several different kinds of cheeses. Over time, inspectors should attempt to collect representative samples of each type of cheese manufactured to monitor the quality of each different process the cheese maker uses.

In the case of aged cheeses, samples should be collected only from batches that have been aged the required time and are ready for sale. It is desirable that samples be collected from lots that have been properly aged but have not been offered for sale and will not be offered for sale until sample test results have been received. In cases such as this, if a cheese is found to be contaminated, the entire lot could be destroyed and a recall would not be necessary.

Manufacturers are required by the regulations to furnish samples to inspectors for testing at no charge. Most producers will not object to furnishing the samples at no charge because the testing should be an important part of their quality control program and VDACS does not charge them for the testing.

ENFORCEMENT

If the inspector is not getting cooperation from the manufacturer and he feels an official notice or suspension should be issued, his or her Regional manager should be contacted prior to any action being taken. If it is an emergency situation, and the inspector's Regional manager cannot be immediately reached, then the other Regional manager should be contacted for guidance.

**VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
APPLICATION FOR A PERMIT TO RECEIVE, PROCESS AND HANDLE MILK
FOR MANUFACTURING PURPOSES**

This application must be accompanied by a recent plant inspection made on the facilities described below and a negative water supply test record within 30 days of the date the permit is issued.

1. **TYPE OF MILK PROCESSED:** _____
(Cow, goat, sheep, water buffalo, etc.)

2. **ISSUE PERMIT TO:** The permit may be issued to any individual(s), plant operator(s), partnership, corporation, company, firm, trustee, or institution. If a partnership, corporation, company, firm, trustee, or institution, the permit application must be accompanied by the articles of incorporation, partnership agreement, or trust document, identifying the names, titles, and addresses of all responsible officials for the entity.
No permits may be issued to minors (persons under 18 years of age).
ISSUE PERMIT TO: (Please Print)

3. **PERMIT ADDRESS:** The actual location of the facilities should be listed. Please list the UPS delivery address. (Please Print)

Address 1: _____

Address 2: _____

City/State/Zip: _____

4. **TRADING AS NAME:** If the processor will not be trading in the name to which the permit is issued, list the trading as name. (Please Print)

Trading as Name

5. **CORRESPONDENCE NAME AND ADDRESS:** Please designate the name of one permit holder and their mailing address to which all sample reports and official correspondence may be sent. (Please Print)

Mr.
Ms.

Correspondence Name: Mrs. : _____

Address 1: _____

Address 2: _____

City/State/Zip: _____

6. **NAME(S) AND PHONE NUMBER(S) OF RESPONSIBLE PERSON(S) TO CONTACT:** (Please Print)

Name Area Code Number

Name Area Code Number

7. **SIGNATURE(S) OF PERSON(S) TO WHOM PERMIT IS TO BE ISSUED:** All persons listed on the permit must sign and date below.

Print Name	Signature	Title	Date
Print Name	Signature	Title	Date
Print Name	Signature	Title	Date
Print Name	Signature	Title	Date
Print Name	Signature	Title	Date
Print Name	Signature	Title	Date

OFFICE INFORMATION, TO BE COMPLETED BY THE INSPECTOR:

PLANT INSPECTOR: _____ INSPECTOR NUMBER: _____

PLANT IS LOCATED IN THE COUNTY/INDEPENDENT CITY OF: _____

IS PLANT LOCATED WITHIN 50 MILES OF NORTH ANNA NUCLEAR POWER PLANT? ___ YES ___ NO

IS PLANT LOCATED WITHIN 50 MILES OF SURRY NUCLEAR POWER PLANT? ___ YES ___ NO

IS PLANT LOCATED WITHIN 50 MILES OF NORFOLK NAVAL NUCLEAR POWER STATION? ___ YES ___ NO

NO WATER SAMPLE NECESSARY, PLANT SUPPLIED BY A PUBLIC WATER SUPPLY SYSTEM: ___ YES ___ NO

ISSUE DATE OF PERMIT: _____

SIGNATURE OF INSPECTOR: _____ DATE _____

The following documents are attached:

- ___ Water Sample Report
- ___ Recall Plan
- ___ Product Labels
- ___ Inspection Report

Dairy Manufacturing Plant Inspection Report Virginia Department of Agriculture and Consumer Services Office of Dairy and Foods						Date			
Permit No.				Name of Plant				Telephone	
Address								City, St. Zip	
Time In		AM PM		Time Out		AM PM		Inspection conducted before (), during (), or after processing ()? What product(s) were being processed?	
Person Interviewed				Title:				Signature:	
Products Manufactured									
An inspection of your dairy manufacturing plant has this day been made and you are notified of the violations marked below with a cross (x). See Reverse for your Notice of Opportunity for a Fact-Finding Conference.									

- | | | |
|---|---|--|
| <p>Premises, Buildings, and Facilities</p> <p>1. Premises and surroundings
Clean (), orderly (), free from strong odors and smoke (); surroundings properly drained ()</p> <p>2. Buildings
Sound construction (), maintained in good repair ()</p> <p>3. Conveyor and Service-Pipe Openings
Tight metal collars or effectively sealed</p> <p>4. Doors, Windows, Openings to Outside
Screened () or protected () against entry of vermin, outer doors open outward () and outer doors self-closing (), doors and windows in good repair (), clean ()</p> <p>5. Walls and Ceilings
Smooth (), impervious (), light colored (), and clean ()</p> <p>6. Floors
Smooth (), impervious (), good repair (), graded to drain (), properly trapped (), backup of sewage to floor prevented ()</p> <p>7. Lighting and Ventilation
Each room provided with ample light (), light bulbs, tubes and fixtures protected from breakage (), adequate heating, air conditioning and ventilation provided () Exhaust fans equipped with self-closing louvers (), inlet fans equipped with air filters () ventilation system clean ()</p> <p>8. Processing Rooms
Clean (), orderly (), no objectionable odors () or vapors, receiving room separated from processing areas (), free from unnecessary equipment ()</p> <p>9. Coolers and Freezers
Adequate size (), clean (), dry (), orderly (), sufficient refrigeration () and air circulation () refrigeration units collect and dispose of condensate ()</p> <p>10. Supply Room - Dry Storage Space
Adequate size (), clean (), dry (), orderly (), good repair (), items stored protected and off the floor (), accessible for inspection (), insecticides, rodenticides, cleaning compounds properly stored (), free from insects and rodents ()</p> <p>11. Boiler and Tool Rooms
Separated from other rooms (), orderly (), and reasonably clean ()</p> <p>12. Toilet and Dressing Rooms
Provided (), no direct opening into processing or storage areas (), doors are self-closing (), properly ventilated (), clean (), in good repair (), lockers provided (), hand-washing facilities provided () hot and cold water (), mix valve (), hand-washing signs posted ()</p> <p>13. Laboratory
Sufficient size (), adequately staffed (), adequately equipped ()</p> <p>14. Water Supply
Ample hot and cold water (), conveniently located (), protected from contamination (), bacteriological tests satisfactory (), Date of last test:</p> | <p>15. Drinking Water Facilities
Sanitary () and conveniently located ()</p> <p>16. Hand-washing Facilities
Provided in each room where product handled or stored (), hot & cold water (), mix valve (), soap (), single-service towels (), equipment wash vats not used for hand washing (), self-closing waste containers ()</p> <p>17. Steam
Clean (), non-toxic (), adequate supply (), and pressure ()</p> <p>18. Air under pressure
Complies with 3-A Practices (), clean and free from volatile substances ()</p> <p>19. Waste Disposal
Sewer of sufficient capacity (), non-public disposal methods approved (), refuse in covered containers (), waste paper properly handled ()</p> <p>Equipment and Utensils</p> <p>20. Construction and Maintenance
Product contact surfaces of stainless steel or other equally corrosion-resistant material (), in good repair (), accessible for cleaning () and inspection ()</p> <p>21. C-I-P and Welded Sanitary Lines
Properly engineered and installed ()</p> <p>22. Can Washers
Operating properly (), clean (), and in good repair ()</p> <p>23a. Vat Pasteurizers
Indicating and recording thermometers comply with specifications (), adequate agitation throughout holding (); agitator sufficiently submerged (); each pasteurizer equipped with indicating and recording thermometer (); bulbs submerged (); recording thermometer reads no higher than indicating thermometer (); product pasteurized a minimum of 30 minutes (); no product added after holding period begun (); air space maintained 5° F higher than minimum pasteurization temperature (); approved air space thermometer with bulb one inch above product level (); inlet and outlet valves and connections in compliance ()</p> <p>23b. Pasteurization - High Temperature
Indicating and recording thermometers comply with specifications (); Flow-diversion device complies with requirements (); Recorder controller complies with requirements (); Holding tube complies with requirements (); Flow promoting devices comply with requirements (); Satisfactory means to prevent adulteration with added water ()</p> <p>23c. Regenerative Heating
Pasteurized product in regenerator automatically under greater pressure than raw product in regenerator at all times (); Accurate pressure gauges installed (); booster pump properly installed and identified (); Regenerator pressures in compliance ()</p> <p>23d. Recording Charts
Batch pasteurization charts comply with requirements (); HTST & HHST pasteurizer charts comply with requirements (); aseptic charts comply with requirements ()</p> | <p>24. Personnel cleanliness
Hands washed before work and when interrupted (); good hygiene practiced (); No tobacco used (); Clean outer garments worn (), caps or hair nets worn ()</p> <p>25. Personnel health
No communicable diseases (); no discharging wounds, sores or lesions on exposed portions of body (); Current medical record on file</p> <p>26. Vehicles Used to Transport Can Milk
Enclosed type (); clean ()</p> <p>27. Transport Tanks
Good condition (); interior smooth (), enclosed tight-fitting cabinet (); piping and tubing capped (); washing facilities available (); sanitized prior to use (); current cleaning and sanitizing tag in place ()</p> <p>Plant Operations</p> <p>28. Raw Product Storage
Maintained at 45° F or less ()</p> <p>29. Pasteurization
Milk and cream properly pasteurized</p> <p>30. Cleaning and sanitizing equipment and utensils
Equipment not designed for C-I-P disassembled daily and thoroughly cleaned (); C-I-P system operated properly (); utensils and other equipment and in-place pipelines thoroughly cleaned each day (); all equipment subject to an effective bactericidal treatment immediately before use ()</p> <p>31. Containers
Clean (); sound (); properly labeled with: name of product (); net weight (); name and address of manufacturer (); ingredient statement (); and sell by date ()</p> <p>32. Finished Product Dry Storage
Products & supplies stored off the floor (); clean and orderly ()</p> <p>33. Finished Product Refrigerated Storage
Proper temperature maintained to protect quality (); products not placed directly on wet floors ()</p> <p>34. Recall Plan
Provided (), and approved ()</p> <p>35. Small-scale cheese plant: Yes / No
Driveways and surroundings maintained to keep mud and dust to a minimum (); If separate rooms not provided - processing area cleaned between processing steps (); clean outer garments (), shoes () and hair covering worn ()</p> <p>36. Supplemental Requirements for Cheese Plants
Separate rooms provided for: starter culture propagation (); make room (); drying room (); paraffining room (); net weight (); coolers/curing (); and cutting/packaging (); Cheese vats (), agitators (), hoops (), cheese press (), and paraffin tanks () are approved type () and in good repair (). Required aging records maintained ().</p> |
|---|---|--|

CONTACT YOUR INSPECTOR PRIOR TO INSTALLING EQUIPMENT OR ALTERING CONSTRUCTION OF FACILITIES			
Remarks			
Inspector	Inspector Number	Date	

SUPPLEMENT TO CHEESE PLANT INSPECTION REPORT

1. What products are being manufactured?

Cheddar, pepper jack hard cheese, Colby and Swiss

2. Have any new products, product packaging or product labels been added since the last inspection?

A new vacuum packaging machine has been purchased.

3. Where are products being sold?

Richmond Saturday Farmers Market, Westview vineyards, Joe's Country Store, Smith's Restaurant, Charlottesville Farmers Market, Internet

4. Has any equipment been altered, repaired, or added since last inspection?

A new stainless steel table has been added and repairs have been made to two cheese hoops.

5. Have all product labels been reviewed and approved by VDACS?

Yes. On file in Richmond office

6. What is the temperature of the milk when received?

Less than 40 degrees F.

7. Is milk being tested for drug residues? What test is being used? Are appropriate records being maintained?

Milk is being tested prior to delivery at Morningstar dairy in Mt Crawford with the Charm ROSA test. Records of all testing is being maintained for each shipment of milk.

8. Are necessary records on pasteurization, aging, and lot identification being maintained?

There is no pasteurizer---records identify lot numbers and ages on all cheeses

9. Is an approved RECALL plan on file?

Yes

10. Have there been any other changes to your business since the last inspection (consider business name changes, new distributors and vendors, website changes, new markets, mail orders, new ingredients, special requests, employee changes, laboratory testing, etc.)?

Mary Stoneman has been employed as a cheese maker. ESS laboratories are now doing some pathogen testing.

Dairy Services Policy and Procedure Manual

Number: 6.4

Date: January 25, 2005

Revision: October 1, 2007

Effective: December 1, 2007

SUPPLEMENT TO CHEESE PLANT INSPECTION REPORT

Instructions: *The following questions should be ask, answered and attached to every inspection report. This is an example form with answers for demonstration purposes.*

1. What products are being manufactured?

Cheddar, pepper jack hard cheese, Colby and Swiss

2. Have any new products, product packaging or product labels been added since the last inspection?

A new vacuum packaging machine has been purchased.

3. Where are products being sold?

Richmond Saturday Farmers Market, Westview vineyards, Joe's Country Store, Smith's Restaurant, Charlottesville Farmers Market, Internet

4. Has any equipment been altered, repaired, or added since last inspection?

A new stainless steel table has been added and repairs have been made to two cheese hoops.

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There is no pasteurizer---records identify lot numbers and ages on all cheeses

9. Is an approved RECALL plan on file?

Yes

10. Have there been any other changes to your business since the last inspection (consider business name changes, new distributors and vendors, website changes, new markets, mail orders, new ingredients, special requests, employee changes, laboratory testing, etc.)?

Mary Stoneman has been employed as a cheese maker. ESS laboratories are now doing some pathogen testing.

Dairy Services Policy and Procedure Manual

Number: 6.5

Date: April 5, 2005

Revision: October 1, 2007

Effective: December 1, 2007

Policy on wood shelves in cheese plants

I have obtained guidance from USDA concerning the acceptability of wooden shelves used to age cheese in cheese processing plants.

Their document states in part on page C-35:

“Drying of cheese on new clean scale boards on top of wood cheese boxes or box covers is satisfactory.”

“When applicable, check that the carts and shelves used for drying the cheese are paraffined. They should be constructed of material that can be cleaned and maintained in a sanitary manner and free of mites. Recommend replacement of any deteriorated wooded shelves, standards, or carts. Wood construction in sound, clean condition is satisfactory.”

I am providing a copy of the entire section titled “Inspection of Cheese Making Operations”. I hope that you will take the time to read through the entire document to gain a better understanding of what conditions USDA looks for. Please channel any questions concerning the USDA guidance through you supervisor.

Effective immediately, wooden shelves in compliance with the above requirements will be permitted in all cheese processing operations for the storage or aging of cheese.

Dairy Services Policy and Procedure Manual

Number: 6.6
Date: January 25, 2005
Revision: October 1, 2007
Effective: December 1, 2007

**Page C. Inspection of Cheese Making Operations.
(Form DA - 151 - 3)**

Milk Processing

Item C1—Room Construction (58.126, 58.407).

See the guidelines for Item A1—Room Construction.

Give special attention to overhead construction conditions which could lead to direct contamination of the milk or cheese in open vats or hoops. Check for dirty overhead fans or louvers, open cracks in the ceiling, roof leak evidence, peeling paint and condensate drippage. When such deficiencies are noted, which could allow direct contamination of the product, make applicable recommendations and stress the importance of prompt correction.

Item C2—Lighting & Ventilation (58.126d, e).

See the guidelines for Item A2—Lighting & Ventilation.

Item C3—Pumps, Pipelines, & Valves (58.128, 58.146a).

See the guidelines for Items A3—Pumps, Pipelines, & Valves.

Item C4—Clarifier or Separator (58.128a, e).

See the guidelines for Item B4—Separator.

Inspection of clarifiers is basically the same as for separators. The sludge from self-cleaning clarifiers and separators is sometimes flushed away with water into the plant's floor drain system. At other plants, the sludge may be stored separately for disposal with plant garbage or for animal feed. In such instances, check that the sludge is handled in clean, covered containers in a satisfactory manner prior to disposal. In no case shall the sludge from clarifiers be directed back into edible product.

Item C5—HTST Sealed _____ at _____ sec. _____ ° F (58.128, 58.438, 58.439).

See the guidelines for Item B5—HTST Sealed _____ at _____ sec. _____ ° F.

Some cheeses are made from raw or heat-treated milk. However, when the plant produces any cheese that is required to be made from pasteurized milk by a standard of identity, or any cheese that is marked as pasteurized, the HTST pasteurizer shall comply with the *3-A Accepted Practices for the Sanitary Construction, Installation, Testing, and Operation of High—Temperature Short—Time Pasteurizers, Number 603-*. If the proper controls and equipment are not present to comply with the 3-A Accepted Practices, show a recommendation on the report such as:

C5. — "If the cheese is to be marked, 'Made from Pasteurized Milk', equipment and controls shall be installed to meet the 3-A Accepted Practices for HTST Pasteurizers, Number 603- . This survey shows that {fill in names of items that are lacking} are needed."

(A*)

* See paragraphs below for the proper category assignment

If pasteurization is required, or intended, the cheese milk shall be pasteurized at 161° F for not less than 15 seconds unless fortified to above 10% butterfat or 18% total solids, which requires a minimum of 166° F for not less than 15 seconds.

The following guidelines apply for pasteurization deficiencies noted during the survey:

A. Cheeses Defined as Made From Pasteurized Milk by an FDA Standard of Identity.
Whether or not the finished cheese is labeled as pasteurized, the plant shall utilize approved, properly engineered, and sealed pasteurization equipment for all dairy ingredients. Otherwise this shall be considered a category A deficiency (applies to Cottage, Neufchatel, Cream, Monterey or Monterey Jack, High Moisture Jack, Muenster, and all types of Mozzarella and Scamorza). Some plants may be using the phosphatase test to determine pasteurization instead of using properly engineered pasteurization equipment. This is not a recommended practice and is not acceptable at USDA approved plants. USDA approved plants that make these cheeses shall have properly engineered pasteurizers.

B. Uncured Soft Cheeses Which are Usually Consumed Fresh and for Which There is no FDA Standard of Identity.

Same policy as outlined in paragraph A above (applies to Bakers and Farmers cheeses).

C. American Type Cheese.

The procedure for preparing the survey report and assigning deficiencies to categories shall be as follows:

1. When a plant is marking any of its production of cheese as "Pasteurized" and the survey shows that proper equipment and controls are installed and sealed, the inspector shall check this item satisfactory and show the required information about HTST time, temperature, etc.
2. When a plant is marking any of its production of cheese as "Pasteurized" and proper controls or equipment are not present, show a recommendation for provision of a properly engineered pasteurizer system. This shall be considered a category A deficiency.
3. When a plant is marking any of its production of cheese as "Pasteurized" and raw dairy ingredients (such as whey cream) are added after the pasteurizer, recommend that all dairy ingredients be pasteurized. This shall be considered a category A deficiency.
4. When a plant is not marking the cheese as "Pasteurized" and is heat-treating the milk, mark this item NA and show the temperature and holding time in item C7—Heat-Treating at sec, ° F. Also, check the finished product for proper labeling as outlined in item C54. In some instances, a plant might be manufacturing American type cheese from both pasteurized and heat-treated milk, and management may wish to use the same HTST unit for processing the milk. In such case, the pasteurizer shall comply with the 3-A Accepted Practices for HTST Pasteurizers and shall have a dual diversion control system (as outlined in Item B47), with one of the divert settings to be at least 161° F and the other at a heat-treatment setting chosen by management, such as 147° F. Although this section concerns American type cheese (Cheddar, Washed Curd, Colby, Granular) it also applies to the following cheeses which, by FDA definition, may also be made from either pasteurized or unpasteurized milk: Asiago, Blue, Brick, Caciocavallo, Edam, Gouda, Gorgonzola, Hard cheeses, Grating cheeses, Gruyere, Limburger, Nuworld, Parmesan, Provolone, Soft Ripened cheeses, Romano, Roquefort, Samsoc, Sap Sago, Semisoft cheeses, Semisoft Part-Skim cheeses, Spiced cheeses, and Swiss. There are separate FDA standards of identity for Cheddar Cheese for manufacturing, Washed Curd Cheese for manufacturing, Colby Cheese for manufacturing, Granular Cheese for

manufacturing, and Brick Cheese for manufacturing. Such cheese must conform to the respective standards for Cheddar, Washed Curd, Colby and Granular cheese, except that the milk is not pasteurized and curing is not required. This type of cheese is intended for processing or other manufacturing purposes which involve high heat treatments during the processing. Since by definition, the milk for cheese making is not pasteurized, do not criticize lack of a timed and sealed pasteurizer if the plant uses the option of heat-treating the milk. If the plant is making one of these types of cheese "for manufacturing," mark this item NA and use DA INSTRUCTION NO. 918-PS items C6—Heat-Treating or HTST Equipment and C7—Heat-Treating at sec, ° F to cover the situation.

D. Other cheeses.

Pasteurization in "3-A" equipment of the fluid product for making some cheeses is not required for plant approval because of high temperatures employed in the manufacturing methods for the cheese. FDA Standards of Identity for Cook cheese (Koch kaese) and Gammelost specify how the cheese curd is heated to high temperatures during the manufacturing process (at least 180° F for Cook cheese and about 145° F for not less than ½ hour for Gammelost). Pasteurization of the fluid skim milk mixture is not required prior to start of cheese making. The standard of identity for Cook cheese shows a phosphatase test requirement, but this can be satisfied by the curd cooking treatment. Ricotta cheese (no FDA Standard of Identity) is also made by a manufacturing procedure which involves high heat and acid precipitation of proteins from whey or whey-milk mixtures. Temperatures of 170-200° F for 5-20 minutes are employed. Initial pasteurization of the dairy ingredients is not required even though the Ricotta cheese is sold fresh for consumption without curing. If any of the cheeses in this category are labeled as "pasteurized," and the fluid product from which the cheese is made is not pasteurized with legally sealed equipment, the inspector shall show a recommendation for provision of a properly engineered and sealed pasteurizer system (use the same wording as the example above). This shall be considered a category C deficiency.

E. Condensed Milk for Cheese Making.

Pasteurization at a minimum temperature of 161° F for at least 15 seconds or its equivalent, using legally sealed pasteurization equipment is required prior to the evaporator. This pasteurization step is required even if the cheese is labeled as made from raw milk. If the condensed milk is received from another plant it shall be repasteurized or the cheese shall be labeled as "heat-treated," "unpasteurized," "raw milk," or "for manufacturing" (see Item C54 for labeling requirements of raw milk or heat-treated milk cheese). The condensed product shall be pasteurized, separately or by blending the reconstituted product with fresh milk in the constant level tank of the HTST, at a minimum of 161° F for a minimum of 15 seconds. However, a pasteurization temperature of 166° F for a minimum of 15 seconds is required if the total solids of the product is greater than 18%.

F. Reconstituting NDM for Fortifying Milk for Cheese Making.

The FDA Standards of Identity for Cheddar and many other types of cheese allow addition to the milk of "cream, skim milk, concentrated skim milk, nonfat dry milk, and water in a quantity sufficient to reconstitute any concentrated skim milk or nonfat dry milk used."

Note:

Dry whey and WPC are not allowed in most cheeses which have a standard of identity (except as noted in the guidelines for starter media in Item C14—Media

Storage & Reconstitution). If water is used to reconstitute the NDM, it must be potable, filtered, and the resulting reconstituted milk must be pasteurized except as noted in paragraph D above. This pasteurization step is required even if the cheese is labeled as made from raw milk. The plant may blend the pasteurized, reconstituted milk with other heat-treated milk to produce raw milk cheese (see item C54 for labeling requirements of raw milk or heat-treated milk cheese). Pasteurization requirements are the same as outlined in paragraph E above. If milk is used to reconstitute the NDM, the resulting cheese milk is considered a raw product, even if pasteurized milk is used. If the plant is reconstituting the NDM without subsequent pasteurization (to avoid an excessive number of heat-treatments) the cheese shall comply with the labeling requirements of raw milk cheese as outlined in item C54. Pasteurization requirements are the same as outlined in paragraph E above. Also check the following items:

1. A dump hopper and adequate dust control must be present. A powder funnel and effective dust control would meet the minimum requirements (use blank Item C11 to list any deficiencies).
2. The NDM shall be reconstituted in a processing area or its equivalent. If the dumping is done in the raw milk receiving area recommend a reduction in status unless this practice is discontinued immediately (use blank Item C11 to list this deficiency).
3. The funnel (if used) and associated piping may not be attached directly to the cheese vat. If you observe this make an appropriate comment under Item C23—Make Vats & Agitators and recommend a reduction in status unless the plant makes the required corrections during the survey.
4. If large bulk bags (Super Saks, Jumbo Bags, etc.) are used, follow the guidelines for Item D45—Tote to Bag Packaging.

G. Standardizing Cheese Milk With Whey Cream.

Whey cream can be used to standardize the cheese milk, in the plant where it was produced, provided it is properly handled and the process is inspected by the USDA (Page W is required). The whey cream should be pasteurized, either in separate equipment at a minimum of 166° F for not less than 15 seconds, or by addition to the cheese milk in the constant level tank of the HTST. If the whey cream is added to the balance tank, the mixture can be pasteurized at a minimum of 161° F for not less than 15 seconds. However, a pasteurization temperature of 166° F for a minimum of 15 seconds is required if the fat content is above 10% or the total solids is greater than 18%. When the whey cream is not pasteurized, the cheese shall be labeled as “raw milk cheese” or “cheese for manufacturing” (see the guidelines for Item C54 for labeling requirements).

Item C6—Heat-Treating or HTST Equipment (58.128).

See the guidelines for Item B6— HTST or Vat Pasteurizer.

If the milk for cheese making is either heat-treated or pasteurized, cross out the nonapplicable part of the heading on the report to properly indicate the kind of equipment being inspected. Use this item to make any recommendations needed with respect to sanitation or condition of the equipment.

Example:

C6 Heat-Treating or HTST Equipment

or

C6 Heat-Treating or HTST Equipment

When raw milk cheese is made, show NA for this item and also item C5—HTST Sealed at sec, ° F and use item C7—Heat-Treated at sec, ° F to cover inspection of the preheater used for adjusting the milk to setting temperature.

Item C7—Heat-Treating at _____ seconds _____ ° F (58.128, 58.439).

When the milk for cheese making is only heat-treated, show the temperature and hold time

directly in the item heading.

When only heat-treating is intended, it is not required that the equipment be timed and sealed. When only heat-treating is practiced, check this item satisfactory even though essential pasteurizing components may be missing (see the guidelines for Item C54 for labeling requirements).

Also, there is no legal minimum temperature and holding time for heat-treated milk for cheese making. However, the FDA requires that when the whey is intended for making Grade A Dry Whey, heat-treating of the milk for cheese making (in lieu of pasteurization) must be at a temperature of at least 147° F for at least 21 seconds, 153° F for at least 15 seconds, or other acceptable equivalent time-temperature relationship, using "3-A" equipment. The intent of this minimum heat-treatment is to reduce the number of staphylococci so that development of enterotoxin is less likely during the cheese make procedure and prior to the pasteurization of the whey. Of course, the Grade A inspection agencies will have the responsibility to check for compliance with these heat-treatment and equipment requirements at plants making whey or whey products for Grade A use. If such plants also have USDA inspection, simply report hold time and temperature actually used in the same manner as for any other heat-treating cheese plant.

Item C8—Vacuumizer (58.128p).

See the guidelines for Item B7—Vacuumizer.

Item C9—Storage Tanks (58.128d, 58.143).

See the guidelines for Items A28—Storage Tanks - Silo & A29—Storage Tanks - Horizontal.

Item C10—Housekeeping (58.126e, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Starter Facilities

Item C12—Room Construction (58.126, 58.406).

See the guidelines for Item A1—Room Construction.

The wording of §58.406 permits either, 1) a separate starter room or, 2) "properly designed starter tanks and satisfactory air movement techniques." Although a separate starter room is desirable, it is not required when specially designed bulk starter tanks are used. Such tanks usually have enclosed dome tops, high efficiency filtration of air admitted to the tank, and are mechanically cleaned. Although a separate starter room is not required, starter making is still considered a processing activity. Therefore, the tanks must be located in a processing room or area and shall not be located near areas where contamination is likely to occur. These same requirements apply to secondary starters. In addition, starters shall not be processed in close proximity to equipment such as boilers, open type separators, whey tanks, or other probable sources of contamination.

Also check the floor, walls ceiling and lighting in the room or area. Make recommendations as may be necessary. Floor drains are not required if the floor is sloped to drain to an exit.

If the plant is using "direct set" starter, show NA for Items C12-18 because special starter facilities are not needed. In such case, show the heading "Direct set starter use" for blank item C19. Check the item satisfactory if the plant is thawing the cans of concentrated culture and drying the can exterior in a sanitary manner before adding the contents to the vat (it is not necessary to check plant facilities for storage and thawing of the cans of starter).

Item C13—Lighting & Ventilation (58.126d, 58.406).

See the guidelines for Item A2—Lighting & Ventilation.

The manager should be encouraged to provide a filtered air supply to the starter room. The air should be obtained from an outside source and thereby provide a positive pressure in the room to minimize the possibility of contamination. Air filters for ventilation of starter rooms should have a minimum average efficiency of 90% when tested by the ASHRAE Synthetic Dust Arrestance test (same efficiency as required for spray dryers for air to be heated). This is

intended as a guide for management regarding a minimum efficiency for such filters. It is, of course, optional if more efficient filters are chosen. Since this is a "should" item, it will not be necessary to ascertain efficiency of existing filters or to report such information on the report.

Item C14—Media Storage & Reconstitution (58.126e, 58.128).

Many plants use special dry bulk starter preparations to make up bulk starter. It is not necessary for bulk starter media to be manufactured in a USDA approved plant. All other dairy ingredients in the cheese that are allowed by a standard of identity shall be from approved sources.

Check for orderly storage of bags of starter media up off the floor on racks or pallets. When considerable amounts of starter are made, a separate room should be recommended for storing a small supply of media and for performing the dumping and reconstitution operations.

Inspect the equipment used for reconstitution (usually a funnel and recirculating pump). If a Ladish Company "Tri-Blender" is used, check that the valve between the funnel and pump is an approved 3-A sanitary type. They are sometimes supplied for food uses with a series 55 butterfly type valve that does not conform to 3-A requirements. If so, recommend replacement. If possible during the survey, also check that bag dumping is carried out in a sanitary manner. Misuse of starter media in the cheese making process is a serious problem. This involves the use of excessive amounts of starter media, the inappropriate addition of secondary starters, or the addition of dry starter media for the fortification of milk for cheese making. Secondary starters, when used in appropriate amounts should not be criticized. In cheese making, active starter culture is generally added to milk at the rate of 1-2%. Consider amounts of 3% or more added starter (including secondary starter, if used) as excessive. When observed usage is greater than 3% recommend discontinuing the improper use of starter to fortify the cheese (category A deficiency).

Whether using commercial starter media or plant blended whey fractions, the starter culture shall be viable. If the starter does not contain an active culture, it is being used to fortify the cheese milk. However, only the optional ingredients listed in the Standard of Identity can be used to fortify the cheese milk. Therefore, secondary starter that contains whey fractions cannot be heat-treated just before being added to the vats. If the starter is being misused in this manner, notify the National Field Office and assign the INELIGIBLE status (category A deficiency).

The use of secondary starters is acceptable, provided they are used according to all the above guidelines. In summary:

1. Less than 3% total starter is used.
2. Appropriate temperatures are used.
3. Handled as a starter (i.e., made in the starter room or specially designed starter tanks).
4. Appropriate powder handling equipment is used for reconstituting the secondary starter media.

Item C15—Media Heat-Treating Equipment (158.128j, k).

See the guidelines for Items A27—Product Cooler and B6—HTST or Vat Pasteurizer. Show NA for this item (use Item C16) if the plant performs the heat-treating in the starter making vats, which is a common practice in small or medium sized operations.

Use this item to cover inspection of equipment used for continuous heat-treating of bulk starter media prior to piping to starter vats for inoculation. Such equipment usually consists of heat exchangers to bring the temperature to 200-250° F, a hold tube, and regenerative cooler.

Because of the high temperatures used, pasteurization is not required (timing and sealing of the unit and other public health controls are optional). However, the equipment shall meet the applicable 3-A Sanitary Standards.

Item C16—Processing Vats (58.415).

Inspect the processing vats for condition and cleanliness giving particular attention to

appurtenances, such as vents, agitator, valve outlet, etc. Also, check that the vats are made of stainless steel, in good repair, equipped with tight fitting lids and have adequate temperature controls such as valves, indicating thermometers, and recording thermometers.

§58.415 requires that, "New or replacement vats shall be constructed according to the applicable 3-A Sanitary Standards" (formerly a "should" item). There is no special 3-A Sanitary Standard that pertains only to starter vats. However, there are two 3-A Sanitary Standards which are applicable to commonly used processes of starter making:

1. When the bulk starter media is mixed, heat-treated or pasteurized, set, incubated, and cooled in the same vat, *3-A Sanitary Standards for Non-Coil Type Batch Pasteurizers, Number 24-* is applicable (this process is likely to be encountered at only small or medium size cheese operations).

2. When the bulk starter media is heat-treated with continuous type heating equipment and is then piped to a vat for subsequent inoculation and incubation, *3-A Sanitary Standards for Non-Coil Type Batch Processors for Milk and Milk Products, Number 25-* is applicable for the vat (this process is most popular at medium or large size cheese operations).

If inspection of new or replacement vats reveals no 3-A symbol, handle in the same manner as outlined for item A3—Pumps, Pipelines, & Valves.

Show NA for this item if the starter is made in cans, which is a satisfactory option.

Item C17—Starter Cans or Pipelines (58.128a, 58.131a).

See the guidelines for Item A3—Pumps, Pipelines, & Valves or Item A5—Condition of Producer Cans.

The handling, cooling, and storage of starter in stainless steel or well tinned clean milk cans is a satisfactory practice. Check several empty cans, if available, using the inspection guidelines for Item A5—Condition of Producer Cans. When more than 10 percent are in an unsatisfactory condition, show a recommendation for correction and a summary of the inspection results.

If starter is made in cans, check that the cooking and cooling tank is maintained in a clean condition. Also, check the pails, utensils, etc. for cleanup and condition.

When starter is conveyed to vats with pipelines, inspect the pump, pipelines, valves, and fittings and use this item to report any deficiencies.

Item C18—Housekeeping (58.126e, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Cheese Room

Item C20—Room Construction (58.126, 58.407).

See the guidelines for Item A1—Room Construction.

Also check that the room is of adequate size and the equipment spaced to permit movement around the equipment for proper cleaning and satisfactory working conditions.

Item C21—Lighting & Ventilation (58.126d, 58.407).

See the guidelines for Item A2—Lighting & Ventilation.

Filtered air ventilation should be encouraged for make rooms, but it is not mandatory if ventilation is otherwise adequate (a "should" item of §58.407).

Item C22—Pumps, Pipelines & Valves (58.128, 58.146a).

See the guidelines for Items A3—Pumps, Pipelines, & Valves.

Item C23—Make Vats & Agitators (58.128, 58.416, 58.417).

A. Conventional Open Cheese Vats and Tables (58.416, 58.417).

Open cheese vats and tables shall meet the requirements of the 3-A Sanitary Standards for Cottage Cheese Vats, Number 38- .

Carefully inspect the condition and sanitation of the vat liner. The vat bottom should be relatively smooth and allow free drainage of the whey to the outlet valve. Check cleaning of the outlet valve and sump. Outlet valves shall be of a sanitary type. Outlet valves with bevel seats should be removed daily for hand cleaning.

Examine around the outlet valve and the top corners of the vat liner for cracks. Small cracks in the top of a drain table or vat should be assigned to category C. However, cracks in a jacketed vat that might allow heating media into the cheese should be assigned to category B. Agitators shall be of the closed type which are so designed as to protect the product in the vat from potential contamination from the moving parts in the agitator assembly.

Check that exterior surfaces of agitators are kept clean and that exposed interior surfaces are cleaned as necessary to keep them relatively free from accumulated rust, dirt, etc. §58.417 requires that "all product contact surfaces, shields, shafts, and hubs shall be constructed of stainless steel or other equally corrosion-resistant metal."

Do not recommend replacement of painted metal shields with stainless steel shields when they are located on open rail type agitators. Instead, recommend remodeling or replacement of the entire unit.

Iron agitator hubs and shafts are unsatisfactory, recommend replacement with stainless steel. Aluminum hubs in good condition should not be criticized. However, they should be carefully checked as they are often found broken or in excessively worn condition. Agitator hubs shall not be painted. When painted hubs are noted, recommend removal of the paint.

When oil seepage is noted on the agitator shaft, recommend correction (usually requires a new oil seal or perhaps new bearings and an oil seal). Assign this deficiency to category B. If the oil is noted in the product assign this deficiency to category A.

B. Enclosed Cheese Vats and Tables (58.416).

Enclosed cheese vats and tables, installed after November 16, 2003, shall meet the requirements of the 3-A Sanitary Standards for Enclosed Cheese Vats and Tables, Number 83- .

These vats are either round and have one or more vertically mounted agitators (such as the Double O vats), or may have one or more horizontal agitators (such as the OST vats),. The agitators usually also perform the function of cutting the curd. After the curd is cooked, whey may be predrawn and then the remaining curd and whey slurry is usually pumped to drain tables for subsequent manufacturing steps. Cleaning is usually accomplished by means of factory installed devices for mechanical cleaning in place.

Spray devices, for the addition of nondairy ingredients intended to remain in place during processing operations, if provided, shall be designed, such that their exposed exterior surfaces inside the vat meet product contact surface requirements and are readily accessible, readily removable and inspectable. Interior surfaces of pipelines and spray devices supplying nondairy ingredients are not required to meet product contact surface finish requirements except when included in a mechanical cleaning circuit for product contact surfaces. Also, there are no minimum radii requirements for orifices in spray devices used for incorporating non-dairy ingredients or potable water.

As with conventional vats, inspect all interior surfaces and appurtenances for condition and cleanliness. This may require entering the vat. Before doing so, arrange with management for making sure that the unit cannot be started while you are inside (use the lockout/ tagout device supplied by the National Field Office) and check the plants confined space entry program (see Section I, Item P).

The Damrow "Double O" enclosed cheese vat has been widely used in the cheese industry for many years. Following are areas which require close inspection during plant surveys.

1. The points which are the indentation of the figure "8" shape of the interior of the vat are high stress points for the stainless steel of the bottom. Check these areas for stress cracks.
2. The bottom discharge depression is also subject to stress cracking.
3. Check for product remnants on the knife assembly (including the underside), knife bearing assembly and the discharge valves.
4. Check for stress-cracks on the exterior of vat near the outlet valve.

5. Look for metal to metal contact that can occur if the agitator shaft is not properly aligned.

6. Check the areas on the upper surfaces where the agitator braces are attached.

When inspecting enclosed horizontal cheese vats, such as the HCV or OST cheese vats, inspect all interior surfaces and appurtenances for condition and cleanliness. Because of the arrangement of the agitator(s) in this type of vat it is not safe to enter. The rear seal (drive end) of the agitators in these vats are supplied with a CIP line. The front seal rides in a plastic bushing. Inspect at least one set of bushings each survey. Inspecting the front bushing will require the agitator to be supported by a hook while the plate on front of the vat is removed. There should be enough room between the drive motor and the vat to slide the rear bushing out enough to inspect it.

C. Miscellaneous.

During cheddar cheese making operations, you may note the addition of calcium chloride, artificial color, hydrogen peroxide solution, catalase preparation, and special curing enzymes in addition to the normally employed starter, rennet (or other milk clotting enzyme), and salt. All of these materials are permitted by the *FDA Standard of Identity*, which also outlines applicable limitations, labeling requirements etc.

When special enzymes are added to aid in curing or flavor development of Cheddar cheese, no special labeling is required for the finished cheese when the enzymes are added early in the making process, before the curd is formed. However if the enzyme preparation is added directly to the curd or cheese, the finished cheese must be specially labeled, for instance, "Enzyme Modified Cheddar Cheese."

For some varieties of cheese (Asiago, Blue, Gorgonzola, Parmesan, Reggiano, Provolone, Romano, Swiss, and Emmentaler) the FDA Standards of Identity allow the bleaching of the milk with benzoyl peroxide or a mixture of benzoyl peroxide with potassium, calcium sulfate, and magnesium carbonate.

It is not the intent here to outline the wide variety of permitted ingredients and making procedures for standardized cheeses. Evaluation of plant practice in this regard requires a thorough knowledge of the standards. Checking for proper use of these materials would also take considerable time, so this is not a USDA survey responsibility. Nevertheless, if you should note apparent improper use, either recommend correction or ask for supervisory guidance when you need assistance.

Item C24—Drain Tables (58.128, 58.416, 58.417).

See the guidelines for Items C23—Make Vats & Agitators.

In general, the construction and inspection guidance for conventional open cheese vats also applies to drain tables. Many drain tables, however, are equipped with special mechanical devices for pushing the curd and with special end designs for feeding the curd to bulk cheese conveying systems. Inspect such mechanical equipment carefully for cracks, poor condition gaskets, sanitation, etc.

Most drain tables have a center drain trough, covered by perforated or slotted drain plates. Remove some of the drain plates for inspection of condition (criticize cracks, rough welds, etc.) and cleanup. Also check the vertical trough outlet pipes as these are sometimes overlooked during cleanup.

Some drain tables (Damrow) have end gates which are gasketed with transparent tygon hose slipped over a formed stainless steel rod and held in place with a hose clamp. If the hose is cracked, or cut, or contains liquid, recommend replacement of the hose and use of end fittings which do not leak (a redesigned gasket is available that utilizes a solid gasket in place of the hose).

Make vats and drain tables should be washed between makes (cleanup between makes need not be as thorough as would be expected at the end of the day's operation).

Item C25—Curd Knives, Forks, Rakes, Misc. (58.128, 58.417, 58.419).

Cutting the cheese into uniform size cubes is important for proper cooking, salting, and composition control. Inspect the curd knives for cleanliness and missing wires. Show as unsatisfactory when wires are missing, or broken (more than two vertical or two horizontal). Also make a recommendation if the wires are excessively loose. Check for satisfactory storage of knives when not in use.

Inspect the forks, rakes, and miscellaneous utensils for cleanliness and condition. These items shall be made of stainless steel or plastic material that meets the *3-A Sanitary Standards for Multiple-Use Plastic Materials Used as Product Contact Surfaces for Dairy Equipment, Number 20-*. Recommend repair or replacement if these items are in poor repair, have cracks, crevices, rough welds, or cannot be cleaned properly. Remove the rubber from the stainless mounting on the squeegee and check for cleanliness. This should be removed daily for proper cleaning. Wood rakes or handles are not acceptable. Also check for satisfactory storage of utensils when not in use.

Some strainers, although constructed of stainless steel, are fabricated with crimped joints. When such strainers are noted in poor condition, recommend replacement with new strainers having seamless construction.

Item C26—Mech. Draining, Matting Equipment (58.128, 58.418a, b).

Show NA for this item if the plant uses conventional vats or vats and drain tables.

If the plant uses special automatic or semiautomatic cheddaring equipment, inspect product contact surfaces for condition and sanitation.

The USDA, Dairy accepted design of the Damrow DMC Machine provides openings for the shafts supporting the belt to pass through the sides of the machine. These openings permit the bearings (both grease and Teflon type) to be located outside of the product contact area and therefore eliminate the possibility of contamination from these bearings.

While the DMC machine is being CIP cleaned, a sizeable amount of cleaning solution can be lost through these openings. To salvage this solution, pans have been installed below the openings to catch the CIP solution and return it to the DMC machine for recirculation. This is an acceptable practice.

During the cheddaring process, a small amount of whey is lost through these same openings. The piping which attaches the catch pans to the machine for CIP solution return shall be disconnected during operation. Whey that is collected in these pans during operation has been in contact with unsanitary areas and shall not be salvaged for human consumption in USDA approved plants.

If the cheese manufacturing plant is salvaging this whey, inform the plant management that this is an unsatisfactory practice. If plant management elects to immediately disconnect this piping during the survey, lower the plant status to ensure the practice is being discontinued. If plant management either cannot or chooses not to disconnect the piping during the survey, assign the INELIGIBLE status to all codes which include whey.

Item C27—Curd Mill (58.419).

Product contact surfaces of the curd mill shall be made of stainless steel or be well tinned. Check that the motor and drive mechanism are mounted or guarded to prevent dirt or grease from dropping into the vat. Also check that there is no metal-to-metal rubbing of parts which might shave off metal particles into the cheese. Old style mills with bolted blades and exposed threads should be replaced with welded assemblies.

Use care during inspection as mills have many sharp edges.

Most mills for Cheddar Cheese are the rotary type, but Mozzarella "milling" is often accomplished with dicer type units using a reciprocal plunger to force the curd through sturdy knives. On such units, inspect all product contact parts for cleanliness and condition, including the hopper, chamber, plunger, and knives.

Item C28—Mixing & Molding Equipment (58.428).

When the plant makes Mozzarella cheese, use this item for listing deficiencies with the cheese mixing, molding, and cooling operations.

A. Mixing Equipment.

New or replacement equipment shall meet the *3-A Sanitary Standards for Italian-Type Pasta Falata Style Cheese Cookers, Number 70-* .

Modern mixers for the cheese and hot water usually employ one or more augers to continuously mix and convey the cheese from a mill or dicer to the molding machine. Some older mechanical mixers are batch type, however, and use paddles or arms to mix the cheese and hot water in a portable kettle. Either type is satisfactory. Inspect all parts for condition and sanitation. Augers should be removable for cleaning, or design provision should be made for easy effective daily cleaning of all product contact surfaces, including seals or bearings located in the product zone.

The 3-A Sanitary Standard allows certain surfaces to be coated with Teflon or shot peened to prevent the cheese from sticking. When surfaces are coated with Teflon, check for adherence. Recommend recoating when the Teflon is peeling or deteriorated. When surfaces are shot peened, they will be slightly rougher than a number 4 finish.

Steam introduced for direct injection heating of the water shall be culinary and meet the requirements as outlined in the guidelines Item A36—Culinary Steam.

Inspect the hot water tank, pump, related piping system and temporary storage tank for the hot water-fat mixture, which is usually separated to recover the butterfat.

There is no objection to the reclaiming of milkfat, milk solids, or brine fractions of the cooker/stretcher water provided the component streams are handled in a sanitary manner and in properly designed and constructed equipment.

Note:

For the purpose of this section of the guidelines the brine fraction is the excess salt extracted from the cooker/stretcher water. This should not be confused with brine systems used later in the process to cool and salt the cheese.

Any milkfat reclaimed will be considered whey cream, and any milk solids reclaimed will be considered as whey or salty whey suitable for intermixing with other human food products as appropriate.

The quality of the milkfat and milk solids reclaimed should be monitored carefully. The repetitive pumping at elevated temperatures may result in deteriorated quality. While acceptable from a sanitary standpoint, the quality may not be sufficient to produce finished products of satisfactory quality.

When inspecting systems from which the milkfat, milk solids, or brine fraction is reclaimed, the following criteria shall apply.

1. Salt slurry makeup systems shall use potable water. They shall be constructed consistent with the salt slurry systems used for the injection of salt into continuous butter churns (See the guidelines for Item B17—Churn(s)).

2. Because of the relatively small volumes of salt brine in cooker/stretchers, there is no objection to mixing this brine in with properly collected and handled salty whey prior to reclaiming the product in a membrane system. If a membrane system is used to separate the salt brine from the milk solids fraction, pasteurization is required. The pasteurizer shall be properly engineered and installed, and be timed and sealed by the state regulatory authority. For USDA acceptance, the pasteurizer may be located either before or after the membrane unit. However, the plant should be aware that the FDA generally requires that the pasteurizer be located prior to the membrane unit.

Reclaimed brine solutions recirculated back to the cooker/stretcher shall be handled in equipment designed and constructed to product contact standards. This is required so the system can be effectively cleaned in the event a failure in the membrane system allows milk solids to be introduced into the brine recirculation system.

3. The cooker/stretcher water shall be stored at temperatures either greater than 145° F or less than 45° F until it is processed to recover the fat, solids, or brine fractions.
4. Reclaimed milk solids (whey) shall be considered as raw and shall be pasteurized at some appropriate point during processing and before leaving the plant.
5. If the reclaimed milk solids are further processed by separation, the following shall apply:
 - a. The separator shall be a sanitary design dairy separator.
 - b. Milkfat (whey cream) may be added back to the raw milk balance tank prior to pasteurization for cheese making or be cooled and blended with other whey cream for shipment to another plant or used for butter making. If blended with cream, the entire blend shall be labeled as whey cream.
 - c. The heavy phase (milk solids and salt) may be combined with other salty whey for further processing or disposal. See the guidelines for processing salty whey (Items W47, W51, and W52).
 - d. If a self cleaning (desludging) separator is used the sludge or "shoot" material shall be disposed of as waste. This product shall not be reclaimed as human food.
6. The cooker/stretcher water shall be processed or dumped following the end of each days production. The cooker/stretcher water shall not be held over and used the following day, nor assembled for several production days before further processing in order to increase the volume to be processed.

B. Molding Equipment.

New or replacement equipment shall meet the *3-A Sanitary Standards for Italian-Type Pasta Falata Style Cheese Moulders, Number 71-* .

Molders usually are Teflon coated or have shot peened surfaces to prevent the cheese from sticking. Molders consist of hopper and auger(s) for forcing the warm cheese into desired shapes and sizes. Inspect for condition and sanitation as outlined for mixers.

C. Cheese Forms, for Cooling (if used).

See the guidelines for Item C46—Hoops, forms, & Press Cloths.

New or replacement equipment shall meet the *3-A Sanitary Standards for Italian-Type Pasta Falata Style Moulded Cheese Chillers, Number 72-* ,

A common commercial style for Mozzarella cheese is the five or six-pound loaf. To facilitate handling of the stainless steel loaf forms, they are sometimes fastened together, three or four to a unit, with welded stainless steel straps or bars. Check for open seams at point of welding, particularly if strip or spot type welding is employed. Since the entire form and the exposed cheese are immersed in the cooling water, open seam areas at fastening points have direct sanitary significance and are unsatisfactory. Plastic forms shall be smooth, in good condition, and free of cracks. Also, check for proper storage of the forms when not in use.

D. Cheese Cooling.

Cooling is usually accomplished by immersion of the cheese, with or without forms, into cold water or brine. The water may be flowing continuously or may be refrigerated and recirculated. If recirculated, the water should be drained at the end of the day. In addition, all surfaces that the water contacts shall be considered product contact surfaces.

Chilling of the water with immersed refrigerated copper coils should not be criticized. Copper coils shall not be used to cool brine.

Some special molding machines also have refrigerated jacket type surfaces to accomplish a dual function of molding and cooling.

Item C29—Salt Storage & Handling (58.418c).

See the guidelines for Item B19—Salt Storage & Handling.

A. Manual Salting.

Salting of American cheese at many plants will consist of manual spreading of the salt on the curd in the make vat or drain table, followed by a period of mechanical forking and mellowing

prior to hooping.

Pails used to salt the cheese shall not be stored on the floor.

B. Automatic Salting.

If salting is performed by a machine, the automatic salter shall be constructed of stainless steel or other equally corrosion resistant metal and should be constructed to equally distribute the salt throughout the curd. It shall be designed to accurately weigh the amount of salt added. It shall be constructed so that it can be satisfactorily cleaned. The salting system shall provide for adequate absorption of the salt into the curd. Sometimes steam is used to moisten the curd during salting. If this is the case, the steam must comply with the guidelines for Item A36—Culinary Steam.

Inspect the automatic salting system for compliance with these requirements. Make recommendations as may be applicable.

The salting machine is often a separate unit which requires conveyors to bring the curd to it. For the manufacture of cheddar cheese, the conveyors are usually belt or vibratory type and are located just after the curd mill. Inspect such conveyors for sanitation and condition and make any needed recommendations under this item number. Also, check that suitable means of access is provided for any elevated or hard-to-reach components to facilitate daily cleaning. In connection with automatic salting machines, the salt is sometimes 1) bulk handled in tote bins, 2) dumped into a hopper for gravity feed, or 3) elevated to a feed hopper with an air conveying system or other conveyor. In such instances, check for sanitary dumping and handling to prevent contamination of the salt.

Item C30—Fines Return & Fines Saver (58.428).

Show NA for this item if the fines are not returned to the cheese.

Dismantle and inspect all components for condition and sanitation.

Encourage the practice of keeping the fines container up off the floor on a shelf, rack, or separate stand (when allowed to sit on the wet floor, water from the bottom exterior surfaces can fall in the cheese vat when the container is emptied).

Under most circumstances, the fines saver should be operated with a cover in place to protect the whey and fines from external sources of contamination. There may be exceptions, however, where such protection is afforded by location in a separate room or special area. When a cover is not employed, evaluate the situation and use your judgement.

Check that the screen, or any extra screens, are properly stored when not in use. Large radiator style hose clamps with exposed threads should be criticized.

If a separator-type fines saver is used, the areas that collect the fines shall meet product contact surface requirements. Check the *Accepted Equipment List* under the heading centrifuges to determine if the desludging section is acceptable for product contact. If the model is listed follow the inspection guidelines for Item B4—Separator. In addition, inspect the fines collection and outlet area. If a water rinse is utilized to flush the fines back to the drain tables or into a storage tank where they are to be reclaimed for human food, see the guidelines for Item A35—Product Rinsings.

Item C31—Hand Washing Facilities (58.127c).

See the guidelines for Item B21—Hand Washing Facilities.

Hand washing facilities shall be available in the immediate work area. Employees should wash hands prior to handling product; if possible, determine if this practice is being followed. When deficiencies are noted, recommend correction.

Item C32—Housekeeping (58.126e, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Brushes and cleaning materials should be kept in their proper place and miscellaneous utensils such as forks, rakes, pails and strainers should be stored in a sanitary manner. Also, check floors under cheese vats and the underside of vats and equipment for cleanliness following

equipment cleanup after the day's operations.

Item C33.

Use this item with appropriate heading to cover improper use of defoamers or any other cheese making equipment located in the make room and not listed in this section.

Although defoamers are allowed to be used in whey, they are not allowed in whey cream, cream, or cheeses covered by a Standard of Identity such as Cheddar cheese. A defoamer is not permitted for use in such cheeses unless specifically listed in the optional ingredients section of the standards. However, due to specific functional needs and additional regulations covering the manufacture of reduced fat cheeses, a defoamer may be used for the manufacture of standardized cheeses that are formulated to comply with low fat or reduced fat label declarations. The improper use of a defoamer does not constitute a serious breach of a Standard of Identity. If during a survey a defoamer is used in the production of a standardized full fat cheese, recommend that the plant discontinue its use immediately and assign the deficiency to category C. If on subsequent surveys a defoamer is still in use, elevate the deficiency to the next higher category until the plant has taken appropriate action.

Cheese Brine Facilities

Item C35—Room Construction (58.126, 58.408).

Preferably, cheese brine tanks should be in a separate room constructed so it can be readily cleaned. However, a separate room is not a requirement, so do not criticize brine tank location in a make room or packaging room, for instance, provided there is sufficient room and no interference with other processing activities.

If the factory does not salt cheese by the brine soaking method, show NA in the report heading for this section and leave Items C35-41 blank.

Item C36—Lighting & Ventilation (58.126d).

See the guidelines for Item A2—Lighting & Ventilation.

Item C37—Brine Tanks (58.422).

The brine tanks shall be constructed of suitable nontoxic material and should be resistant to corrosion, pitting or flaking. Good condition concrete or tile tanks are satisfactory. However, when flaked or deteriorated condition is noted and replacement is needed, recommend replacement with stainless steel, fiberglass-covered wood, or other suitable nontoxic material. Because of the strong corrosive effect of brine on most metals and paint, the tank exterior surfaces, legs, or other framework should also be constructed of stainless steel, fibreglassed wood, or other corrosion resistant material.

Fiberglass brine systems are to have surfaces that are at least as good as a good condition concrete tank. Fiberglass tanks should not possess rough, pitted surfaces with fabric folds or exposed fibers.

When unacceptable brine tank surfaces are noted, fill out a Nonconforming Equipment Report and attach it to the survey report so follow-up action can be taken with the manufacturer. Appropriate recommendation to bring the surfaces into compliance should also be made on the survey report.

Brine tanks may be mounted one atop the other, provided the exterior of the top tank is constructed to the same specifications as the product contact surfaces of the tanks. If such deficiencies are noted, describe them on the report together with a recommendation to correct the condition. Also, check for cleanliness and presence of mold on the underside of the tanks. Employees shall use sanitary procedures when working with the top vats. Employees shall not stand on the edge of the lower vat. If noted, recommend that this practice be stopped immediately. Also evaluate the adequacy of alternative means of access provided by management.

Walkways over brine tanks shall be solid so that debris cannot fall into the tanks. In addition, there shall be a kick plate a minimum of 4-inches high on the portion of the walkway over the

tank.

Item C38—Control of Brine Quality (58.422).

The brine tank shall be operated so as to assure the brine is clean, well circulated, and of the proper strength and temperature for the variety of cheese being made.

In a very small cheese operation, minimum compliance might be achieved by locating the tank in a cooler room for temperature control. However, note that without circulation brine strength tends to stratify as salt is absorbed into the cheese from the top of the tank.

When the brine tanks are located in a regular processing room, cooling of the brine may be necessary. The preferred method is for recirculation of the brine through a filter and cooler (plate or tubular type, for instance) and back to the tank. The filter removes impurities, the circulation prevents stratification of brine strength in the tank, and the cooler removes heat imparted by the cheese.

Cooling of brine with refrigerated copper coils immersed in the brine tank is a questionable practice. Excessive copper salts may be in solution in the brine and be absorbed by the cheese. Therefore, copper coils are unsatisfactory, recommend replacement with stainless steel.

Since the brine is very corrosive to ferrous metals, the piping used for recirculating the brine through the filter and cooler and back to the brine tank is often constructed of special stainless steel or rigid polyvinyl chloride (PVC). The use of rigid PVC piping for this purpose should not be criticized.

Plant testing for microbial contamination and salt strength should be encouraged to aid in maintenance of brine quality. As may be necessary, tanks should be cleaned and the brine should be heat-treated or filtered to control microbial contamination.

Note:

When the brine quality is under good management control as indicated above, USDA has no recommendation for frequency of dumping old brine and making up a new solution. The frequency is a management option.

Item C39—Miscellaneous Utensils (58.428).

Use this item to cover inspection of any special equipment or utensils employed in or around the brine tanks, including such items as tables for removing cheese from hoops, brine tank dividers, salt buckets, tools for moving the cheese, etc. Check that construction is of stainless steel, or rubber or plastic material that meets the 3-A Sanitary Standards and that 3-A principles are followed in the fabrication. Also check for sanitation and proper storage of these items when they are not in use.

Item C40—Cheese Drying After Brining (58.428).

Check that facilities for drying cheese after brine immersion are constructed to protect the cheese from contamination. Product contact surfaces of such equipment must be made of stainless steel or rubber or plastic materials that meet the 3-A Sanitary Standards. If a drying tunnel is used, check interior surfaces for freedom from peeling paint or rust (because of brine, stainless steel construction is desirable although not required).

Item C41—Housekeeping (58.126e, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Cheese Packaging

Item C43—Room Construction (58.126, 58.410, 58.411, 58.413).

See the guidelines for Item A1—Room Construction.

A separate room for packaging rindless bulk cheese is not mandatory and the packaging operations may be conducted in the cheese make room (or any suitable section of a processing area).

The room or area shall be free from dust, condensation, mold, or other conditions which may contaminate the surface of the cheese or contribute to unsatisfactory packaging of the cheese.

When applicable for rind cheese, a separate room or compartment should be provided for paraffining and boxing the cheese. The room shall be of adequate size and the temperature maintained near the temperature of the cheese drying room to avoid sweating of the cheese during paraffining.

Item C44—Lighting & Ventilation (58.126d, 58.410, 58.411, 58.413).

See the guidelines for Item A2—Lighting & Ventilation.

Check for 30 F/C of light and light protectors.

If rindless bulk cheese is packaged in a separate room, ventilation of the room with filtered air under slight pressure is desirable, but this is not a requirement.

Item C45—Barrels, Carts & Conveyors (58.420, 58.424, 58.425).

Use this item for any deficiencies that could affect the quality or wholesomeness of the cheese. Deficiencies that affect the whey should also be recorded on Page W.

When applicable, check the condition of barrels used. Some barrels are constructed of steel, lacquered inside and painted outside, are poly lined, contain approximately 500 pounds of cheese, and require cleaning and paraffining after each use in order to be maintained in good condition. The empty barrels shall be stored in an enclosed, clean, dry area. When barrels are not properly stored or are rusty, in poor repair, not clean, or in need for reconditioning, make a recommendation for correction. Indicate how many barrels were inspected and how many were found unsatisfactory.

When American type cheese is hooped directly into barrels, whey drainage is usually facilitated by turning the barrel on its side with a portable cradle or by use of a mechanical sling from an overhead monorail. Some plants also have other special equipment for positioning barrels for drainage.

When a monorail is used, check for appropriately constructed shields under the monorail carriages to protect empty and filled barrels and whey drain pans from paint chips, rust, oil, etc. If no shields are present, recommend that they be provided.

When cheese is packed in large collapsible plastic or wooden boxes (waxed), inspect the box components for condition, and also check the filling, pressing, dressing, and final packaging operations.

Item C46—Hoops, Forms & Press Cloths (58.418e, 58.420, 58.421, 58.429).

Inspect hoops or forms for condition and cleanliness. Construction material shall be stainless steel, suitable plastic, or well-tinned iron (usually, tinned hoops are employed mainly for small styles). Check the forms for fabrication deficiencies such as bolted construction, rough product contact surfaces, cracks, crevices, etc.

Hoops for American Cheese shall be washed daily. Do not criticize the common practice of immediate refilling Mozzarella hoops for more than one use during the same day.

The *Accepted Equipment List* shows manufacturers of cheese molds that have obtained USDA acceptance of their products. To obtain this acceptance, the plastic materials used must comply with the applicable Food and Drug Administration regulations (21 CFR Parts 170 to 199) and also with the *3-A Sanitary Standards for Multiple—Use Plastic Materials Used as Product Contact Surfaces for Dairy Equipment, Number 20-*. There are a variety of plastic materials available which meet both of these requirements and would therefore be satisfactory for use in fabricating cheese molds.

Several cheese plants which manufacture cylindrical shaped cheese such as Parmesan, Romano, and Longhorn styles of Cheddar and Colby have purchased rigid PVC (polyvinyl chloride) pipe of the proper diameter, cut it into proper lengths and use these as cheese forms. Since PVC has not been found to comply with the FDA requirements and the 3-A Sanitary Standards, it is unacceptable for use as cheese forms in USDA approved dairy plants. If any USDA approved dairy plant currently using PVC cheese forms, recommend the INELIGIBLE status (category A deficiency).

There are several other classes of plastics that do meet the requirements. These can also be purchased in lengths of specific diameter pipe, cut to the proper lengths, have holes drilled for whey drainage and be acceptable for use as cheese forms in USDA approved plants. Plastics such as polyethylene, polypropylene, polystyrene and extruded nylon which meet the requirements could be used. Cheese plants which elect to use acceptable types of plastics should request that the plastics supplier provide them with certification that the plastics meet our requirements. This certificate should remain at the plant for review during plant inspections. When a mechanical hoop washer is used, inspect the machine for sanitary condition and maintenance. Check that solution temperature and pressure are controlled to achieve satisfactory cleaning of hoops. Check also for adequate venting to the outside. Make any needed recommendations under this item.

Examine press cloths for sanitary condition. When the appearance or odor of press cloths indicate improper cleaning, recommend adoption of an effective daily cleaning procedure. Badly worn, ragged cloths are also unsatisfactory, recommend replacement. Single service type press cloths should be used only once.

When used, the washing machine for press cloths should be of commercial quality and size or be of sufficient size to handle the applicable load. It should be equipped with temperature and water level controls. In effect, this means that family type washing machines are considered satisfactory for washing press cloths when they are properly loaded and are properly cleaning the cloths. If this is not the case, then larger commercial style washers should be recommended.

Item C47—Hooping Equipment (58.128a, 58.418b, d).

A. Manual Hooping.

Check that shovels, funnels, etc. are properly constructed and stored under sanitary conditions.

B. Automatic Curd Conveyors.

Salted curd is often moved to a hooping station for blocks or barrels by means of an air conveying system. §58.418b requires stainless steel construction, cleanable design, sufficient size unit, and provision with "filtered air of the quality satisfactory for the intended use. Air compressors or vacuum pumps shall not be located in the processing or packaging area." The major uses of pneumatic conveying equipment are to move salted curd to hooping stations and to convey ground cheese to blending vats. All of the major commercially available systems (Damrow, Kusel, and Stoelting) use rather large volumes of air at low pressure of approximately 5-15 PSI to convey the cheese. Cubic feet per minute (CFM) depends on the sizing of the system, but usually falls into the 300 to 1300 CFM range for conveying cheese curd. Some large systems for conveying ground cheese may use considerably more. The slightly compressed air is usually supplied by rotary pumps commonly called "blowers" (as compared to fans which deliver very high quantities of air at very low pressures and to compressors which supply relatively low volumes of air at very high pressures). The rotary blowers usually have air prefilters of various types on the suction side. The blowers are made of iron and have iron appurtenances such as prefilter housings, sound mufflers, check valves, and associated piping. The interior surfaces of iron components are subject to rusting and therefore a downstream filter is required, together with corrosion resistant piping from the filter to the cheese pickup point. Since the air blower is not located in the processing area, the air supply pipeline may be quite long. When the final filter is located near the blower, the air piping from the final filter may be made of threaded stainless steel, sanitary stainless steel (that is, with either welded joints or "3-A" fittings), aluminum, rigid PVC, copper, or any other suitable nontoxic material which is corrosion resistant. However, if other than sanitary stainless steel piping is used, conversion to sanitary stainless steel piping must be made a few feet upstream of the cheese pickup point. The connection should permit easy dismantling to allow take down and inspection of pipes downstream of the connection. Another alternative would be to locate the final filter relatively

close to the cheese pickup point, in which case iron piping can be used between the blower and the final filter.

Regular cleaning of the air line, upstream from the sanitary connection, should not be necessary if backflow of product or liquids is prevented during shutdown periods. Such backflow can be prevented by locating the sanitary connection in a vertical section of air piping which comes from above, toward the cheese pickup point. Where this is not practical and a horizontal air line is required prior to the cheese pickup, the sanitary connection should be taken apart and capped off during shutdown and cleanup operations (optionally, a valve might be installed to serve the same purpose). The system should have pressure relief protection to prevent damage in case the blower is accidentally started while the line is blocked.

Minimum filter efficiency should be 85% when tested in accordance with the ASHRAE Atmospheric Dust Spot Method when operated at its design face velocity (this is the same filter efficiency specified in 3-A Accepted Practices). We understand that the 85% efficiency by this test would approximate the removal of 93% of airborne particulates in the 1-5 micron range. Use of higher efficiency filters is a management option.

As with any filter installation, it is important that air bypassing be avoided by filter design or use of gaskets in the filter frame or cartridge (the physical shape and size of filters will vary considerably depending on design and size of the pneumatic system).

Other conveyors, such as auger, belt, or vibratory types, are also used to convey salted curd to the hooping station(s). Inspect conveyors for conformance to the §58.128a or §58.418b requirements as may be applicable.

C. Automatic Curd Filling or Hooping.

§58.418d requires stainless steel construction, cleanable design, sufficient size unit, and accurate control of curd weight into the container. Some curd filling units also have automatic devices for moving the containers through the machine and for tamping the curd. These automatic curd fillers are usually manually cleaned. Check for sanitation and condition and make recommendations as may be necessary.

Item C48—Whey Probes (58.428).

Use this item when the plant is making cheese in large styles such as barrels or 640's and is using vacuum probe equipment to withdraw whey from the cheese. Note any deficiencies to the exterior of the probes under this item. Deficiencies on the interior of the tubes and other fittings should be recorded on Page W, Item W6—Collection of Salty Whey. Use Item C45—Barrels, Carts, & Conveyors to cover inspection of barrel drain carts, conveyors, etc. Probe design varies. Most probes consist of a tube within a tube. Dismantle the probes and slide the tubes apart. Check for sanitation and rough welds, open seams, etc. Make appropriate recommendations. Some 640 operations use a wedge-type system to allow the whey to drain out the bottom of the box. Remove the wedges from the support and check sanitation and condition.

Item C49—Cheese Press (58.421).

A. Conventional Presses.

Check that presses are made of stainless steel with welded joints and cleanable surfaces, including trough, rails, rail supports, and press head. Also check that the pressure device is a continuous type which exerts uniform pressure on the cheese. This requirement can be satisfied by hydraulic or air type press devices, or by hand operated press jacks which exert continuous pressure by means of springs at either or both ends of the press. In the case of barrel cheese and some other types, weights may also be satisfactorily used to exert continuous pressure. When weights are employed, check that they are constructed and maintained in a satisfactory manner. Also, inspect presses for cleanliness, including exterior surfaces, and sanitary construction.

B. Tower Block Formers.

1. Preparation of towers for inspection:

Dairy Grading Branch inspectors shall not attempt to prepare the blockformer for inspection. The procedures for preparation prior to inspection must be performed by a qualified plant employee.

The blockformer control panel must be switched to "manual" mode. The front door should be opened and blocked with a suitable material to prevent accidental closing. Next the guillotine should be pushed back into the rear chamber by hand. Remove compressed air supply to the main control panel.

Check to see that all electrical switches are in the off position, and are locked out with padlocks.

2. Inspection:

Start at the top of the tower and work downward. Assistance of a plant employee will be required. Make recommendations as appropriate when deficiencies are observed.

The following guidelines can be used to inspect nonwelded towers as well as the new welded tower. Removal of the upper screen attachments used in the older towers will require removal of the exterior jacket of the tower. If this is done, it is recommended that only five screen bolts be removed and the areas between the screen and tower wall checked before replacing the retainer bolts. Note that each screen will have six bolts. Three upper and three lower. By removing three upper and two lower, the screens can be flexed enough to inspect the areas between the upper screen and tower. The sixth bolt can be left in place to hold the screen. The older towers have plastic seals or washers to seal the screen retainer bolts and holes instead of USIT seals. Care must be taken so all parts are accounted for when plant employees reassemble the screen retainers.

Inspection of the lower sections of the older towers is performed the same way as the all welded tower.

Also, check the thin white sidewall flange gaskets for condition and cleanup. Make appropriate recommendations if soil accumulations, pitting, deteriorated gaskets, etc. are observed.

a. Remove the curd supply line, CIP lines, and top cover of the tower. Check the areas for proper cleaning, pitted areas, rough welds, deteriorated gaskets, and other construction deficiencies.

b. Dismantle and inspect the air valve assembly in the curd feed line. Observe for soil accumulations, deteriorated O-rings or pitted areas.

c. Inspect the CIP fittings, valves, and gaskets. Check spray balls for debris.

d. Check the gasket and underside of the top cover for condition and general cleanup.

If the gasket is glued to the cover, it shall be firmly attached and shall be free of loose areas which could collect water or soil. The gasket should be flush with the tower interior when the cover is bolted to the tower. The gasket and surrounding areas shall be free of excess glue. If the gasket is torn, cracked or rough recommend replacement.

e. Place a clean plastic bag or other clean, suitable material over the block lift plate at the bottom of the tower. The material used should be placed to catch the USIT seals that may drop from the top of the tower when the screen retainer bolts are removed.

f. Remove one side of one screen at a time. If the bolts from both sides of one screen are removed at the same time, the screen may drop and become wedged in the lower part of the tower. The long side of the screen will have six bolts and the short side will have four bolts. One USIT seal will be positioned under each bolt head and one between the screen and sidewall of the tower. As the bolts are removed, the USIT seals between the screen and tower sidewall may fall to the lower part of the tower.

Care must be taken to assure that all USIT seals and bolts are accounted for after they have been removed from the screens. If a seal becomes lodged between the

screen and sidewall, shake the screen or use a water hose to flush the seal down to the plastic-covered lift table. If USIT seals or bolts are left inside the chamber serious damage could result, and metal parts could contaminate the cheese or whey.

Check the USIT seals and bolts for cleanup. Check for pitted bolt heads or USIT seals. USIT seals are not reusable, they shall be replaced with new ones. If extra seals are not available, perform the inspection, and instruct management to replace damaged seals at a later date.

After the bolts have been removed from one side or the other, fold the top section of the screen inward. Using a strong light, examine the exterior of the screen and inside wall of the tower. Careful attention should be given to the areas where the USIT seals rested against the screen and tower sidewall. Allow the screen to snap back in place and then check the interior of the screen surfaces. Loosen at least two sides of one screen for the inspection of the top areas of the tower. Observe for curd remnants or soiled areas. If the areas that are examined are found clean, it is not necessary to remove the second screen.

After the top screen(s) have been inspected, the bolts and USIT seals should be replaced and tightened before proceeding. A special tool is available for holding the USIT seals in place between the screen and tower sidewall as the bolts are being replaced (this tool will be provided by the tower manufacturer). The seals can only be replaced by using the special tool (use of silicone is not acceptable). If the seals are not replaced, it will be impossible to pull a satisfactory vacuum inside the tower.

g. Next examine the lower sections of the screens and tower interior walls. Using the highly polished stainless steel mirror supplied by the manufacturer, carefully examine the lower sections of the tower. Use a strong flashlight or spotlight to provide adequate lighting. It may be desirable to have another person hold the light either at the top or bottom of the tower while you inspect these surfaces. Check for soil accumulations, milkstone, or curd particles. There may be areas where the screen has rubbed the polished surfaces of the tower sidewall. If the areas are rough or pitted, make appropriate recommendations.

3. Examination of The Tower Base:

a. Remove the cover from the rear whey collection chamber. Check the cover gasket for condition and sanitation. Inspect the interior of the whey collection chamber for milkstone buildup or curd remnants.

Check the rubber seal above the guillotine. It should be clean and free of cracks, broken areas, and milkstone. Recommend replacement if the seal is damaged.

The seal can be removed by simply pulling it off of the retainer pegs.

b. Check for soil behind the small metal flapper plate positioned directly above the guillotine seal. This plate acts as a check valve when vacuum is being pulled inside the tower.

c. Next remove one of the rear plastic bearings from the two guide rods for the block pusher plate. Check the seal around the plastic bearing. It should be clean and free of cracks or splits. If milkstone accumulations are noted on the plastic parts, recommend that the cleaning program be modified to provide proper cleaning.

The front bearings are pressed into the steel plate, and cannot be removed without damaging the bearing. If the bearing is tight, it should be considered satisfactory.

If either of the bearings are loose, recommend that they be replaced with new ones.

Removal of the plastic block push plate requires considerable time. If the plate and rods are tight, they should not be removed for inspection. If the connections are loose recommend that new parts be installed. Check the plastic grooves for the

guillotine. These grooves act as a bearing for the guillotine as it moves back and forth. The areas should be free of milkstone, curd particles, and black film.

d. Check the block lift plate and plate chambers. The area under the lift plate is a nonproduct zone. This area should be free of curd particles, product residue, and odors.

e. Inspect the front door assembly. If the doors are of the two-piece bolted type, have the parts taken apart. The inner areas should be dry and free of residue and odors. If the gasket is rough, cracked or stained recommend replacement.

Check the exterior areas of the door and cheese block discharge conveyor or slide. Careful attention should be given to the underside of the discharge slide assembly.

f. Open the electrical control boxes and remove the tower side panels from the base. Check the areas with your flashlight. These areas should be clean and free of product residue and insects.

4. Examination of Whey Removal Pipelines Valves and Tanks:

If the plant requests status for the whey operations, deficiencies in this area should be recorded on Page W.

5. Inspection of Vacuum Lines and Related Equipment:

Each tower is supplied with vacuum lines and a vacuum interceptor tank. As the cheese is vacuumed within the tower, vacuum is drawn through the interceptor which may or may not be located at the top level of the tower (some plants have the interceptors located at the base of the towers, either position is satisfactory).

There are two styles of vacuum interceptors. One style has a bolted cover and gasketed flange, the other is of all welded construction. All towers manufactured at this time have the all welded style interceptors.

It is normal for some moisture and fine curd particles to be drawn into the interceptor.

Generally, the interceptors are not considered product contact areas. Valves at the bottom of the vessel remain closed until the towers are cleaned. At that time, the vacuum lines, valves, pumps, and interceptors are cleaned.

Inspection of the vacuum lines, pumps, pipelines, valves and interceptors should be limited to a general check of interior surfaces. Areas should be relatively clean and free of yellow build up. Do not become concerned if one or two small curd particles are noted inside these fittings. If on the other hand the areas have solids buildup, make appropriate recommendations to improve cleaning of the vacuum system.

Item C50—Cheese Vacuumizer (58.423).

Bulk cheese vacuum chambers, if used, should be installed so that floor surfaces underneath are effectively sealed or have enough clearance so they can be cleaned.

Inspect interior surfaces of the vacuum chamber for cleanliness and condition. Per §58.423, the vacuumizer “shall be satisfactorily constructed and maintained so that the product is not contaminated with rust or flaking paint. An inner liner of stainless steel or other corrosion resistant material should be provided.” If the vacuumizer has peeling paint or rust conditions on the sidewalks or ceiling, recommend resurfacing, preferably by lining with stainless steel or other equally corrosion resistant metal. Coating with either hot dip or cold galvanizing compound would also constitute satisfactory protection of the interior surface.

Item C51—Wrapping Table & Scale (58.128m, 58.419).

If rindless cheese is made, check the facilities for wrapping and weighing. The table top for wrapping and the scale platform shall be stainless steel or other hard material that can be cleaned and maintained in sanitary condition.

It is not necessary for the survey inspector to check compliance of the scale for graduations and accuracy tolerances specified in §58.128m: “Compliance shall be determined by the appropriate regulatory authority.” Usually this will be a state or local department of weights and measures which checks scales routinely. Deficiencies regarding scale graduations or accuracy tolerance

will not be considered as a significant factor in the assignment of plant status. In the event that official test weighing is requested, it is required, of course, that a suitable accurate scale be provided as outlined in separate instructions for inspection, sampling, and test weighing of cheese. The inspector involved would be responsible for checking that the scale is suitable and accurate.

Item C52—Rindless Sealing Equipment (58.426).

Check a few finished blocks to determine whether the wrappers are tightly applied and adequately sealed. For wrappers using wax as a sealing agent (parakote, aluminum foil, etc.), the kraft outer wrapper is melted, causing the outer wrapper to have a mottled, greasy appearance. Wrappers employing sealing techniques other than wax should be closely examined to determine if a complete seal is obtained.

As a general rule, only a cursory check need be made of the wrapping and sealing operation for rindless block cheese. It is not necessary to report type of wrapper, sealing temperature, sealing method, etc., unless to illustrate deficiencies in the procedures. When the cheese is being offered for grading it is the responsibility of the grader to check for proper wrapper application and sealing. However, when wrapping and sealing deficiencies are noted during the survey, recommend needed corrections.

Individual block sealing presses shall have square interior corners, reasonably smooth interior surface and have controls that provide uniform pressure and heat equally to all surfaces (the amount of pressure, heat, and time to be applied will vary considerably depending on the equipment and the kind of wrapping material used). If deficiencies are noted, recommend correction.

If the plant utilizes a machine that performs automatic wrapping of individual blocks, together with vacuumizing and sealing of the wrapper, check that the manual "unhooping" of the cheese and the feeding of the machine are performed in a sanitary manner.

When cheese is packed in cryovac bags and sealed by the heat shrink and bag clip method, check the hot water shrink tank and related equipment for condition and sanitation.

When cheese is to be paraffined, proper conditions should be maintained to produce a sound, dry rind on all surfaces of the cheese. This usually requires one or more days on the shelf with the cheese being turned once a day.

Drying of cheese on new clean scale boards on top of wood cheese boxes or box covers is satisfactory. However, the housekeeping and space requirements of this practice would make it suitable only for very small cheese operations.

When applicable, check that the carts and shelves used for drying the cheese are paraffined. They should be constructed of material that can be cleaned and maintained in a sanitary manner and free of mites. Recommend replacement of any deteriorated wooden shelves, standards, or carts. Wood construction in sound, clean condition is satisfactory.

If there is considerable volume of cheese for drying, a separate room shall be provided, of adequate size to accommodate the maximum production.

If the plant paraffins rind type cheese on the premises, use this item also to cover your inspection of the paraffining and boxing operations. When applicable because of the volume of cheese so handled, a separate room or compartment should be provided. Also check that the temperature of the room is maintained about the same as the drying room to avoid sweating of the cheese prior to paraffining.

The paraffin tank should be equipped with an indicating thermometer and facilities for automatic temperature control. Do not make recommendations about the temperature of the paraffin, this may vary considerably depending on the kind of paraffin and the manufacturer's advice in this regard.

Item C53—Housekeeping (58.126e, 58.127f, 58.146d).

See the guidelines for Item A7—Housekeeping.

Observe the general housekeeping in the packaging area. Packaging material and supplies

should be kept off the floor and stored so as to preclude contamination of the materials. Supplies in the immediate packaging area should be maintained in a neat and orderly manner. Product contact material should be kept covered when not being used.

Item C54—Bulk Cheese Markings (58.438, 58.439, 58.445).

Use of Antimycotics.

Use this item and the heading “Bulk Cheese Markings” or “Use of Antimycotics” to make recommendations about any noted deficiencies.

A. Bulk Cheese Markings.

Observe the markings present on the finished bulk packages. Bulk packages shall be legibly marked with the name of the product, name and address of manufacturer (or distributor) or state assigned plant identification, and vat number (although not required, it is industry practice to also show net weight on bulk cheese). When markings are satisfactory, no comments need be shown on the report.

When the cheese is marked as “pasteurized,” “made from pasteurized milk,” or words to that effect, follow the guidelines for Item C6.

The labeling requirements for raw milk or heat-treated milk cheese are found in 21 CFR 101.100 (f) (1), (2), and (3). Subsection (3) is for Cheddar, washed curd, Colby, and granular cheeses. It requires;

1. Each cheese shall bear a legible mark on the cheese showing the date at which the preliminary manufacturing process has been completed and at which date curing commences.

2. A removable tag shall be affixed to each cheese, wrapper or container containing the following:

“_____ cheese made from unpasteurized milk. For completion of curing and proper labeling, or for labeling as _____ cheese for manufacturing.”

The blank being filled in with the applicable name of the variety of cheese.

B. Use of Antimycotics.

The FDA standards of identity in 21 CFR 133 subpart B list the ingredients that are allowed in each type of cheese. Many of these standards allow the use of antimycotics (mold inhibitors that are usually applied to the surface of the cheese). If antimycotics are used by the plant, use this item to list any deficiencies noted.

Antimycotics are allowed on the exterior of the following bulk cheeses for manufacturing or during curing and aging: Asiago, Blue, Brick, Edam, Gorgonzola, Gouda, Granular, Washed curd, Stirred curd, Hard grating cheeses, Monterey jack, Muenster, Parmesan, Romano, Swiss, and Soft ripened cheeses.

In addition to being allowed on the exterior, antimycotics can also be added during the kneading and stretching process of the following bulk cheeses: Mozzarella, Provolone, Scamorza.

The Standards of Identity allow the use of antimycotics on the surface of consumer slices, cuts, and packages of the following cheeses: Blue, Grated or shredded cheese (any variety), Cheddar, Colby, Cold pack, Greyer, Pasteurized process, Samsoe, Semisoft or Semisoft part skim, Spiced cheese. 21 CFR 172.155 was amended to allow the use of Natamycin (also known as pimaricin) on any cheese surface rather than limiting its use to consumer packages. This regulation is specific to natamycin and does not apply to any other antimycotic. In addition, §172.155(c) limits the amount that can be used to 20 milligrams per kilogram (20 ppm) in the finished product. Therefore, the use of Natamycin is acceptable on the surface of cheddar cheese regardless of the type of package.

Antimycotics are not allowed on the following cheeses: Cook cheese (Koch kaese), Cottage cheese, Cream cheese, Roquefort, and Sop sago, Skim milk cheese for manufacturing, and

Bulk Colby.

If a plant is producing cheeses that do not have standards of identity (any type not listed) the use of antimycotics is allowed.

When the above guidelines are not being followed or if chlorine is being used as an antimycotic, recommend the practice be discontinued and assign the deficiency to category C.

Because these compounds are not dairy products, construction of the interior of the applicator does not need to meet dairy product contact requirements. However, the method used to apply the antimycotics shall protect the cheese from contamination. If a hand held sprayer is used it shall be stored between uses in an acceptable manner and be kept clean. Some plants may utilize a spray head powered by air under pressure. In this case the air shall meet the requirements of *3-A Accepted Practice for Supplying Air Under Pressure in Contact with Milk, Milk Products and Product Contact Surfaces, Number 604-* and if the spray head is mounted permanently in the dairy product zone it's exterior shall meet the requirements of a product contact surface. The plant shall not use paint brushes, rags, sponges, paint rollers, or other applicators that cannot be kept sanitary.

Product Storage

Item C56—Room Construction - Coolers (58.126, 58.154, 58.412).

See the guidelines for Item B51—Room Construction - Coolers.

Check the floor for cleanliness. When large bulk style or fiber barrel cheese is stored more frequent cleaning of the floor may be required

Item C57—Room Construction - Warehouse (58.126, 58.153).

See the guidelines for Item B53—Room Construction - Warehouse.

Item C58—Lighting & Ventilation (58.126d, e, 58.412).

See the guidelines for Item B54—Lighting & Ventilation.

The guidelines for Item B54 also apply to coolers for fresh cheeses such as Cottage, Bakers, etc., and for drying, storage, and curing rooms for American or similar type cheese. Moldy conditions in such rooms are considered a serious deficiency.

Special temperature and high humidity conditions are required for curing of certain varieties of cheese. Although all other sections of B54 apply, moldy conditions will not have the same significance in the following situations:

A. Cheese Rooms Where Mold Growth is a Step of the Cheese Making Process.

Blue, Gorgonzola, Brie, and Camembert are examples of such types. These cheeses are mold covered upon completion of the curing process.

It is not unusual for some mold to grow on adjacent curing shelves. Under such conditions where the mold appears to be a desirable type for the particular cheese, its presence is not considered a deficiency. However, the walls, ceiling, and shelf supports should be free of mold.

B. Curing Rooms for Surface Ripening Cheese.

Some cheeses, such as Brick, Limburger, Liederkrantz, Muenster, etc. require high humidity conditions to support the surface ripening characteristic of the cheese. But at the same time the high humidity is conducive to mold growth. However, the walls, ceiling, and shelf supports should be free of mold.

C. Long hold cheese curing rooms.

Parmesan cheese for instance is cured a minimum of 10 months and often up to 18 months. Romano is cured for not less than 5 months. These cheeses too, may become mold covered during the long curing process and are then machine brushed and cleaned before final packaging. The mold is not essential to the cheese making process, but is not harmful, being only a surface growth due to hard rind condition. Mold development on the cheese is difficult to avoid because of the necessary cheese curing temperatures and the humidity range necessary to avoid excessive drying of the cheese and cracked rind condition. However, the walls, ceiling, and shelf supports should be free of mold.

Item C59—Temperature Control (58.412, 58.510d).

See the guidelines for Item B55—Temperature Control.

Item C60—Housekeeping (58.126e, 58.127f, 58.146d, 58.154).

See the guidelines for Item A7—Housekeeping.

When product and supplies are being stored on pallets or floor racks, check the item satisfactory (no comment needed). If product or supplies are stored on the floor make an appropriate recommendation. The floor under pallets or racks should be kept clean.

In the case of cheese in metal barrels and 640's, it is not necessary to use pallets provided the barrels are removed from the cooler regularly and the floor is maintained in a clean condition.

More rapid and uniform cooling of barrel cheese is promoted by storage on slats or pallets, however, this practice is not a requirement.

Check that storage is orderly and good housekeeping is maintained.

Dairy Services Policy and Procedure Manual

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Exemption for Random Weight Labeling

Food labeling quantity statements are regulated under the National Institute of Standards and Technology (NIST) Handbook 130, *Uniform Laws and Regulations in the areas of legal metrology and engine fuel quality*. Sections 11.1, 11.1.1 and 11.32 include exemptions for random weight packages which apply to most if not all of our small-scale cheese processors.

Random Weight Labeling: As a general rule all packaged food products require the quantity statement to appear on the label in both English and Metric; however, there is an exemption for "random weight packages".

Random weight packages are packages of food from the same lot which vary in weight. A five pound round of cheese that has been cut into sixteen wedges with each wedge individually wrapped, labeled and varying in weight is an example.

Random weight packages at the time of sale must be labeled with the:

- a) Net weight;
- b) Unit price; and
- c) Total price.

Exemption 1: In the case of a random package packed at one place for subsequent sale at another, neither the price per unit of weight nor the total selling price need appear on the package, provided the package label includes both such prices at the time it is offered or exposed for sale at retail.

Exemption 2: Random packages manufactured or produced and offered for indirect sale (e.g., e-commerce, on-line, phone, fax, catalog, and similar methods) shall be exempt from the labeling requirements of unit price and total price.

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Procedures for Enforcement of Coliform, E. coli and Staph Count Standards in Cheese

Coliform counts:

Coliform standards under the regulations governing milk for manufacturing purposes have been determined unsuitable for aged raw milk cheeses and will not be implemented and enforced; however, coliform counts will continue to be requested on all cheese samples to build up a data base of values to use in determining appropriate coliform standards for various cheese products in the future.

Escherichia coli count:

Escherichia coli counts will be requested for all cheese samples. Escherichia coli are more appropriate bacteria to use for establishing standards in aged raw milk cheeses and have been used by the European Union, Canada and the World Health Organization to monitor sanitation during the manufacture of aged raw milk cheese. Escherichia coli counts have no established standard under the regulation and will be used to establish a database of values to use in determining appropriate Escherichia coli standards in the future.

Enforcement procedures for Staphylococcus aureus counts:

While there is no allowance to exceed the standard for *Staphylococcus aureus* we must recognize that **only** the presence of Staph toxin constitutes a food safety hazard that renders the product unfit for human consumption. *Staphylococcus aureus* organisms alone should be considered a quality problem rather than a public health issue. Several different sources establish the need for *Staphylococcus aureus* populations to exceed one million organisms per gram before detectable amounts of Staph toxin are produced. Our VDACS laboratory will automatically test each cheese sample with 100,000 or more *Staphylococcus aureus* organisms per gram for the presence of Staph toxin. Any cheese sample found to be positive for Staph toxin shall be cause to immediately suspend the product from sale and to initiate a recall. The presence of Staph toxin is a very serious public health threat and must be considered an emergency to be handled without delay.

Staphylococcus aureus counts will be requested for all cheese samples; however, the standards established under the regulation have been determined to be unsuitable for

aged raw milk cheese. Staphylococcus aureus counts will be used to create a database of values to use when determining suitable Staphylococcus aureus standards in the future.

Enforcement procedures for Escherichia coli organisms:

The Escherichia coli standard of 4.6 Escherichia coli organisms per gram of product has been determined to be unenforceable because there are only six pathogenic Escherichia coli organisms out of many dozens of separate types that make up this group of bacteria. The presence of non-pathogenic Escherichia coli does not indicate an imminent public health problem and would be more appropriately handled by establishing a standard under the regulations.

Enforcement procedures for pathogenic organisms:

Whenever a cheese product contains any detectable level of pathogenic organisms the product will be suspended from sale. Products containing pathogenic organisms should be recalled by the processor.

Dairy Services Policy and Procedure Manual

Number: 6.9

Date: October 1, 2007

Revision:

Effective: December 1, 2007

Evaluation and Acceptance of Vat Pasteurization Equipment

Legal Requirements:

Section 2 VAC 5-531-70 C 3 n on page 43 of the *Regulations Governing Milk for Manufacturing Purposes* requires the installation and use of non-coil type batch pasteurizers that comply with all requirements contained in *3-A Sanitary Standards for Non-Coil Type Batch Pasteurizers for Milk and Milk Products, Number 24-02, effective November 1, 1989*.

The requirements for pasteurization equipment contained in the *Grade "A" Pasteurized Milk Ordinance* **are not applicable** because the Dairy Services Program does not evaluate, approve or inspect any pasteurization equipment used for grade "A" purposes under 2 VAC 5-490 *Regulations Governing Grade "A" Milk*. It is not acceptable to layer the requirements for pasteurization equipment under the grade "A" program on top of the requirements established for Milk for Manufacturing Purposes. They are two separate and distinct sets of requirements.

Approval Process:

Each piece of pasteurization equipment shall be inspected, evaluated and tested prior to approval and use for processing any dairy product that may be offered for sale.

The evaluation shall compare the compliance of each piece of pasteurization equipment to the requirements contained in *3-A Sanitary Standards for Non-Coil Type Batch Pasteurizers for Milk and Milk Products, Number 24-02, effective November 1, 1989*. This is the version of 3-A Sanitary Standards that was referenced when 2 VAC 5-531, *Regulations Governing Milk for Manufacturing Purposes* was adopted. Changes in the requirements for 3-A Sanitary Standards after the adoption of the regulation are not enforceable until the regulations are amended and the new requirements adopted. You can enforce only the requirements that were in force when the regulation was adopted. This is the case with all of the individual 3-A Sanitary Standards, not just *Number 24-02*.

The inspector shall complete a written evaluation of their comparison documenting the equipment's compliance or non-compliance with the requirements.

Each pasteurizer shall be tested by the inspector to ensure that the recording thermometer, indicating thermometer and airspace thermometer are accurate within the specified range; that the time function on the recorder is accurate; the agitator is operating; and the headspace heater is functioning properly.

Pasteurization Operation Training is required to be provided. As part of the evaluation process it is essential for the inspector to provide training to the operator in its proper operation and how to record information on the recording charts and what must be recorded. The consequences of under processing (recalling product) shall be covered as well as adjustments to pasteurization time and temperatures used when added sweeteners or high fat products are pasteurized. Training materials and examples of properly completed recorder charts shall be left with the operator for future reference.

Acceptance based on compliance with the intent of each requirement:

When evaluating compliance with any specific requirement of 3-A Sanitary Standards the inspector must first determine if the requirement is applicable. If a requirement is applicable then a determination of the equipment's compliance is required. When considering if the equipment design is in compliance the inspector must consider the intent of the requirement.

To illustrate this process consider the **requirement that the bottom of each vat pasteurizer shall be sloped to the outlet**. The intent of this is to allow for complete drainage of pasteurized product, cleaning and sanitizing solutions from the vat. One manufacturer of combination pasteurizer/cheese vats manufacturers their vats without any slope on the bottom draining to the outlet. The manufacturer does equip each vat with a jack on one end that allows the operator to raise one end of the vat so that it slopes to the other end where the drain is. Although the bottom of the vat is not sloped all the time, it is capable of being sloped when being drained and for washing. While this vat may not comply with the prescriptive sloped bottom design requirement it does accomplish the intent of the requirement and is therefore acceptable.

A second illustration involves the **requirement of an inlet/outlet leak detect valve** on a vat pasteurizer. In this case the standard is written to require every vat pasteurizer to be equipped with an inlet/outlet leak detect valve which makes perfect sense if you intend to empty the vat through a valve at the bottom. There are very small pasteurizers that are intended to hold two or three gallons of product and sit on a stove top for processing. These units do not have outlet valves because all of the product can be poured from the vat pasteurizer by lifting the entire unit and tipping it over. Even though the standards specify an outlet valve is required, this type of unit is acceptable because the absence of the valve is mute since it is not needed. More to the point, the inclusion of the valve would prevent the unit from setting properly on the stove to transfer heat and by preventing stable contact of the bottom of the pan with the eye of the stove.

For a third example, a means shall be provided to keep the atmosphere above the product at a temperature of not less than 5°F higher than the required minimum temperature of pasteurization during the holding period. This **does not require an air space heater** to be provided. The operator may choose to process their product at temperatures well above the minimum required pasteurization temperature so that the air space temperature is maintained 5°F higher than the minimum temperature allowed. If the operator chooses to provide an air space heater then it must be evaluated to determine if it operates properly. The purpose of the evaluation is to determine if there are any public safety safeguards that may be compromised by the heater design. Some individuals have proposed **forced hot air** as one method of air space heating. Typically a hair dryer or paint stripper is attached to the pasteurizer lid through a tube so that the hot air generated can be blown into the vat pasteurizer above the milk to heat the airspace. One obvious problem with this arrangement is that the motor bushings will generate carbon dust and an electrical burn smell that will be blown into the vat pasteurizer contaminating the milk. If these shortcomings can be avoided, forced hot air should be re-evaluated. **Electric air space heaters** have been installed by manufacturers on a number of vat pasteurizers. While there are no specific requirements regarding electric air space heaters they should be evaluated to determine if they work. When evaluating these units it is important to consider that the radiant heat generated by the electric heating element may cause the temperature of the indicating thermometer to be higher than the surrounding air temperature because the metal sensing probe will be heated by radiant energy before the air temperature. To measure the true temperature of the air in the vat above the product the sensing probe should be shielded from direct radiant energy. We are all familiar with metal objects that sit in the sun becoming much warmer than the surrounding air. This can be prevented by placing the thermometer probe inside a tube much larger around than the probe. The shield will intercept the radiant energy before it hits the temperature probe and the air gap between the probe and the shield will allow the air to circulate around the probe providing a more accurate temperature reading.

Lastly, should the operator choose to **install culinary steam to heat the airspace**, the system used to generate the steam shall be evaluated to determine compliance with the requirements for the production of culinary steam under 3-A Sanitary Standards. Again, the inspector must determine if each separate requirement is applicable and whether the intent of the requirement is being met.

Specific Questions and Answers:

1. Does a vat pasteurizer have to be round in shape?
No. Square and rectangular vat pasteurizers are acceptable also.
2. Are digital thermometers acceptable for use on vat pasteurizers?
Yes. They must be tested and found to be accurate within temperature requirements. At this point, there are no specific 3-A Sanitary Standards for digital thermometers.

3. What happens when existing equipment that has been evaluated and accepted at some time in the past no longer complies with revised 3-A Sanitary Standards?

This is going to happen. We can only require persons to comply with the requirements in force at the time the equipment is being reviewed. We can not enforce new requirements on the regulated industry until new regulations have been amended to adopt the revised 3-A Sanitary Standards. When the regulations adopted in Virginia change the industry will be asked to bring their equipment into compliance with the new requirements.

Dairy Services Policy and Procedure Manual

Number: 6.10

Date: June 16, 2011

Revision: None

Effective: June 16, 2011

SEASONAL CHEESE PLANT OPERATIONS

When small scale cheese plant permit holders voluntarily stop making cheese and selling cheese for a period of time (i.e. seasonal milk producers), but intend to restart their operations again in a few months, the inspector should suspend the producer's small scale cheese plant permit until they actually begin producing cheese again. In most cases inspectors will suspend the cheese plant permit at the same time they suspend the dairy farm permit for seasonal milk production. Inspectors should consult with the producers involved to explain that all they will need to do is notify their inspector when they are ready to begin making cheese again for an inspection prior to start up. See suspension notice-consenting below.

When cheese plant permit holders stop making and selling cheese for a period of time and will not consent to the suspension of their permit, the inspector must issue an official warning notice prior to suspending the permit. See example official warning notice below. See official suspension notice-non-consenting below.

When the permit holder request reinstatement the inspector will need to perform a cheese plant inspection and reinstate the permit on the bottom of the inspection sheet.

Example Official Warning Notice:

An official inspection made today of Your Cheese Processing Plant Shows that you are violating Regulations Governing Milk for Manufacturing Purposes, Sections 2 VAC 5-531-50 C 1, 2, and 4.

as follows Your cheese processing plant is not producing or offering for sale cheese on a daily basis.

Remarks: Your failure to produce and offer for sale cheese products on a daily basis before (DATE) will result in suspension of your permit to receive, process and handle milk for manufacturing purposes.

Example Official Suspension Notice-Non-Consenting:

An official inspection made today of Your Cheese Processing Plant Shows that you are violating Regulations Governing Milk for Manufacturing Purposes, Sections 2 VAC 5-531-50 C 1, 2, and 4.
as follows Your cheese processing plant is not producing or offering for sale cheese on a daily basis.
Remarks: Your permit to receive, process and handle milk for manufacturing purposes in Virginia is suspended. Submit application for reinstatement to inspector when you plan for cheese production and sales to resume.

Example Official Suspension Notice-Consenting:

An official inspection made today of Your Cheese Processing Plant Shows that you are violating Regulations Governing Milk for Manufacturing Purposes, Sections 2 VAC 5-531-50 C 1, 2, and 4.
as follows Your cheese processing plant is not producing or offering for sale cheese on a daily basis.
Remarks: Your signature on this form signifies your consent to suspended your permit today. Your permit may be reinstated as soon as you begin to offer and sell cheese products again. Please notify your inspector and submit application for reinstatement when you plan to resume cheese production and sales.

Dairy Services Policy and Procedure Manual

Number: 7.1

Date: June 26, 2000

Revision: October 1, 2007

Effective: December 1, 2007

Reconstituting Powdered or Dry Frozen Desserts Mix

We have been approached by individuals who wish to reconstitute powdered or dry frozen dessert mix with pasteurized grade "A" milk instead of water and not be required to re-pasteurize the reconstituted mix.

The Rules and Regulations Governing the Production, Processing and Sale of Ice Cream, Frozen Desserts and Similar Products, §2 VAC 5-510-540 states:

"A. Powder or dry frozen desserts mix shall be reconstituted with potable water in one of the following ways:

1. If the retail establishment possesses and uses a mechanical means capable of cooling the reconstituted mix to 45°F within four hours, cold tap water may be used.
2. If the retail establishment does not possess or use a mechanical means capable of cooling the reconstituted mix to 45°F within four hours, only potable water at a temperature of 40°F or below shall be used."

After reviewing an operation that is reconstituting dry frozen desserts mix with pasteurized refrigerated milk and assessing the food safety risk associated with this practice we have determined the this practice is as safe as reconstituting with potable water.

Therefore, we believe the use of pasteurized refrigerated milk to reconstitute dry or powdered frozen dessert mix should be considered to be the equivalent of reconstituting with potable water. We recommend that in the interest of uniformity this interpretation be applied by Virginia Department of Health personnel regulating similar frozen dessert operations under their jurisdiction.

Dairy Services Policy and Procedure Manual

Number: 7.1.1
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Revision: None
Effective: May 1, 2011

Additions to Pasteurized Frozen Desserts Mix That Do Not Require Re-Pasteurization **Manufacturing Frozen Desserts Mix without Pasteurization**

The existing frozen desserts regulation states:

“2 VAC 5-510-550. Pasteurization of frozen dessert mix.

Except for flavoring ingredients, the entire mix shall be pasteurized after formulation. Pasteurized mix or frozen desserts shall not be permitted to come in contact with equipment or containers with which unpasteurized mix, frozen desserts, milk or milk products have been in contact, unless such equipment has first been properly washed and subjected to a satisfactory bactericidal treatment. Powdered or dry frozen dessert mixes are not required to be re-pasteurized after being reconstituted with water as described in 2 VAC 5-510-540 of this chapter.”

We have enforced this standard in the past because it establishes the highest level of safety; however, it has come under increasing criticism because it limits production of common frozen desserts available in other states at retail and unnecessarily hampers business choices. Numerous restaurants and frozen desserts retail establishments serve gelato which is normally reconstituted from a dry powdered mix with pasteurized milk and sugar. The requirement to pasteurize the entire mix after formulation prohibits this practice if strictly enforced. The Food and Drug Administration permits the addition of ingredients that are generally recognized as safe (GRAS) without re-pasteurizing the mix. In our opinion the regulation is overly restrictive when applied to restaurants and retail frozen desserts establishments.

Henceforth, frozen desserts mix may be manufactured at retail from pasteurized dairy ingredients, pasteurized eggs and any ingredients that are generally recognized as safe (GRAS) without having to re-pasteurize the resulting mix.

Likewise, ingredients that are GRAS may be added to commercially prepared and pasteurized dry or liquid frozen desserts mix in restaurants and retail frozen desserts establishments without having to re-pasteurize the resulting mix.

MEMORANDUM OF UNDERSTANDING
Between
The Virginia Department of Health
and
The Virginia Department of Agriculture and Consumer Services

MILK, FROZEN DESSERTS AND
FOOD SANITATION PROGRAM

Statutory Authority

This agreement is established with reference to the Virginia Standards of Quality, Grading, Sanitary Standards, Etc. law (Virginia Code Sections 3.1-530.1 through 530.9), the Virginia Ice Cream and Similar Products law (Sections 3.1-562.1 through 562.10), the Virginia Food laws (Sections 3.1-361 through 419), and the Rules and Regulations adopted by the Virginia Board of Agriculture and Consumer Services pursuant to these laws.

Purpose

Certain dairy and food related laws assign specific responsibilities to the Virginia Department of Health (VDH) and the Virginia Department of Agriculture and Consumer Services (VDACS) to govern the handling, processing or sale of various milk and food products. Products regulated by the separate agencies may be handled or processed in the same plant or establishment thus creating a possibility for some duplication of work. To eliminate as much duplication of effort as possible, a cooperative program between VDH and VDACS is established by this Memorandum of Understanding.

In order to ensure that this agreement can be implemented, VDH and VDACS recognize that there are four major areas of regulatory responsibility in a milk, frozen desserts and food sanitation program. These are: (1) raw milk production for pasteurization (2) milk, and milk product processing and packaging for distribution to include those milk and milk products plants processing imitation milk, fruit juices, fruit beverages, tea and bottled water, etc. (3) frozen desserts processing and packaging for distribution (4) frozen desserts processed at retail establishments for consumption. The following agreement outlines responsibilities assigned to each agency in accordance with these four areas.

I. Standards of Quality, Grading, Sanitary Standards, Etc., Law.

A. Primary Responsibilities

Chapter 21, Article 3.1, Sections 530.1 through 530.9 divides the regulatory responsibilities for the production, processing and sale of Grade "A" milk and milk products between VDH and VDACS.

B. Permits and Inspection Services

VDH will issue permits to all Grade "A" milk processing plants which offer milk and or milk products for sale in Virginia. VDACS will issue permits to all Grade "A" dairy farms and all receiving and transfer stations handling raw milk in Virginia. VDACS will issue permits to all plants or establishments processing ice cream and frozen desserts or other manufactured dairy products which are not an integral part of a Grade "A" milk plant. VDH will be responsible for all inspection services in each Grade "A" milk plant located in Virginia except Valley Milk Products, Strasburg, Virginia and as noted in paragraph C., below.

C. Point of Delivery

VDH will be responsible for the inspection of Grade "A" milk plants including physical facilities of the milk receiving rooms. VDACS will be responsible for the inspection of milk tank trucks and their appurtenances including cleaning practices and procedures which apply to the milk tank truck. All planned or required changes in milk plant receiving room cleaning-in-place systems or cleaning and sanitizing procedures will be reviewed by both agencies and approval will be made by VDH.

D. Sampling and Testing

VDACS has primary responsibility for the collection of raw milk samples from the producer dairies. VDH will collect samples of raw milk for pasteurization from each milk plant after unloading from delivery vehicles. All necessary laboratory examinations of samples of milk, milk products, and water will be performed in laboratories that have been certified by the agency designated for such purposes. Where certification is not under the jurisdiction of any official agency, tests will be performed by methods and laboratories approved by the State. A copy of each raw milk warning or suspension letter will be sent to VDACS. VDACS may collect and examine for chemical residue or other adulteration, such samples of pasteurized milk and milk products as it deems necessary. VDACS will notify VDH when there is a violation.

E. Interstate Milk Shippers Ratings

VDH Certified State Milk Rating Officers will conduct milk ratings on all Interstate Milk Shippers within the Commonwealth of Virginia.

II. Ice Cream and Similar Products Law

The Commissioner of Agriculture and Consumer Services and his agents are charged with administering and enforcing all regulations adopted under the Ice Cream and Similar Products law; however, to prevent unnecessary duplication of effort and to ensure that each establishment will be inspected by one regulatory agency, the following is agreed:

A. Permits

VDH will initiate the issuance, suspension, reinstatement and revocation of permits for all frozen desserts plants which are an integral part of any premises including Grade "A" milk plants, hotels, restaurants, and mobile units where frozen desserts are frozen or partially frozen or dispensed for sale at retail normally permitted by VDH pursuant to Sections 35.1-1 through 35.1-26. VDH shall issue a permit to food service establishments under Sections 35.1-1 to -26 and Section 3.1-562.6 of the Code of Virginia.

VDACS will initiate the issuance, suspension, reinstatement and revocation of permits for frozen desserts plants which do not qualify for a permit issued by VDH. VDACS shall issue a permit to these establishments under the provisions of Section 3.1-562.6 of the Code of Virginia. Also, the VDACS will issue a permit to all out-of-state firms who desire to manufacture ice cream and similar products, including mix, for sale in the Commonwealth of Virginia.

B. Inspections

VDH will inspect all places or premises permitted by VDH as often as necessary to insure compliance with all applicable laws, rules and regulations. VDACS will inspect all places permitted by VDACS as often as necessary to insure compliance with all applicable laws, rules and regulations, including Section 7.1 of VR 115-05-03(*§ 2 VAC 5-510-440 Frequency, filing of inspection reports and confidentiality.*)

C. Sampling and Testing

VDH will be responsible for the regular collection and analysis of samples from places permitted by VDH as often as necessary to insure compliance with all applicable laws, rules and regulations. VDACS will be responsible for regular collection and analysis of samples from places permitted by VDACS as often as necessary to insure compliance with all applicable laws, rules and regulations.

III. Chapter 20, Food and Drink Generally

The Commissioner of Agriculture and Consumer Services and his agents are charged with administering and enforcing all regulations adopted pursuant to the Virginia food laws. However, to prevent unnecessary duplication of effort the following is established:

A. Permits

Grade "A" processing plants which are permitted under the Virginia Standards of Quality, Grading, Sanitary Standards, Etc. law will not be required to have additional permits when fruit juices, fruit drink, imitation milk, tea and bottled water are an integral part of the processing operation.

B. Inspections

VDH will inspect all such places as listed in Paragraph A. as often as necessary to insure compliance with all applicable state and federal laws, rules and regulations.

C. Sampling and Testing

Whenever inspectional findings or other occurrences indicate the need for the collection of samples VDH will request the assistance of VDACS and the two agencies will jointly collect the sample(s) with VDACS assuming the lead role. The results of samples collected under this agreement will be shared by both agencies.

D. Compliance Provisions

If a plant is found during VDH inspection to be in significant violation of the Virginia food laws and does not voluntarily comply by the first follow-up inspection, VDH will notify VDACS, providing all supporting documentation, and the two agencies will, to the extent of their respective authority, jointly initiate appropriate regulatory action under Chapter 20, Sections 3.1-361 through 3.1-419, Code of Virginia, and regulations promulgated under those statutes. VDACS will have primary responsibility during compliance proceedings.

E. Complaints

All complaints received by VDACS regarding products processed in a Grade "A" milk plant will be forwarded to VDH for investigation. A copy of the complaint investigation by VDH regarding products subject to VDACS regulations will be forwarded to VDACS.

F. Training

In order to ensure a more uniform enforcement of the Virginia food laws and related regulations VDACS will conduct, in cooperation with the VDH Division of Sanitarian Services, a training session for sanitarians who will be inspecting under the provisions of this memorandum. The training session will cover all aspects of inspecting non-dairy beverage manufacturers. Additional training sessions will be conducted on an as needed basis as determined by post training evaluation and as mutually agreed upon by the Chief, Bureau of Food Inspection, VDACS and the Director of Milk Sanitation, VDH.

G. Evaluation

The effectiveness of the training provided in paragraph F. will be evaluated by a program of joint inspections of firms subject to this memorandum. The joint inspection will be conducted by a VDH sanitarian and a VDACS inspector. The inspection will primarily cover products and processes subject to this memorandum. The VDH sanitarian shall be the lead representative, the VDACS inspector will observe. Additional details of the evaluative process, including the frequency of joint inspection, will be arranged between the Chief, Bureau of Food Inspection, VDACS and the Director of Milk Sanitation, VDH. Information obtained from the evaluative process will be utilized to strengthen activities subject to Part III of this memorandum.

H. Information Exchange

VDH will maintain a current inventory of firms subject to Part III of this memorandum. A current inventory of firms will be relayed to VDACS at least once a year along with documentation that the firms are in compliance with applicable laws and regulations. A current inventory of each firm's non-dairy beverage product labels will be provided to VDACS by VDH. This list will be updated as necessary. VDACS will maintain an inventory of applicable laws and regulations and shall make them available to VDH. VDACS shall immediately notify VDH of any changes in the laws or regulations. VDACS shall provide advice and guidance to VDH in the interpretation and application of the laws and regulations governing products and firms covered by Part III of this memorandum.

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All complaints received by VDACS regarding products processed in a Grade "A" milk plant will be forwarded to VDH for investigation. A copy of the complaint investigation by VDH regarding products subject to VDACS regulations will be forwarded to VDACS.

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H. Information Exchange

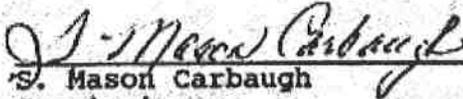
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IV. Agreement and Consent

This agreement shall be effective upon the signature of the State Commissioner of Agriculture and Consumer Services and the State Health Commissioner, and shall remain in effect until modified or terminated by mutual agreement of the agency heads. This Memorandum of Understanding supersedes all previous versions.

Either agency may terminate their participation in this agreement by notifying the other of their intent thirty days prior to such termination.

This memorandum of understanding is for the purpose of facilitating cooperation between two agencies of the Commonwealth. It does not intend to create, nor does it create, any rights in any third party.


S. Mason Carbaugh
Commissioner
Virginia Department of
Agriculture and Consumer Services

Date 11/5/90


C. M. G. Buttery, M.D., M.P.H.
State Health Commissioner
Virginia Department of Health

Date 10/27/90

Dairy Services Policy and Procedure Manual

Number: 7.3

Date: March 23, 2004

Revision: October 1, 2007

Effective: December 1, 2007

Inspection and Enforcement Procedures for Ice Cream, Frozen Desserts and Similar Products at Permitted Establishments

Laws:

§§ 3.1-562.1 through 3.1-562.10 of the Code of Virginia (1950) as amended (see attached)

Regulation:

2 VAC 5-510, *Rules and Regulations Governing the Production, Processing and Sale of Ice Cream, Frozen Desserts and Similar Products.*

Permits Required:

Each person who prepares and pasteurizes any frozen desserts mix or who manufactures, packages and wholesales frozen desserts from a location in Virginia is required to obtain a Frozen Desserts Plant permit from VDACS prior to manufacturing and packaging any frozen dessert for sale. Each person from outside the Commonwealth who manufactures and offers frozen desserts for sale within the Commonwealth are also required to obtain a Frozen Desserts Plant permit. Distributors who do not manufacture and package frozen desserts are not required to obtain a permit.

Frozen Desserts Produced in Virginia Grade "A" Milk Plants:

By Memorandum of Understanding between the Virginia Department of Health (VDH) and the Virginia Department of Agriculture and Consumer Services (VDACS) all frozen desserts produced in grade "A" milk plants will be the responsibility of VDH. VDACS will issue the grade "A" milk plant a frozen desserts permit; however, VDH will perform all inspections, collect required samples, and take all enforcement actions. On a case by case basis, VDH personnel may be allowed to deliver frozen desserts samples to VDACS laboratories for testing. VDH personnel are requested to copy and forward to the Dairy Services Richmond office inspection, sample and enforcement records. As requested, Dairy Services personnel may train VDH personnel in frozen desserts plant inspection and sampling activities.

Permits Renewable:

Permits are required to be renewed on July 1st of each year.

Permit Application:

Each person who wishes to hold a frozen desserts permit must complete and sign the Frozen Desserts Permit application form. Each application must be accompanied by a frozen desserts plant inspection report dated and recommending that the permit be issued and evidence of a potable water supply. No Frozen Desserts Permit will be issued without a satisfactory inspection.

Inspection Frequency:

Plants located in Virginia will be inspected once each three months. Pasteurization equipment will be inspected once each three months.

Inspection Records: Inspectors shall use only the "*Frozen Dairy Products Plant Inspection Form*" and the "*Sanitary Observation Sheet*" to document inspection findings.

Inspection Enforcement:

Enforcement is principally through voluntary means. The agency can deny, refuse to issue, suspend or revoke a Frozen Dessert Permit **only after a full hearing**. Full hearings require a court appointed hearing officer and attorneys representing the agency. Attorneys may also represent the permit holder. The agency is required to cover the cost of providing a hearing officer, court recorder, and representation for the agency. The agency may also petition any appropriate court of record for relief by injunction as a result of any violation of the law or the regulation adopted there under.

Inspectors **shall not issue official warning notices** to frozen dessert permit holders **without contacting their supervisor and the Dairy Services Program Supervisor** in advance of initiating the action.

Inspectors **shall not under any circumstances issue an official suspension notice** to a frozen desserts permit holder.

Frozen Dessert Sampling:

§ 2 VAC 5-510-450 of the Frozen Dessert regulation requires that at least four samples of frozen desserts and pasteurized mix from each plant shall be taken and examined by the agency during any six month period. Samples of frozen desserts or mix may be taken at any time prior to final delivery. Frozen desserts and mix imported into the Commonwealth shall be sampled as deemed necessary by the agency.

§ 2 VAC 5-510-460 of the Frozen Dessert regulation establishes quality standards for pasteurized dairy ingredients, pasteurized and unpasteurized mixes or frozen desserts. A maximum standard plate count of 50,000/ml; a maximum coliform count of 10/ml; and a maximum storage temperature of 45 degrees Fahrenheit are established for all products. Standard plate counts do not apply to cultured products. The coliform count is increased to not more than 20/ml for chocolate, fruit, nuts, or other bulky flavored frozen desserts. Storage temperature does not apply to sterilized mix in hermetically sealed containers or dry or powdered frozen desserts mix.

§ 2 VAC 5-510-470 of the Frozen Dessert regulation requires that whenever two of the last four consecutive bacteria counts, coliform determinations, or cooling temperatures taken on separate days exceed the limit of the standard for milk, cream, fluid dairy ingredients, frozen dessert mix, or frozen desserts, the agency shall send a written notice thereof to the person concerned. This notice shall be in effect so long as two of the last four consecutive samples exceed the limit of the standard. An additional sample shall be taken within 14 days of the sending of such notice, but not before the lapse of three days. Immediate suspension of the permit or court action shall be instituted whenever the standard is violated by three of the last five bacteria counts, coliform determinations, or cooling temperatures. The agency may forego suspension of the permit if the product or products in violation are not sold or offered for sale.

Inspectors shall collect frozen dessert samples at each frozen dessert plant a minimum of four times in any six month period. Each sample shall be identified by its complete name, flavor, size, and coding information. Frozen desserts with the same code should not be sampled more than once. Inspectors should collect vanilla, chocolate, strawberry, and a nut flavor at each sampling. Novelty items should also be sampled if available. Inspectors should limit the number of samples to approximately six each time. All samples should be tested for standard plate count, coliform, and inhibitory substances. Phosphatase test results should be requested for vanilla flavors only.

The Richmond office will record and track frozen dessert sample results by individual flavor. Whenever two out of the last four samples exceed the standard, the Richmond office will issue a warning letter to the permit holder. Inspectors are required to resample the frozen dessert under warning within 14 days, but not before the lapse of three days.

The Richmond office will issue a frozen desserts suspension letter for each flavor of frozen dessert that exceeds the standard on three out of the last five consecutive samples. These letters suspend each particular flavor of frozen dessert from being offered for sale by the permit holder until that flavor is reinstated.

Prior to reinstating a flavor of frozen dessert that has been suspended; the permit holder must provide evidence to the agency that they have brought their frozen dessert into compliance with the standard. This can be accomplished by the permit holder manufacturing and testing a different batch of the frozen dessert and providing the test results to the agency. Inspectors may also collect and test frozen dessert samples for

this purpose, but this is not required and should only be done at the permit holder's request. In general, permit holders should bear the cost of testing products for reinstatement purposes. Inspectors should provide the names of dairy testing labs to permit holders for this purpose when requested.

Inspectors should track which frozen desserts are suspended for each permit holder and document on the **Frozen Dairy Products Plant Inspection Form** and a **Sanitary Observation Sheet** if suspended flavors of frozen dessert are being offered for sale. Inspectors **shall not** sample a suspended flavor of frozen dessert unless they are working with the permit holder to resolve the cause of the suspension. Samples of suspended frozen desserts shall be submitted as "**Service**" samples only.

§2 VAC 5-510-540 of the Frozen Dessert regulation relating to retail establishments states:

"A. Powder or dry frozen desserts mix shall be reconstituted with potable water in one of the following ways:

1. If the retail establishment possesses and uses a mechanical means capable of cooling the reconstituted mix to 45°F within four hours, cold tap water may be used.
2. If the retail establishment does not possess or use a mechanical means capable of cooling the reconstituted mix to 45°F within four hours, only potable water at a temperature of 40°F or below shall be used."

After reviewing an operation that is reconstituting dry frozen desserts mix with pasteurized refrigerated milk and assessing the food safety risk associated with this practice we have determined the this practice is as safe as reconstituting with potable water.

Therefore, we believe the use of pasteurized refrigerated milk and other pasteurized fluid milk products (cream, half and half, etc.) to reconstitute dry or powdered frozen dessert mix should be considered to be the equivalent of reconstituting with potable water.

Chapter 21
Milk, Milk Products, and Dairies
Effective July 1, 2001

§ 3.1-562.1 Authority of Board to establish standards, adopt regulations, etc.

The State Board of Agriculture and Consumer Services is authorized to establish definitions, standards of quality and identity and to adopt and enforce regulations dealing with the issuance of permits, labeling and sanitary standards for ice cream, ice milk, frozen custards, sherbets, water ices, and related foods and other similar products and those products manufactured or sold in semblance to or as substitutes therefor.

§ 3.1-562.2 Conformity with regulations, etc., of United States Department of Health, Education and Welfare and Department of Agriculture; compliance with Administrative Process Act

In adopting regulations for the purpose of sanitation and to prevent deception, the Board shall be guided by those regulations recommended from time to time by the United States Department of Health, Education and Welfare and the United States Department of Agriculture. The definitions and standards so promulgated may conform, so far as practical, to the definitions and standards promulgated or recommended by the Secretary of the United States Department of Health, Education and Welfare or the Secretary of the United States Department of Agriculture. The regulations authorized by § 3.1-562.1 and by this section shall be adopted in accordance with the Administrative Process Act (§ 9-6.14:1 et seq.).

§ 3.1-562.3 Commissioner and his agents to enforce article; right of entry

The Commissioner of Agriculture and Consumer Services and his agents shall administer and enforce the regulations adopted pursuant to this article. They are empowered in the performance of their duties to enter upon and to have free access to any establishment or area subject to the provisions of this article or the regulations adopted hereunder.

§ 3.1-562.4 Sale of products; not subject to local supervision

Products produced, processed or manufactured under the regulations adopted in accordance with the provisions of this article may be sold in all counties, cities and towns in this Commonwealth and shall not be subject to the supervision or inspection of any political subdivision in which the products are sold.

§ 3.1-562.5 Products produced outside Commonwealth

No regulation adopted under this article shall be construed so as to prohibit the sale within the Commonwealth of any product which is produced outside of the Commonwealth under laws or regulations of the exporting state or political subdivision

thereof which are substantially equivalent to regulations promulgated under this article and which are enforced with equal effectiveness.

§ 3.1-562.6 Permits; delegation of enforcement of article to State Health Commissioner for restaurants

Within thirty days after the adoption of initial regulations by the State Board of Agriculture and Consumer Services, every person, firm or corporation engaged in the manufacture within this Commonwealth of any of the foods covered by this article shall make application to the Commissioner of Agriculture and Consumer Services on a form prescribed by him for a permit to manufacture such foods or any of them.

A separate application shall be made for each establishment where such foods are manufactured or are to be manufactured. The Commissioner may by agreement delegate the enforcement of this article to the State Health Commissioner for restaurants as defined in § 35.1-1. Such agreement shall provide for the combining of the permit required by this article and the license required by § 35.1-18.

The Commissioner, upon receipt and approval of such application properly executed, shall issue a permit authorizing the applicant to engage in the manufacture of such foods as are described in the application; however, the Commissioner may, after a full hearing, refuse to issue a permit or renew a permit or may suspend or revoke a permit in the case of any establishment which does not meet the requirements of this article or of any regulation adopted for its administration and enforcement. Such permit shall be renewable on July 1 of each year.

§ 3.1-562.7 Injunctions

In the event of violation of any provision of this article or the regulations adopted thereunder, the Commissioner of Agriculture and Consumer Services may petition any appropriate court of record for relief by injunction without being compelled to allege or prove that an adequate remedy at law does not exist.

§ 3.1-562.8 Detention of adulterated, misbranded, etc., products

Whenever any product subject to this article is found by any authorized representative of the Commissioner upon any premises where it is held and there is reason to believe that any such product is adulterated or misbranded in violation of the regulations adopted by the Board pursuant to this article, or that such product has been or is intended to be distributed in violation of any such regulations, it may be detained by such representative for a period not to exceed twenty days, pending action under § 3.1-562.9 of this article, and shall not be moved by any person from the place at which it is located when so detained, until released by such representative.

§ 3.1-562.9 Condemnation of adulterated, misbranded, etc., products

Any product referred to by § 3.1-562.8 shall be liable to be proceeded against and condemned.

At any time prior to the expiration of the twenty-day detention period provided by § 3.1-562.8, the authorized representative of the Commissioner placing a product under detention shall, at the direction of the Commissioner or his authorized representative, notify the attorney for the Commonwealth for the city or county in which such detention was made in writing of said detention. Upon receiving such written notification, the attorney for the Commonwealth shall forthwith file in the name of the Commonwealth any information against the detained product in the clerk's office of the circuit court of the county, or of the corporation court, or other court of record of competent jurisdiction in the city wherein the detention was made. Upon the filing of such information, the clerk of court shall forthwith issue a warrant directing the sheriff or city sergeant, as the case may be, to seize the detained product and see to its transportation to a suitable place of storage, which if necessary, may be outside of the county or city served by the sheriff or city sergeant. Should the attorney for the Commonwealth, for any reason, fail to file such information within five days after receipt of written notice of detention of the product, the same may, at any time within thirty days thereafter be filed by the Attorney General and the proceedings thereon shall be the same as if filed by the attorney for the Commonwealth.

Such information shall allege the seizure, and set forth in general terms the grounds of forfeiture of the seized product, and shall pray that the same be condemned and sold and the proceeds disposed of according to law, and that all persons concerned or interested be cited to appear and show cause why such product should not be condemned and sold to enforce the forfeiture. After the filing of the information, the attorney for the Commonwealth shall apply to the judge of the court wherein the information was filed for a hearing on the matters contained in the information. The judge of the court shall move the cause to the head of the docket and such hearing, as is prayed for by the information, shall be had as soon as practical to do so. The owner of and all persons in any manner then indebted or liable for the purchase price of the product and any person having a lien thereon, if they be known to the attorney who files the information, shall be made parties defendant thereto, and shall be served with the notice hereinafter provided for, in the manner provided by law for serving a notice, at least ten days before the day therein specified for the hearing on the information, if they be residents of this Commonwealth; and if they be unknown or nonresidents, or cannot with reasonable diligence be found in this Commonwealth, they shall be deemed sufficiently served by publication of the notice once a week for two successive weeks in some newspaper published in such county or city, or if there be none published therein, then in some newspaper having general circulation therein, and a notice shall be sent by registered mail of such seizure to the last known address of the owner of the detained product.

Any person claiming to be the owner of such product or to hold a lien thereon, may appear at any time before final judgment of the trial court, and be made a party

defendant to the information so filed, which appearance shall be by answer, under oath, in which shall be clearly set forth the nature of such defendant's claim, whether as owner or as lienor, and if as owner, the right or title by which he claims to be such owner, and if lienor, the amount and character of his lien, and the evidence thereof; and in either case, such defendant shall set forth fully any reason or cause which he may have to show against the forfeiture of the product.

If such product is condemned, it shall, after entry of the decree, be disposed of by destruction or sale as the court may direct and the proceeds, if sold, less the court costs and fees, and storage and other proper expenses, shall be paid into the state treasury, but the product shall not be sold contrary to the regulations of the Board; provided, that upon the execution and delivery of a good and sufficient bond conditioned that the product shall not be sold or otherwise disposed of contrary to the regulations of the Board, the court may direct that such product be delivered to a claimant thereof, who may have appeared in the proceedings, subject to such supervision by authorized representatives of the Commissioner as is necessary to insure compliance with the applicable regulations. When a decree of condemnation is entered against a product and it is released under bond, or destroyed, court costs and fees, and storage and other proper expenses may, as the court deems just, be awarded against the person or persons, if any, intervening as claimant of the product.

If a claimant shall deny for any reason that the product to be condemned is subject to condemnation as provided by this section, and shall demand a trial by jury of the issue thus made, the court shall, under proper instructions, submit the same to a jury of five, to be selected and empanelled as prescribed by law, and if such jury shall find on the issue in favor of such claimant, or if the court, trying such issue without a jury, shall so find, the judgment of the court shall be to entirely relieve the product from forfeiture, and no costs shall be taxed against such claimant.

§ 3.1-562.10 Penalties

Any violation of the provisions of this article or the regulations adopted thereunder, or failure to comply with such provisions or regulations, shall be a misdemeanor and punished as provided by law. Each day of such failure or violation shall be a separate offense as such.

FROZEN DAIRY PRODUCTS PLANT INSPECTION FORM
VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
OFFICE OF DAIRY SERVICES
RICHMOND, VIRGINIA

PERMIT NO. _____

DATE: _____

NAME OF PLANT: _____

OWNER OR MANAGER: _____

ADDRESS: _____

PERSON INTERVIEWED: _____

TIME OF DAY: _____

PLANT PHONE NUMBER: _____

SIR: An inspection of your plant has this day been made and you are notified of the defects marked with a cross (X).
 Your cooperation in making corrections is requested.

ITEM NO.

ITEM NO.

- (1) Plant Premises—exterior good repair () dust controlled () drainage () odor ()
- (2) Floors—smooth finish, no pools () wall joints and floor surface impervious () easily cleanable () clean ()
- (3) Walls and ceilings—smooth, light-colored finish, good repair () clean ()
- (4) Doors and windows—outer opening effectively screened or other approved methods employed () doors self closing ()
- (5) Lighting and Ventilation—Adequate natural and artificial light () No undue condensation or odor ()
- (6) Miscellaneous protection from contamination—Tanks and vats covered, ports protected () no woven-wire strainers, no straining pasteurized mix except through perforated metal () no drip from mezzanine or overhead pipes () flies under control () processes partitioned (or approved enclosures in counter freezer plants) (), rooms of sufficient size () ingredients not unloaded directly into processing rooms () pasteurized product not in contact with equipment used for raw or lower grade products unless sterilized () no plant operations in living quarters ()
- (7) Toilet facilities—Clean, well-ventilated () good repair () no direct openings into plant or storage () self closing doors ()
- (8) Water supply—Easily accessible, adequate, and of a safe, sanitary quality
- (9) Hand-washing facilities—Adequate, convenient () hot and cold water, soap, sanitary towels () hands washed after toilet ()
- (10) Sanitary piping—Easily cleanable size, shape and length () smooth uncorroded surfaces () sanitary fittings, interior surfaces accessible for inspection ()
- (11) Construction and repair of containers and equipment—Easily cleanable, smooth, non-corrodible surfaces () no open seams, good repair () self-draining () pressure-tight seats on submerged thermometers ()
- (12) Disposal of wastes—In public sewer or as approved () trash and garbage kept in covered containers ()
- (13) Clearing of containers and equipment—Multi-use containers thoroughly cleaned after each usage () equipment each day ()

- (14) Bactericidal treatment of containers and equipment approved
 - (15) Storage of containers—In clean crates or racks above floor, protected from flies, splash, dust, inverted when practicable
 - (16) Handling of containers and equipment. No handling of surfaces to which ingredients or products are exposed
 - (17) Storage and handling of single-service containers and utensils—Purchased in sanitary tubes or cartons () kept therein in cabinet or other clean dry place () sanitary handling ()
 - (18) Pasteurization—All mix pasteurized (155°F for 30 min. or by other approved methods in approved equipment)
 - (19) Indicating and Recording Thermometers—Pasteurizers equipped with approved indicating and recording thermometers () Recording pasteurization record on file ()
 - (20) Cooling—All pasteurized mix cooled to or below 45°F and maintained thereat until frozen ()
 - (21) Freezing and packaging—In an approved manner () covered immediately and handled in such a manner as to prevent contamination ()
 - (22) Vehicles—Clean, protects products from possible contamination.
 - (23) Premises—Near and clean () no health hazards () dust-free ()
 - (24) Personnel—Clean, clean outer garments
 - (25) Ingredients—Clean and wholesome quality, properly stored and protected from contamination
 - (26) Labeling—All packaged products properly labeled () mix properly labeled ()
 - (27) Returned ice cream and ice cream mix properly disposed ()
 - (28) Permit Posted
- Ice cream mix or frozen dairy mix made or purchased?
 From whom is mix purchased _____

REMARKS: _____

ORIGINAL

INSPECTOR

Dairy Services Policy and Procedure Manual

Number: 8.1

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Revision: July 27, 2012

Effective: December 1, 2007

D&F 16E's - Instructions for completing VDACS' analysis of raw milk report.

A. RAW MILK SAMPLES COLLECTED ON THE FARM AND TRANSPORT MILK SAMPLES. These instructions reference the attached numbered 16-E form and are to be completed by the dairy inspector. Inspection personnel submitting raw milk samples to VDACS laboratories for analysis should use only **BLACK MEDIUM BALLPOINT INK PENS** and complete the following numbered items:

1. Leave blank;
2. Leave blank;
3. Leave blank;
- 3a. Always indicate if this is a farm pickup load of milk or not;
4. Record where the samples were collected, "ON FARM", or record the permit number of the facility where the milk was sampled (ie: **51-4114** for Shenandoah's Pride, Mt. Crawford). **Do not** write in the name of the processing plant;
5. Record the date and time samples were collected;
6. Record the number of "Analysis of Raw Milk Reports" in order of use for the days' sampling(ie: 1 of 5; 2 of 5; 3 of 5; etc.);
7. Leave blank;
8. Record the laboratory the samples were submitted to. Use only the laboratory codes for each laboratory (HARR, IVOR, LYNCH, WARR, or WYTH);
9. Indicate which tests are to be performed on the samples;
10. Record the sampling inspectors' name;
11. Record the sampling inspectors' inspector code number (ie: 02, 20, 08, etc.);

12. Indicate the Cooperative responsible for this load of milk. Use the abbreviation codes according to the attached list (ie. CMPA; CV; DI-R; etc);
13. Use the remarks area to record other information as needed;
14. Record the sampling inspectors' initials in this block (ie:JAB);
15. Record the **FULL FIVE DIGIT** Grade "A" permit number (ie: 00390) which matches the producer sample and leave blank if a transport tank sample. Reference list ordered by patron number for each cooperative will be supplied;
16. Record the producers' name from the weigh ticket or record the identity of the truck sampled(ie: Transport tank No. 32). **NEVER COMBINE TRANSPORT TANK SAMPLES WITH PRODUCER SAMPLES ON THE SAME 16-E FORM;**
17. Record the producer's patron number or tank identification number here. **NEVER RECORD ANY NUMBERS OTHER THAN PATRON NUMBERS OR TANK IDENTIFICATION NUMBERS IN THIS BLOCK!**
18. Leave blank for a producer sample collected on the farm. For a transport sample record the compartment from which the sample was taken. Use "F" for front pot; "R" for rear pot; or leave blank if a single pot trailer;
19. Record the sample collect date and time;
20. Record the temperature of the milk;
21. Leave blank;
22. Indicate the number assigned to the milk sample(**DO NOT INCLUDE YOUR INITIALS HERE.**)

B. Instructions for special sampling situations

1. **FOLLOWUP SAMPLES:** Samples collected in response to warning letters for bacteria and somatic cells. When submitting these required official followup samples mark plainly below the sample information on the 16-E form the words "**FOLLOWUP SAMPLE**".
2. **OFFICIAL SAMPLES:** Milk samples which will become part of producer or plant quality records. These samples count toward meeting minimum sample numbers and quality standards for IMS.
3. **PRODUCERS WITH TWO TANKS:** Record Tank A or Tank B after the producer's name or record the tank ID number after the producer's name. Identify the milk samples with the next sample identification number in sequence. **Do Not** cross out the results area for the "B" sample. Leave a

blank line between the "B" sample and the next sample on the 16-E and record in the "inspector sample number" block for the blank line the term "AVG".

4. REINSTATEMENT SAMPLES: Samples collected by inspectors for permit reinstatement purposes. **DO NOT MIX OFFICIAL SAMPLES AND REINSTATEMENT SAMPLES ON THE SAME ANALYSIS OF RAW MILK REPORT.** When submitting reinstatement samples mark plainly below the sample information on the 16-E form the words "**REINSTATEMENT SAMPLE**".
5. SERVICE SAMPLES: Samples collected by inspectors to assist producers in resolving high bacteria counts, high somatic cell counts, positive cryoscope results, etc. **DO NOT MIX OFFICIAL SAMPLES AND SERVICE SAMPLES ON THE SAME ANALYSIS OF RAW MILK REPORT.** When submitting service samples mark plainly below the sample information on the 16-E form the words "**SERVICE SAMPLE**".
6. UNOFFICIAL SAMPLES: Used by the Richmond office to void out individual milk samples and all of their results to keep them from counting as part of a permit holder's official record.

C. COMMINGLED RAW FARM PICKUP LOADS OF MILK WITH ACCOMPANYING PRODUCER SAMPLES ONLY. These instructions reference the attached numbered 16-E form and are to be completed by the dairy inspector. Inspection personnel submitting raw milk samples to VDACS laboratories for analysis should use only **BLACK MEDIUM BALLPOINT INK PENS** and complete the following numbered items:

1. Record the name of the milk hauler or sampling operator here;
2. Record only the **middle five digits** (ie: 53-**00999**-167) of the permit number of the licensed milk hauler. If the hauler is not licensed leave blank and record that they are not licensed in the "Remarks" area;
3. Record the identification numbers of the farm pickup tank here;
- 3a. Always indicate if this is a farm pickup load of milk or not;
4. Record the **permit number** of the facility where the milk was sampled (ie: **51-4114** for Shenandoah's Pride, Mt. Crawford). **Do not** write in the name of the processing plant;
5. Record the date and time samples were collected;
6. Record the number of "Analysis of Raw Milk Reports" in order of use for the

days' sampling(ie: 1 of 5; 2 of 5; 3 of 5; etc.);

7. Record the temperature of the operator check temp. sample;
8. Record the Laboratory the samples were submitted to. Use only the following laboratory codes for each laboratory (HARR, IVOR, LYNCH, WARR, or WYTH);
9. Indicate which tests are to be performed on the samples;
10. Record the sampling inspectors' name;
11. Record the sampling inspectors' inspector code number (ie: 02, 20, 08, etc.);
12. Indicate the Cooperative responsible for this load of milk. Use the abbreviation codes according to the attached list (ie. CMPA; CV; DI-R; etc);
13. Use the remarks area to record other information as in the following: (I) Load delivered by Jack Russell;
14. Record the sampling inspectors' initials in this block (ie: JAB);
15. Record the **FULL FIVE DIGIT** Grade "A" permit number (ie: 00390) which matches the producer sample and leave blank if a farm pickup tank sample. Reference list ordered by patron number for each cooperative will be supplied;
16. Record the producers' name from the weigh ticket or record the identity of the truck sampled(ie: Farm Pickup SA-47). **Always record truck load samples first on the 16-E form and follow with the producer samples;**
17. Record the producer's patron number or tank identification number here. **NEVER RECORD ANY NUMBERS OTHER THAN PATRON NUMBERS OR TANK IDENTIFICATION NUMBERS IN THIS BLOCK!**
18. For a producer sample, record the compartment into which the producer's milk was pumped. Use "F" for front pot; "R" for rear pot; and "S" for split. For a load sample record the compartment from which the sample was taken. Use "F" for front pot; "R" for rear pot; or leave blank if a single pot trailer;
19. Record the sample collect date and time from the weigh ticket;
20. Record the temperature from the weigh ticket;
21. Record the pounds of milk from the weigh ticket;
22. Indicate the sampling inspectors number(**DO NOT INCLUDE YOUR INITIALS HERE.**

D. INSTRUCTIONS FOR SPECIAL SAMPLING SITUATIONS

1. **FOLLOWUP SAMPLES:** Samples collected in response to warning letters for bacteria and somatic cells. When submitting these required official followup samples mark plainly below the sample information on the 16-E form the words "**FOLLOWUP SAMPLE**".
2. **OFFICIAL SAMPLES:** Milk samples which will become part of producer or plant quality records. These samples count toward meeting minimum sample numbers and quality standards for IMS.
3. **PRODUCERS WITH TWO TANKS:** Record Tank A or Tank B after the producer's name or record the tank ID number after the producer's name. Identify the milk samples with the next sample identification number in sequence. **Do Not** cross out the results area for the "B" sample. Leave a blank line between the "B" sample and the next sample on the 16-E and record in the "inspector sample number" block for the blank line the term "AVG".
4. **REINSTATEMENT SAMPLES:** Samples collected by inspectors for permit reinstatement purposes. **DO NOT MIX OFFICIAL SAMPLES AND REINSTATEMENT SAMPLES ON THE SAME ANALYSIS OF RAW MILK REPORT.** When submitting reinstatement samples mark plainly below the sample information on the 16-E form the words "**REINSTATEMENT SAMPLE**".
5. **SERVICE SAMPLES:** Samples collected by inspectors to assist producers in resolving high bacteria counts, high somatic cell counts, positive cryoscope results, etc. **DO NOT MIX OFFICIAL SAMPLES AND SERVICE SAMPLES ON THE SAME ANALYSIS OF RAW MILK REPORT.** When submitting service samples mark plainly below the sample information on the 16-E form the words "**SERVICE SAMPLE**".
6. **UNOFFICIAL SAMPLES:** Used by the Richmond office to void out individual milk samples and all of their results to keep them from counting as part of a permit holder's official record.
7. **GOAT MILK SAMPLES:** All goat milk samples submitted to VDACS laboratories for Somatic Cell Testing (SCC) will be tested using the Direct Microscopic Somatic Cell Count (DMSCC) method using the special stain for goat milk. No goat milk samples will be screened by regular DMSCC or Electronic Somatic Cell Count (ESCC) prior to being tested using the DMSCC method for goat milk. **Dairy Inspectors submitting goat milk samples will identify to laboratory personnel the sample numbers of all goat milk samples being submitted at the time of submission.** This will allow

laboratory personnel to easily find, prepare and ship the goat milk samples for DMSCC testing. One easy method of providing the identity of the goat milk samples would be to always place the goat milk samples on separate 16-E forms and place the 16-E forms on the top of the stack for easy access by laboratory personnel. A simple note identifying the goat milk sample by sample number would also be appropriate.

8. **CRYOSCOPE SAMPLES:** Milk samples collected for cryoscope testing after an observed milking to determine if a cryoscope suspension letter will be issued or a temporary cryoscope standard must be established for a producer shall be identified on the 16-E form as a **“CRYOSCOPE INSPECTION SAMPLE”**. **Do not identify** these samples as **“FOLLOW-UP SAMPLES”**. **CRYOSCOPE INSPECTION SAMPLES** are entered in our database under a separate category called “CRYO” to document the sample results. These samples are not considered part of the producer’s official record when determining compliance with quality standards.

9. **Brucellosis Milk Ring Testing:** Each time milk samples are submitted for Heat Inactivated Ring Testing the inspector should complete and attach to the 16-E forms the **“Listing of Herd Size for BRT Testing”**. This form is used to identify milk samples from farms milking between 151 and 450 cows; 451 and 700 cows; and 701 to 1,500 cows. A larger portion of milk is added to the test tubes for testing when the dairy herd is larger than 150 cows. Inspectors can determine the number of cows based on the weight of milk being transported.

Dairy Services Policy and Procedure Manual

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MILK TANK SAMPLING, LABELING and SHIPPING STATEMENT

The procedures outlined under this section are based on Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-30(G).

1. Transport Commingled Milk - This is raw milk that is stored and/or shipped from a receiving station, transfer station or dairy processing plant to another plant for processing.
 - A. Sampling Points - Samples will be taken from any or all of the following points:
 1. Receiving Station storage tanks
 2. Loaded transport tanks at the receiving or transfer station.
 3. Loaded transport tanks on arrival at destination (including tanks from out of state).
 - B. Number of Samples - Take one sample from each storage tank or from each transport milk tank. In case of a two compartment transport milk tank, take a sample from each compartment. Do not take a sample from a storage tank and then another sample from a transport milk tank which may be loaded partially or completely from that storage tank due to the fact that should the count be high, it will penalize the shipper twice for the same milk.
 - C. Method of Sampling - Samples must be taken in an aseptic manner from a properly mixed source. Extreme caution must be taken if samples are collected where no covered loading or unloading area has been provided. Avoid opening tanks under rainy or extremely dusty conditions unless tanks are under cover. Sample containers and sampling equipment must be the same as normally used for other samples. Hand operated agitation devices are not considered satisfactory for tanks of the size used for transporting pool milk.
 - D. Amount of Sample - Take sufficient amount for bacteria, antibiotics and cryoscope test.
 - E. Frequency of Sampling - When possible, collect samples of "Transport Commingled Milk" at least 4 times in separate months in any given 6 month period from each shipper. Arrangements should be made with laboratories in

advance if samples are collected on other than regular sample schedule days.

- F. Transcripts - The name and address of the shipper shall be recorded accurately and in legible manner in the appropriate space on the transcript.

On the line entitled "Collected From" write "Transport Milk Tank No. ____ at (plant and location)"- or "Storage Tank No. ____ at (plant and location)". Send copies to shipper, receiver, office, and collecting inspector.

- G. Recording - All transcripts designated "Transport Milk Tank" or "Storage Tank" will have results recorded on the "Dairy Products Record Card" of the shipper. This card will be specifically designated "Transport Commingled Milk". In the event more than one sample is collected from the same shipper's milk on the same day, one average on all counts taken on that day will be entered on the record for that day.

2. Farm Pickup Commingled Milk - This is raw milk picked up at the dairy farm by a farm bulk milk pickup tank and delivered to the processing plant, receiving or transfer station. These samples will be collected for information purposes and will also serve as a cross check on samples collected on the quality of the commingled milk shipped from farm to plant. High bacteria counts will be traced to determine the source. Theoretically, the cause could either be traced to a producer or producers or to some unsanitary conditions involving milk transportation.

- A. Sampling Points - Samples will be taken from farm bulk milk pickup tanks on arrival at the processing plant, receiving, or transfer station.

- B. Number of Samples - Take one sample from each farm bulk milk pickup tank. In the case of a multiple compartment tank, take one sample from each compartment, identifying the sample with the compartment on the transcript.

- C. Methods of Sampling - Same as "1.C".

- D. Amount of Sample - Same as "1.D".

- E. When possible, samples shall be collected from farm bulk milk pickup tanks each time producer samples are collected.

- F. Transcripts - The name and address on the transcript shall be that of the association handling the milk (if the association is actually engaged in handling milk for its producers) or in the case of an independent supply for a specific plant, the name and address shall be that of the plant. On the line entitled "Collected From" write "Farm Bulk Milk Pickup Tank No. ____ at (plant and location)". Send copies to the association if applicable, the receiving plant, the office and the collecting inspector.

TRANSPORT TANK LABELING, SEALING AND SHIPPING STATEMENT

The procedures under this section are based on the Bulk Tank Regulations.

Each transport milk tank while it is in interstate or intrastate transit shall have all openings sealed and shall be accompanied by a shipping statement bearing all information prescribed by the Regulations.

AFLATOXINS

Aflatoxin is a toxic metabolite produced by the fungi, *Aspergillus*, specifically *Aspergillus flavus* or *Aspergillus parasiticus*. *Aspergillus*, *Fusarium* and *Penicilium* are the three major genera of fungi which produce mycotoxins. Mycotoxins grow on a wide spectrum of feeds that include cereal grains, groundnuts, beans and peas.

Mycotoxins affect specific tissues or organs depending on the particular genus and toxin involved. The most common mycotoxins which cause health problems in ruminants are aflatoxins, zearalenone (*Fusarium*), vomitoxin or deoxynivalenol and fumonsin.

Of all the mycotoxins, aflatoxins are of the greatest concern because they are highly toxic and potentially carcinogenic. Aflatoxin causes liver damage, cancer, decreased milk production and immune suppression. *Aflatoxin flavus* predominately contaminates corn and cottonseed, producing aflatoxins B₁ and B₂. *Aflatoxin parasiticus* is more common in peanuts, producing aflatoxins B₁, B₂, G₁, and G₂. Aflatoxin M is a major metabolite of Aflatoxin B₁ and is excreted in the milk and urine of dairy cattle.

Because aflatoxins affect humans, as well as livestock, indirect exposure through the consumption of animal products with metabolite levels is a concern. Studies have shown that dairy cattle shed 1.7% of their total aflatoxin B₁ intake as aflatoxin M₁ in milk. With a B₁/M₁ ratio of 66:1, the actionable level of 20 ppb aflatoxin B₁ in the lactating dairy cow ration is appropriate for reducing the risk of incurring M₁ levels in milk greater than the actionable level of .5 ppb.

FDA establishes and enforces limits for aflatoxin for food and feed under the Federal Food, Drug and Cosmetic Act. FDA regulates aflatoxin as an added substance rather than as a naturally occurring poison because it can be avoided or minimized with proper agricultural and manufacturing practices. FDA limits the levels of aflatoxin in corn and grains destined for human food purposes, dairy feed, or young stock to 20 ppb, 100 ppb for beef, poultry and swine breeding stock, 200 ppb for finishing pigs, and 300 ppb for finishing cattle. The limits for aflatoxin in feed and food are outlined in the [FDA Compliance Policy Guidelines](#) in sections 683.100 for feed, 555.400 for food and 527.400 for milk.

FACTORS FAVORING AFLATOXIN PRODUCTION

Aflatoxin contamination can occur in the field, during storage and after processing. Infection by aflatoxin frequently occurs when kernels or seeds have been mechanically damaged and when insects carry spores into the kernel or seed. Aflatoxin is considered to be temperature tolerant fungi. Limiting temperatures for the production of aflatoxin are 54-106 degrees Fahrenheit with optimum production occurring at 77-90 degrees F. Growth of *Aflatoxin flavus* occurs within 48 hours at 86-87 % relative humidity. Field infection of corn is most common when the conditions are high temperatures and high relative humidity particularly when stressed by drought, nitrogen deficiency and insect damage. It is recommended that fields affected with a significant amount of

ear rot be harvested and stored separately.

Post-harvest contamination can occur if crop drying is delayed and during storage if moisture levels exceed recommended levels for the particular grain product. Aflatoxin has been found in bins of heating and discolored corn, as well as in heating ensiled, high moisture corn.

Mycotoxins can occur in storage usually as a result of improper drying and storage conditions. After harvesting grains as early as possible, they should be dried to and maintained at 15% moisture or lower.

Aspergillus is characterized by olive or yellowish green colonies growing in the area of damaged kernels. As well, Aflatoxin B₁, B₂ glows blue under UV light while aflatoxin G₁, G₂ glows green. Under a black light aflatoxin glows with a bright green yellow fluorescence. If using a black light, one should have a color standard for comparison. However, the presence of the fungi does not necessarily indicate that the toxin is present, or if present, what level may exist in contaminated corn. The best method for actual detection of aflatoxin is a chemical test. There are a variety of test kits which are available to quantitate the level of aflatoxin in feed.

When sampling grain products for aflatoxin or mycotoxin contamination, precautions must be taken to obtain a reliable sample. Because mycotoxin contamination can occur even if the feed supply remains constant due to the presence of "hot spots" or localized areas of fungal growth, representative sampling is a must to accurately quantitate the level of contamination. The following steps need to be observed:

1. Obtain samples from multiple locations preferably with the use of a grain or sampling probe.
2. Obtain samples from moving streams of grain.
3. Sample from various unloading areas.
4. Take 10 pounds minimum.
5. Freeze or use air-tight packaging, particularly if sampling high moisture grains.

Ensiling can kill the fungi but does not remove the toxins which may exist in the grain prior to ensiling. Aflatoxin in corn has been found to concentrate in the by-products of the wet milling process used to produce animal feed. By-products of the brewing industry may be contaminated because fermentation does not break down mycotoxins.

SUGGESTIONS TO PREVENT OR DECREASE EFFECTS OF AFLATOXIN CONTAMINATION OF FEED

1. Control environmental factors that influence aflatoxin growth.
 - a) Moisture content of grain - less than 14%
 - b) Relative humidity less than 70%
 - c) Temperature - less than 2.2 degrees Centigrade (approximately 36 °F)
 - d) Oxygen availability - less than 0.5%

2. Control physical condition of grain.
 - a) Minimize grain damage during harvest
 - b) Screen grain to reduce broken kernels. Mycotoxins tend to be concentrated in the red dog, husk, light grains, and broken kernels. Feeding grain screenings is not recommended because concentrations of mycotoxins are considerably higher.
3. Clean storage system regularly.
4. Use mold inhibitors, such as sodium or calcium propionate or organic acids, at the rate of 0.2 to 0.25% to non-ensiled feeds with 14-17% moisture or 0.5 to 0.6% to non-ensiled feeds with 18-24% moisture. Also, anti-caking additives can also help.
5. Use ammoniation to reduce aflatoxin concentrations.
6. Wash, wet or dry milling and heating process (roasting at 300 degrees Fahrenheit, boiling, baking and frying). Some of these methods are recommended for food but are impractical for feed.
7. Addition at the rate of 0.5% of formulated rations of aluminosilicate or bentonite clay. These compounds may bind with aflatoxin and other mycotoxins in the digestive tract to reduce their absorption. As well, several feed companies have new products to be added to rations which may be contaminated which act in similar ways to bentonite clay or aluminosilicate.
8. Reduce stress to animals and increase plane of nutrition. Research suggests that a low-fat, high quality protein ration and/or possibly increasing the levels of Vitamins A, E, B₁, and trace minerals selenium, Zinc, Copper and Manganese by 25% will help alleviate some of the deleterious effects of mycotoxins if signs of reduced feed efficiency, reduced milk production or decreased appetite are noted.
9. If effects or residues are noted reduction or exclusion of the suspected or know feed ingredient is necessary.
10. Blending of grains or rations below the 20 ppb limit. This requires knowledge of the level of contamination in all feed ingredients.

Dairy Services Policy and Procedure Manual

Number: 8.3.1
Date: March 1, 2011
Revision: New Policy
Effective: March 1, 2011

Aflatoxin Residue Screening and Follow-up Program

The purpose of this program is to identify and eliminate aflatoxin residues from milk being shipped by individual Virginia dairy farms. The program works by screening commingled loads of farm pickup milk first. If aflatoxin residues are detected each of the dairy farms comprising the load will be screened to determine the source of the aflatoxin. Commingled loads of milk are screened using the Charm ROSA Aflatoxin test method for residue levels of 300 parts per trillion (ppt) or more. Loads screening below 300 ppt are reported as negative and loads screened at or above 300 ppt are reported as suspicious. No confirmation testing is performed at the screening stage of testing. Each milk sample is tested only once and the result reported as negative or suspicious.

Dairy inspectors will collect and submit commingled milk samples from loads of Virginia produced milk along with each of the associated producer milk samples on the load for testing. The collection of milk samples for aflatoxin screening will normally occur at the same time routine milk samples are collected and submitted. The submission of load and producer samples at the same time will allow laboratory personnel to immediately test each of the producer milk samples on any commingled load which screens suspicious for residues.

When producer samples are not available for screening from loads that have tested suspicious for aflatoxin residues, Dairy inspectors will collect and submit milk samples from each of the dairy farms comprising the load for residue screening. These farm samples will be screened and reported the same as commingled load samples.

Inspectors will visit the farm of each milk sample that tested suspicious to collect feed samples for aflatoxin residue testing. Dairy inspectors will collect samples of each type of feed (**except hay**) being feed to the milking herd using the procedures established in *Dairy Services Policy and Procedure 8.4 – Sampling Feeds for Aflatoxin Residues*. Dairy inspectors will pay particular attention to any purchased or commercial feeds being feed and insure they collect copies of delivery tickets and other information to specifically identify the manufacturer of the commercial feed and lot identification number. Feed samples will be delivered to the nearest VDACS laboratory for shipping to the feed testing lab at Texas A&M University with instructions for each sample that screens positive for aflatoxin residues HPLC testing will be performed to establish the amount of aflatoxin residue present. Dairy inspectors will notify the Dairy Services Program Supervisor after collection and delivery of feed samples of the number and type of samples submitted. Information on commercial feeds sampled will be scanned and sent by email or

faxed to the Richmond office. Scanned electronic records are preferred over fax copies because they contain higher resolution images and are easily distributed. Dairy inspectors could capture images of commercial feed records using a digital camera and attach the images to an email for reporting to the Richmond office.

Once aflatoxin results are known the Dairy Inspector will notify the dairy farmer and allow sufficient time for the dairy farmer to replace the contaminated feed and begin feeding additives like bentonite clay or aluminosilicate to eliminate or reduce the aflatoxin residue in the milk. After sufficient time has passed for the residue to have cleared the cows systems the inspector will collect an official milk sample for aflatoxin testing. The official milk sample will be tested using the Charm ROSA Aflatoxin test method. If the first test screens positive indicating the possibility there is 500 ppt aflatoxin residue in the sample the sample will be tested two more times using a positive and negative control to confirm the result. If either of the two repeat tests is positive there is a 95% confidence level that the sample contains 500 ppt or more aflatoxin residue and will be reported as positive. The dairy farm's permit will be immediately suspended and remain suspended until a milk sample confirms the farms milk is below the actionable level of 0.5 ppb for aflatoxin in milk.

Commercial feeds testing positive for aflatoxin residues will be reported to the VDACS Office of Product and Industry Standards for their action/follow up.

These same procedures will be followed to follow up on Virginia dairy farms associated with loads of milk reported positive for aflatoxin residues when they were tested by regulatory program in other states where the milk was delivered for processing.

Laboratory Aflatoxin Screening Sample Submission and Results Reporting:

Dairy Inspectors will complete *16-E Analysis of Raw Milk Report* for all load and producer milk samples submitted. In addition, Dairy Inspectors will complete and submit a *Charm Aflatoxin Screening Testing* form for all milk and feed samples so the test results can be reported by laboratory personnel.

Dairy Inspectors will always call the lab in advance and make arrangements for sample submission so that sufficient test kits are available for testing.

Laboratory personnel performing screening testing will test each milk sample only once and report it as suspect if the count is 300 ppt or greater and negative is less than 300 ppt. Positive and Negative controls will be run once each time milk samples are screened for aflatoxin to ensure the equipment is functioning properly. If twenty milk samples are being screened positive and negative controls will only be run once.

If a commingled load samples screens suspect for aflatoxin residues laboratory personnel will proceed to test each of the producer samples submitted with the load. Producer milk samples will be reported using the same protocol as for screening load samples. Laboratory personnel will report all suspect milk samples for aflatoxin residue immediately by phone to the Dairy Services program supervisor. Screening results will also be scanned or faxed to the Dairy Services program.

Laboratory Aflatoxin Official Sample Submission and Results Reporting:

Dairy Inspectors will submit all official milk samples for aflatoxin testing on *16-E Analysis of Raw Milk Report*. Official milk samples for aflatoxin testing will be submitted independently from any other testing. No other milk sample tests may be requested on the same 16-E form when official milk samples are submitted. The inspector will write "aflatoxin" in the space for requested tests and "official results" on the form. Laboratory personnel will use the column for reporting bacteria counts for reporting aflatoxin test results. Sample testing will be conducted following the manufacturers test instructions and reports as either **negative** or **positive**. Laboratory personnel will report all positive aflatoxin sample results immediately to the Dairy Services program by phone with results by email.

Rapid Response Team (RRT) Procedures:

Communication and Initial Notification of Positive Milk Sample:

Dairy Services receives initial report of aflatoxin in milk:

- Dairy Services Program Supervisor will notify RRT Coordinator
- Notification will be immediate (same day, if possible)
 - RRT Coordinator will notify RRT Animal Feed Specialist

RRT receives initial report of aflatoxin milk:

- RRT will notify D&F and RRT Animal Feed Specialist
- Notification will be immediate (same day, if possible)
 - When possible, notification will include all manifest information

Inspection Protocols for Potential Aflatoxin Contamination in Milk

Dairy Services Program will be lead VDACS Office in the investigation

Once D&F has been notified of a positive load of milk:

- Dairy Services will collect milk sample from farm(s) on a positive load to identify positive farms. Samples are typically collected within one day of receiving notification.
- Dairy Services will immediately notify RRT that positive load has been detected.
- Once positive farms have been identified, Dairy Services will collect feed samples from farms to determine source of aflatoxin
- Dairy Services will send feed samples to Texas A&M for analysis and notify RRT Coordinator of any commercial feeds that were sampled.
- Test results from Texas A&M will be forwarded from Dairy Services to RRT Coordinator
- RRT Coordinator or Animal Feed Specialist/OPIS will conduct trace-back investigation on positive commercial feed

Dairy Services Policy and Procedure Manual

Number: 8.4
Date: December 21, 1998
Revision: October 1, 2007
Effective: December 1, 2007

Sampling Feeds for Aflatoxin Residues

We sometimes collect samples of feed from dairy farms whose milk tests positive for aflatoxin residues. Any molds contaminating the feed sample that are capable of producing aflatoxin may be able to grow in the feed sample during the time it is being transported to a laboratory for testing if: (1) there is sufficient moisture present in the sample; and (2) if it is exposed to temperatures of 85°F or higher. Wet feeds like silage, haylage, and high-moisture corn are of concern since they will have enough moisture to support growth if the temperature is 85°F or higher. Dry hay, shelled dry corn and other dry feeds are not a concern since they do not contain enough moisture to support growth.

To ensure we are taking every precaution to provide producers with accurate aflatoxin residue test results, samples of all moist feeds will need to be iced down in coolers immediately after collection and shall be transported and delivered to the laboratory on ice or on ice packs. Laboratory personnel shall be requested to ship any feed samples for HPLC testing in shipping containers with ice packs using overnight delivery.

To provide for sampling consistency inspectors collecting feed samples should comply with the following procedures where possible. In some instances the instructions call for sampling probes which we do not have. Please do the best you can in the absence of these sampling devices.

Sample each lot

Do not attempt to combine hays of different qualities or cuttings into one composite sample. Take a good, random set of samples from each lot. The final (composite) 1- or 2-quart sample will represent several tons of forage. And remember where you sampled; write down the location of each lot in the barn or silo or stack for easy reference when feeding.

How to take samples of baled, loose, or chopped hay

1. Test each forage lot separately. Each composite sample should be from only one cutting on one field.

2. Take about 25 to 30 widely separated samples from each lot. The more samples taken, the more representative the composite sample and the more accurate the results will be.
3. Use a hay probe. Don't rely on a knife or a fistful of feed twisted out of the handiest bale or off the surface of the silage. That will not be a representative sample.
4. Insert the hay probe full depth from the side into the center in big round bales and into the middle of the butt end of small bales. That will give you a representative sample of both stems and leaves.
5. Use the hay probe for loose and chopped hay also.
6. Mix the 25 to 30 cores in a clean pail and place in a tight, clean, plastic or paper bag or other container.
7. Label each container with your initials, sample number, and forage type (e.g. red clover, alfalfa hay).

How to take samples of ensiled material from tower silos

1. Collect a minimum of ten one pound grab samples while the unloader is in operation.
2. Do not collect the samples from the spoiled material on top of the silo. In upright silos, wait until 2 to 3 feet of silage have been removed.
3. Collect samples during feeding or while filling the silage cart.
4. Mix the samples thoroughly in a clean container, place in a clean plastic bag, and seal.
5. Label each container with your initials, sample number, and forage type (e.g. corn silage, alfalfa haylage).
6. Store immediately in a cooler on ice until delivered to the lab.

How to take samples of ensiled material from bunker silos

1. If feeding a total mixed ration (TMR) – load silage from bunker into TMR mixer and mix well. Collect a minimum of ten one pound grab samples while the unloader is in operation.

If not feeding a TMR – Collect a minimum of ten one pound samples from the different vertical layers of the silo face. Grab several handfuls from freshly exposed forage after the day's feeding has been removed. Do not sample the spoiled material on top of the silo.

2. Combine the ten sub-samples in a clean container and mix well. Place the entire sample in a clean plastic bag or other container and seal tightly.
3. Label each container with your initials and sample number and forage type (e.g. alfalfa haylage, corn silage).
4. Store immediately in a cooler on ice until delivered to the lab.

Dairy Services Policy and Procedure Manual

Number: 8.5
Date: June 1, 2006
Revision: August 15, 2012
Effective: December 1, 2007

Appendix N Milk Sampling and Laboratory Evaluation Policy

There are currently three different designations under the National Conference on Interstate Milk Shipment (NCIMS) laboratory certification system for industry laboratories that test incoming tank loads of milk before receipt at milk plants. There are Fully Certified NCIMS labs, Certified Industry Supervisor labs, and Industry Screening labs. The differences between these three are significant.

Fully Certified NCIMS labs are the highest category of laboratory. Fully Certified NCIMS laboratory facilities must pass numerous inspection requirements and every analyst must be reviewed on-site by a Laboratory Evaluation Officer (LEO). In addition, each analyst must successfully participate in split samples to be certified. On-site inspections of laboratory facilities and evaluations of each analyst are conducted initially and every two years thereafter. Analyst must participate in split samples during years between inspections by the LEO. Fully Certified NCIMS labs are able to perform confirmatory testing on both load and producer milk samples for official action by regulatory agencies. Collection of milk samples from 10% of the loads of milk received one day each quarter is not required for compliance with Appendix N since each lab is fully certified. Few plant laboratories choose to be Fully Certified NCIMS labs because each analyst must be evaluated by the LEO prior to testing any milk samples.

Certified Industry Supervisor labs are the second highest category of laboratory and apply to animal drug-residue testing only. The major difference between a Fully Certified NCIMS lab and the Certified Industry Supervisor lab is that only the industry laboratory supervisor and their alternate(s) are certified to confirm load and producer milk samples. The Certified Industry Supervisor lab must pass on-site inspections every two years and each analyst must participate in split samples during the years between inspections; however, the analysts are not certified; only the Industry Supervisor and alternate(s) are certified. Under this system any analyst can begin testing milk samples after being trained by the Certified Industry Supervisor; however, they are not allowed to test any producer milk samples or confirm load samples. Whenever a load screens positive in a Certified Industry Supervisor lab the Certified Industry Supervisor or alternate must retest the load sample(s) to confirm the results and perform all testing on producer milk samples. There are three ways to comply with the 10% sampling requirement. Regulatory personnel may collect milk samples from 10% of the loads of milk received one day each quarter; however, the samples must be tested using the exact same test method as the plant used to screen the milk.

Alternatively, the dairy inspector may observe 10% of the load samples on one day each quarter being tested to comply with Appendix N requirements. Lastly, the plant participates in an on-going laboratory certification program utilizing split samples. Under the last alternative not tanker sampling is required. All of the milk plants in Virginia have chosen to be Certified Industry Supervisor labs.

Industry Screening labs differ from Certified Industry Supervisor labs primarily in the fact that no one at the lab is able to confirm load samples or test producer milk samples. Our regulations prohibit Industry Screening Labs because they are unable to confirm loads and test producer samples.

Appendix N Regulatory Responsibilities

Because every milk processor in Virginia who receives any milk in bulk that might require a producer trace back or load confirmation is required to participate in our laboratory certification program no 10% tanker sampling or records reviews are required.

Dairy Services Policy and Procedure Manual

Number: 8.6

Date: February 2, 2012

Revision:

Effective: February 2, 2012

Submission of Grade "A" Pasteurized Milk & Milk Products & Bulk Shipped Heat Treated Milk Products for Phosphatase Testing

Submission of Grade "A" Pasteurized Concentrated (Condensed) Milk & Milk Products for Phosphatase Testing

A. Validated phosphatase testing on Grade "A" milk and milk products

Under the National Conference on Interstate Milk Shipments (NCIMS) laboratory certification program test methods are limited to those that have been validated and approved. Many Grade "A" milk products have no validated test method for phosphatase; therefore, samples of these milk products should not be tested.

Sampling personnel should not request phosphatase testing unless the milk or milk product is listed under the matrices for which the Fluorophos is approved. This will avoid reporting of tests results that may not be valid and prevent clients from asking why tests were not performed that were requested.

PHOSPHATASE TEST METHODS FOR PASTEURIZATION MATRICES	VDACS Harrisonburg Lab Fluorophos	VDACS Warrenton Lab Pasilite	Charm II Phosphatase	Charm Fast PAS
RAW MILK				
Raw Cow Milk	Yes	Yes	Yes	Yes
Raw Goat Milk	Yes	Yes	Yes	Yes
Raw Sheep Milk	Yes	Yes	Yes	Yes
Raw Buffalo Milk	No	Yes	No	No
HTST PAST. MILK				
HTST PAST. SKIM MILK	Yes	Yes	Yes	Yes
HTST PAST. OTHER WHITE MILK (1%, 2%)	Yes	Yes	Yes	Yes
HTST WHOLE MILK	Yes	Yes	Yes	Yes
HTST PAST OTHER FAT CREAM	Yes	Yes	Yes	Yes
HTST PAST. CREAM – 20%	Yes	Yes	Yes	Yes
HTST PAST. LACTOSE REDUCED MILK	No	No	No	No
HTST PAST. CHOC 2% MILK	Yes	Yes	Yes	Yes
HTST PAST, OTHER % BF CHOC. MILK	Yes	Yes	Yes	Yes
HTST PAST. STRAWBERRY MILK	Yes	No	No	No

HHST PAST. MILK				
HHST PAST. MILK*	N/A	N/A	N/A	N/A
HHST PAST. CHOC MILK*	N/A	N/A	N/A	N/A
ASEPTIC PROCESS				
ASEPTIC MILK*	N/A	N/A	N/A	N/A
ASEPTIC CHOC MILK*	N/A	N/A	N/A	N/A
CULTURED MILK PRODUCTS				
CULTURED BUTTERMILK*	N/A	N/A	N/A	N/A
SOUR CREAM*	N/A	N/A	N/A	N/A
COTTAGE CHEESE*	N/A	N/A	N/A	N/A
YOGURT*	N/A	N/A	N/A	N/A

B. Although there is no requirement to test Grade "A" Pasteurized Concentrated (Condensed) Milk & Milk Products for Phosphatase under the PMO; routine samples of condensed milk have been submitted over the years. Before testing the condensed milk needs to be reconstituted to its original strength. In order for laboratory personnel to know the amount of water to add to the sample before testing they need to know the percentage of water removed from the product; therefore, it is requested that the percentage of water removed from the condensed milk product be recorded beside the name of the product on the sample submission form as in the example below:

Pasteurized Condensed Skim Milk 35%

Dairy Services Policy and Procedure Manual

Number: 9.1
Date: December 7, 2005
Revision: October 1, 2007
Effective: December 1, 2007

Phosphatase Testing Policy

Samples of milk, dairy products and frozen desserts for phosphatase testing shall **only be submitted from plants that actually *pasteurized*** the products being sampled.

In the past we have submitted samples of gelato frozen desserts for phosphatase testing and occasionally gotten positive test results. The gelato was reconstituted from a dry powdered mix with fluid pasteurized milk and cream. Flavoring ingredients were also added and in some cases extra sugar. The frozen desserts regulations allow the reconstituting of dry powdered mixes with potable water and by interpretation we have extended that to pasteurized fluid milk products (milk, half and half, cream, etc.). The regulation prohibits the addition of sweeteners after pasteurization.

We have spent a great deal of time investigating the causes of the positive phosphatase test results. Typically, products we have observed being made during these investigations test negative for phosphatase. We are unable to determine through testing if the phosphatase is reactivated phosphatase or the result of biological activity because the confirmation testing needed to determine this is not required to be performed for official testing. During these investigations we have not discovered a single public health concern that could not have been detected through inspection and observation of processing of the dairy products.

The last point is *who do we hold responsible* for the pasteurization process if we have a positive phosphatase test result on a reconstituted frozen dessert from a facility that does not even have pasteurization equipment? Phosphatase testing is performed to verify that the pasteurization process was performed properly. There is no reason to submit samples from facilities that do not pasteurize the products being sampled. Phosphatase testing can not tell you if raw eggs or any other ingredient may have been added to the mix after pasteurization.

Sample Submissions Must Include Species of Milk and if Raw or Pasteurized

The Charm II phosphatase test requires that the analyst know: (1) if the dairy product being tested is pasteurized or unpasteurized; and (2) the species of mammal's milk the dairy product was made from. It is absolutely critical for these two pieces of information to be provided at the time of sample submission.

Please record in the "Product Name" block the species of mammal the milk is from and if it was pasteurized or raw. Phosphatase samples can not be tested unless this information is available.

Dairy Services Policy and Procedure Manual

Number: 9.2
Date: August 29, 2004
Revision: **August 15, 2012**
Effective: December 1, 2007

Submission of Routine Cheese Samples for Laboratory Testing

The Lynchburg laboratory is prepared to perform specific pathogen testing on raw milk cheese samples and pasteurized milk cheese samples made from cow's, goat's or sheep's milk. The Warrenton Laboratory is prepared to test each cheese sample for fats and solids.

Inspectors responsible for sampling at permitted cheese plants shall collect and submit their cheese samples to the Lynchburg Laboratory so that they are **physically received** by the Lynchburg Laboratory before 4:30 PM on the **second Friday** of each sampling month. Inspectors will be divided into two groups with approximately **30** cheese samples being collected by each group each month as assigned below:

<u>Group One</u> Dansey Jones Hodges O'Neill Osborne	<u>Sampling Months</u> January April July October
<u>Group Two</u> Dorton Owen Yankey	<u>Sampling Months</u> February May August November

The collection of 30 samples will continue thru February 2013. Beginning with April 2013 the number of cheese samples collected will be reduced to 15 for each group which should be sustainable into the future.

Inspectors should contact the Lynchburg laboratory and notify them of the number of samples being collected and when they will be delivered. Samples should be submitted to your closest laboratory and they will ship them to the appropriate testing laboratory.

The Lynchburg laboratory will run the VIDAS screening test for *Campylobacter*, *Escherichia coli* 0157:H7, *Listeria monocytogenes*, and *Salmonella* on each of the

samples. If any test result is positive, confirmatory testing will be performed for the specific organism which screened positive.

To facilitate the orderly submission of samples to the laboratory please comply with the following:

1. Please collect a minimum of **8** ounces of raw milk (cow, goat, sheep, or water buffalo) and **8** ounces of a plain cheese variety for testing. Each **8** ounce sample will be divided into two 4 ounce samples. One 4 ounce sample will be used to perform four separate tests (one for each pathogen we screen for) in Lynchburg. The other 4 ounce sample will be shipped to Warrenton for fats and solids testing. When possible collect two 4 ounce samples of each cheese to avoid dividing one 8 ounce sample. If a plain cheese variety is not available, collect a sample of what is available;
2. Please collect and submit samples from each cheese processor under your inspection quarterly;
3. Please submit a maximum of four cheese samples from any one processor each time you submit samples for VIDAS testing. If available, cheese samples should consist of cheeses made from both raw milk and pasteurized milk. Never collect a sample of raw milk cheese that has not been aged a minimum of sixty days;
4. All samples need to be delivered to the Lynchburg laboratory not later than 4:30 PM on the second Friday of each sampling month. This time requirement does not apply to the Warrenton laboratory.
5. All samples need to be delivered fresh, not frozen;
6. Because of the need for laboratory personnel to prepare media and to group the samples for the efficient use of personnel time, please call and schedule your sample submissions with **Lynchburg laboratory personnel** prior to collecting and shipping any samples;
7. Please record in the "Name of Product" area the species of animal (cow, goat, sheep, buffalo or mixture of goat and cow, etc.) whose milk was used to make the cheese for each sample submitted;
8. Please record your samples on a D&F 16A form used for cheese products. In the area of the form "To Be Analyzed For: Other _____" please record the term "VIDAS" and check the block for fats and solids;
9. Please record in the area of the form "Send Copies To: Other _____" the phrase "SEND ALL COPIES TO RICHMOND OFFICE" (the Richmond Office will distribute the copies); and

10. Please remember to include your home address in the shipping container used to ship the samples to Lynchburg so that it may be returned to you for reuse.

Other Testing of Cheese Samples

Inspection results may indicate the need for additional testing. VDACS labs can test cheese samples for a variety of things including: total coliform, presence of *Escherichia coli* and *Staphylococcus aureus* or other pathogens. There are not any specific standards for these tests and submission of samples should only be made to follow up on inspection findings. These samples should not be submitted on a routine basis.

Standard of Identity testing for percent fat, moisture and solids can also be conducted to verify which category of cheese is being produced. Standard of identity testing is expensive and should only be done on an as-needed basis.

Sample Size

Collect a **minimum of 8 ounces of each cheese for testing.**

Inhibitory Substances/Drug Residues

Certain mold ripened cheeses like **Camembert** contain Penicillin in their surface layer because they are inoculated with *Penicillium candidum*. These cheeses should never be submitted for drug residue testing.

Phosphatase Testing

Many ingredients interfere with the phosphatase tests which are why only plain flavors of pasteurized cheese are routinely submitted for analysis. Samples of **Cheddar Cheese with Chives** have tested positive for phosphatase in the past and should not be tested for phosphatase.

Likewise, samples of **Camembert** from pasteurized milk have test positive for phosphatase. The phosphatase produced by molds is different from the phosphatase produced by bacteria, and the heat step used to distinguish bacterial phosphatase from milk phosphatase doesn't work when the phosphatase is produced by molds. Both milk and mold phosphatase are heat labile (they are eliminated by the heat step), while bacterial phosphatase is heat stable. It is recommended that the outer layer of moldy cheeses be completely removed prior to testing the cheese for phosphatase, but to eliminate any questions about results we **will not test Camembert or other moldy rind cheeses for phosphatase.**

Dairy Services Policy and Procedure Manual

Number: 10.1

Date: December 21, 1998

Revision: June 27, 2012

Effective: December 1, 2007

Fats and Solids Testing of Frozen Desserts

All testing for fats and solids will be performed in the Warrenton VDACS Laboratory using the Perten DA 7200 Diode Array Near-Infrared Analyzer.

In order to standardize the submission of samples for fats and solids testing please use the following guidelines when submitting frozen desserts samples for fats and solids testing:

For fats and solids testing submit ice cream, sherbet, quiescently frozen dairy confections and ice cream mix samples. Chocolate and bulky flavors like fruits and nuts should also be submitted.

Water ices, frozen yogurt, gelato and quiescently frozen confections should not be submitted for fats and solids testing.

Dairy Services Policy and Procedure Manual

Number: 11.1

Date: October 1, 2007

Revision: August 15, 2012

Effective: December 1, 2007

WATER SAMPLE COLLECTION PROCEDURES FOR DAIRY INSPECTORS

These procedures apply to the taking of water samples from dairy farms, cheese plants, and other establishments. Procedures to be used for sampling "sweet" water are covered in the attached memorandum "Farm and Plant Cooling Water Sample Testing Procedures".

Inspectors should try to schedule all water samples to be delivered to the laboratory on Monday, Tuesday, or Wednesday. The persons doing the testing in the laboratory are required to begin processing the sample within 30 hours of the time of collection. This should be considered when scheduling delivery times with the laboratory so that adequate time is allowed for the testing to begin before the 30 hour deadline.

Inspectors should test every water supply prior to sampling for the presence of chemical treatment (chlorine or iodine). Supplies which test positive for chlorine or iodine, but which are not continually treated should not be sampled until the water supply tests negative for chemical treatment.

Samples should be collected in the sealed, sterile bottles containing thiosulfate that are provided by your supervisor.

Samples should be collected from the milkhouse from one of the cold water lines that is most frequently used. Avoid collecting samples from rubber hoses and from faucets that have screens or filters.

Turn on the water to a moderate rate with a stream about the size of your little finger and allow to run at least 5 minutes. Break the seal and remove the cap from the sampling bottle, taking care not to touch the inside of the bottle or inside of the cap. Do not rinse the bottle. Carefully fill the bottle to the fill line. Do not overfill and avoid splashing water on the outside of the bottle. Tighten the cap securely, properly identify the sample, and place it in a clean cooler. A clean cooler will ensure that the samples are kept in a clean environment and the cooler will also protect the samples from extreme heat or cold and sunlight.

Complete the water transcript. If it is necessary to collect the sample at a location other than the milkroom, note the location on the transcript. If the supply is treated with

Virginia Department of Agriculture & Consumer Services, Office of Dairy and Foods
 Report of Bacteriological Examination of Water

Permit: _____ Type/No Supplies: Drilled Well ___ Bored Well ___ Spring ___
 Date & _____ AM
 Time Collected: ___ / ___ / ___ : ___ PM By Insp: _____ No: ___

Milkhouse Sample: Yes ___ No ___ Treatment: None ___ Chlorine ___ Iodine ___ Ultraviolet ___

Residual Chlorine: _____ PPM Residual Iodine: _____ PPM

Record Name and Address in Block Below

Type of Water Sample

Farm Supply ___ Farm Cooling ___

Plant Supply ___ Plant Cooling ___

----- FOLD ON THIS LINE ----- FOLD ON THIS LINE -----

Laboratory: Harr ___ Ivor ___ Lynch ___ Warr ___ Wyth ___

LAB USE ONLY – ANALYSIS WORKSHEET

Lab _____ Insp _____ Date/Time _____ AM
 Samp # _____ Samp # _____ Received: ___ / ___ / ___ : ___ PM

	Date	Time	Result
Colisure Set			
Colisure Read (24-48 hr)			Neg Pos Yellow Magenta
Check Positive Colisure Test for Flurescence			Fluorescent? No: Yes:

Reported Results: Total Coliforms Absent _____ Total Coliforms Present _____

E. coli Absent _____ E. coli Present _____

Sample Found to be: Satisfactory _____ Unsatisfactory _____

Remarks:

Date Reported: _____ Analyst: _____

Send Copies to: Addressee, Office, Inspector, Other: _____

Dairy Services Policy and Procedure Manual

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Effective: December 1, 2007

WEIGHER AND SAMPLER EVALUATION PROGRAM TANK TRUCK INSPECTIONS

New requirements have been added by the Food and Drug Administration's Milk Safety Branch. It is now required that anyone weighing and sampling milk must be evaluated a minimum of once every two years. As well, milk tank trucks must be inspected once a year. Dairy Inspectors with assigned sampling locations are responsible for these evaluations and tank truck inspections.

These are all debitable items on check ratings performed by FDA Regional Milk Specialists and ratings done by the Virginia Department of Health for both the milk supply and enforcement rating for Dairy Services.

A. MILK HAULER EVALUATIONS

Milk Hauler (termed licensed weigher and sampler) evaluations should be performed on each licensed weigher and sampler a minimum of once every two years. When a hauler is issued a new permit, he should be evaluated within thirty days.

1. Every effort should be made to evaluate those who drive regularly. When a hauler is issued a new permit, the inspector who gives the test to the hauler should find out which dairy inspector's territory the hauler will be operating in and report this to the regional manager so that the hauler may be assigned to the appropriate inspector for future evaluations.
2. Those who pick up milk so infrequently that evaluation can not be reasonably done, should be indicated on a list and given to the inspector's Regional Manager to help complete the records that will be kept on the Evaluation Program.
3. Licensed weigher and sampler evaluations should be reported by the inspectors on the monthly report form.

B. DAIRY PLANT SAMPLERS

Dairy plant samplers (all individuals who collect milk samples from farm bulk milk

pickup tank, transport tanks, and/or raw and pasteurized milk silos) at milk plants, receiving stations and transfer stations must be evaluated for their milk handling/sampling practices a minimum of once every two years. Dairy plant samplers need to be evaluated by completing Form FDA 2399 DAIRY PLANT SAMPLING - RAW AND PASTEURIZED MILK.

Dairy Plant Samplers include state and local sanitarians who routinely collect milk samples at the plants. State and local sanitarians will be evaluated by Virginia Department of Health officials.

C. MILK TANK TRUCK INSPECTIONS

Each milk tank truck used to pick up farm bulk milk must be inspected annually. Milk tank truck inspections must now be reported on Form FDA 2399 B. A copy of the last inspection needs to be kept with the tanker so that it may be presented as proof of inspection. The lack of the last inspection sheet will be a debitable item.

EVALUATION FORMS

1. The inspector should fill out the appropriate evaluation form for the type weigher and sampler a minimum of once every two years, but preferably more often if there is an opportunity to observe most of the weigher and sampler's procedures while sampling on one or more farms or at the dairy plants, receiving station and /or transfer stations. New weigher and samplers should be evaluated within 30 days of being permitted or hired, such as a new person in the receiving bay at a milk plant.
2. If the inspector should observe violations while the weigher and sampler is on the farm in the process of picking up milk, or after the weigher and sampler has left the farm, such as a partial pickup, at the receiving area, during milk sampling at the plant, or other situations where an evaluation of the entire sampling procedure can not be made, a sanitary observation sheet with the weigher and sampler's name, permit number, sub- contract hauler's name, and addresses should be filled out with violations noted. These should be handled as described below:
 - A. The evaluation sheets (forms FDA 2399, FDA 2399A or FDA 2399B) or sanitary observation sheet should be filled out thoroughly each time with the licensed weigher and sampler's permit number, sub-contract hauler's name, tanker number, etc.

The top portion of the inspection sheet/sanitary observation sheet needs to be as complete as possible for record keeping and correspondence purposes.

- B. The bottom part of the remarks column on the evaluation sheet and the entire "objectionable conditions" section is available for inspector's additional facts or observations concerning the weigher and sampler's milk handling/ sampling practices. This information may be helpful to the Regional Manager in evaluating a need for action against the weigher and sampler's permit or for use when corresponding with the sub-contract hauler.
3. Recommendations to the Regional Manager from the inspector concerning action against the weigher and sampler's permit should be made on a separate piece of paper and attached to the evaluation/ sanitary observation sheet but should not be put on documents provided to the weigher and sampler or sub-contract hauler. Distribution of copies are as follows:
- A. The original copy of the evaluation sheet should be given to the weigher and sampler. The violations observed should be marked on the inspection sheet and discussed with the weigher and sampler.
 - B. A carbon copy of the evaluation should be sent to the inspector's Regional Manager.
 - C. If a copy of the evaluation or sanitary observation sheet can not be properly completed to hand to the weigher and sampler at the time the evaluation is made, the original copy should be mailed to the weigher and sampler and carbon copy sent to the Regional Manager.
 - D. Inspectors should record date of evaluations for assigned weigher and samplers in their record books.

PROCEDURES FOR REGIONAL MANAGERS

Assignment of weigher and samplers (milk haulers) to inspectors for the purpose of evaluation will be done by the Regional Managers. Once weigher and sampler applications (in the case of milk haulers) have been processed in the Richmond office and permits have been issued, a list of weigher and samplers with permit number, sub-contract hauler and other necessary information will be sent to the Regional Managers for the purpose of assigning them to an inspector to evaluate.

1. Milk hauler assignments need to be reported back to the Richmond office for record keeping purposes.
2. Regional Managers will be responsible for keeping records pertaining to evaluations done by inspectors in their regions. All evaluations/sanitary observations will be forwarded by the inspectors to their regional office.

The Regional Managers will make copies of the evaluations/ sanitary observation sheets to place in a file for each weigher and samplers assigned to their region.

Evaluations for haulers assigned to other regions should be forwarded to the Regional Manager in the appropriate region for the record keeping purposes.

Copies of weigher and sampler evaluations should be forwarded to the Richmond office after being recorded so that they may be placed in the weigher and sampler's permanent record.

CORRESPONDENCE REQUESTING COMPLIANCE

Correspondence requesting compliance with the regulations and/or threatening action against the weigher and sampler's permit and/or sub-contract hauler will be done by the State Sampling Surveillance Officer. It will be the Sampling Surveillance Officer's responsibility to:

1. **Write warning** letters to the weigher and samplers concerning evaluations done by inspectors which indicate habitual violations of proper milk handling and sampling practices.
2. Write letters to sub-contract haulers concerning tanker (and parts) repairs, replacement of sampling equipment, sample storage containers, tanker identification, etc.
3. Write letters and/or request for compliance with the regulations to weigher and samplers and sub-contract haulers concerning practices, such as split shipments of milk or other such practices, involving the sub-contract hauler which is debited against the weigher and sampler's permit.
4. Send copies of weigher and sampler evaluations/sanitary observation sheets to the sub-contract haulers who employ these individuals along with correspondence requesting compliance for debits against the weigher and sampler's permit which involve action or responsibility on the part of the sub-contract hauler.
5. Any correspondence which recommends stringent actions/revocation of the weigher and sampler's permit or against the sub-contract must be approved by the Program Manager. Action, such as permit revocation, will require a hearing as do actions against Grade "A" permits.

WHEN ACTION SHOULD BE TAKEN

Two consecutive violations of the same type or several serious violations observed during the same pickup warrant a warning letter to the weigher and sampler, with a copy to the Richmond office. Correspondence concerning action against weighers and samplers and/or sub-contract haulers should be accompanied by notice of right to a hearing.

1. Regional managers will be responsible for keeping records pertaining to evaluations

done by inspectors in their regions. All evaluations/ sanitary observations will be forwarded by the inspectors to their regional office.

2. Evaluations for haulers assigned to other regions should be forwarded to the regional manager in the appropriate region for the record keeping purposes.
3. Copies of weigher and sampler evaluations should be forwarded to the Richmond office after being recorded so that they may be placed in the weigher and sampler's permanent record.

Text from 1999 PMO which reviews all the requirements for the weighing and **sampling program for which Dairy Services is now responsible has been added and follows.**

APPENDIX B. MILK SAMPLING, HAULING, AND TRANSPORTATION

Milk hauling, sampling and transport are integral parts of a modern dairy industry. Hauling, sampling and transport can be categorized into three separate functions. Dairy Plant Samplers, Bulk Milk Hauling, and Sampling and Milk Transport from one milk handing facility to another.

1. MILK SAMPLING AND HAULING PROCEDURES

The dairy plant sampler is an individual responsible for the collection of official samples for regulatory purposes outlined in Section 6 of the *Grade "A" Pasteurized Milk Ordinance*. These persons are employees of the regulatory agency or an official designee of the regulatory agency and are evaluated at least every two-year period by the State Sampling Surveillance Officer. These individuals are evaluated using FDA form 2399--MILK SAMPLE COLLECTOR EVALUATION FORM, which is derived from *Standard Methods for the Examination of Dairy Products*, (most current edition, issued by the American Public Health Association n). A copy of this form is included in this appendix.

The bulk milk hauler/sampler is any person who collects official samples and may transport raw milk from a farm and/or raw milk products to or from a milk plant, receiving station or transfer station and has in their possession a permit from any state to sample such products. The bulk milk hauler/sampler occupies a unique position making this individual a critical factor in the current structure of milk marketing. As a weigher and sampler, they stand as the official, and frequently the only judge of milk volumes bought and sold. As a milk receiver, the operating habits directly affect the quality and safety of milk committed to their care. When the obligations include the collection and delivery of samples for laboratory analysis, the hauler/sampler becomes a vital part of the quality control and regulatory programs affecting producer dairies. Section 3 of the *Grade "A " Pasteurized Milk Ordinance* requires that regulatory agencies establish criteria for issuing permits to bulk milk hauler/samplers. These individuals are evaluated at least once each two years using FDA form 2399a--MILK TANK TRUCK, HAULER REPORT

AND SAMPLER EVALUATION FORM.

The milk tank truck driver is any person who transports raw or pasteurized milk products to or from a milk plant, receiving station or transfer station. Any transportation of a direct farm pickup requires the milk tank truck driver to have responsibility for accompanying official samples.

The criteria for permitting these individuals should embrace at least the following:

TRAINING: To understand the importance of bulk milk collection and the techniques of sampling, all bulk milk hauler/samplers must be told why, and instructed how, in the proper procedures of picking up milk and the collection of samples. This training is industry's responsibility and can be accomplished under the supervision of the dairy fieldman, route supervisors or any appropriate person whose techniques and practices are known to meet requirements.

Training also frequently takes the form of classroom sessions in which the trainer describes pickup practices, demonstrates sampling and care of samples and affords the candidate the opportunity for guided practice in these techniques. Basic considerations of sanitation and personal cleanliness, which are important to the protection of milk quality, are discussed here. Officials administering weights and measures frequently participate in these programs and provide instruction in the measuring of milk and the keeping of required records. An examination is usually administered at the conclusion of this program. Candidates failing the test are denied permits until indicated deficiencies are corrected.

Regularly scheduled refresher short courses by the regulatory agents and officials administering weights and measures, would assist in maintaining and increasing the efficiency of the hauler/sampler.

QUALIFICATIONS:

4. Experience. Experience may include a required period of observation in which the candidate accompanies a bulk milk hauler/sampler in the performance of their duties.
5. Personal References. Permit applications should be supported by suitable references testifying to the character and integrity of the candidate.

EVALUATION OF HAULER/SAMPLER AND PROCEDURES:

The routine inspection of hauling/ sampling procedures provides the regulatory agency with an opportunity to check both the condition of the hauler/sampler's equipment and the degree of conformance with required practices.

The hauler/sampler's technique is best determined when the regulatory agent is able to observe the hauler/sampler at one or more farms. Each bulk milk hauler/ sampler must be inspected by the regulatory agency prior to the issuance of a permit and at least

once every 24 months thereafter as referenced in Section 5 of the PMO. The bulk milk hauler/sampler must hold a valid permit prior to collection of official samples.

The procedures for sampling and the care of samples, should be in compliance with *Standard Methods for the Examination of Dairy Products* of the American Public Health Association.

Specific items to be evaluated in determining compliance include:

1. **Personal Appearance.** Hauler/samplers shall practice good hygiene, shall maintain a neat and clean appearance and not use tobacco in the milk room.
2. **Equipment Requirements.**
 - a. Sample rack and compartment to hold all samples collected.
 - b. Refrigerant to hold temperature of milk samples between 0 - 4.4 °C (32 -40 °F).
 - c. Sample dipper or other sampling devices of sanitary design approved by the regulatory agency, clean and in good repair.
 - d. Sterile sample bags, tubes or bottles, properly stored.
 - e. Calibrated pocket thermometer certified for accuracy every 6 months, accuracy + or - 1° C (2°F).
 - f. Approved sanitizing agent and sample dipper container.
 - g. Watch for timing milk agitation.
 - h. Applicable sanitizer test kit.
3. **Milk Quality Checks.**
 - a. Examine the milk by sight and smell for any off odor or any other abnormalities which would class the milk as not being acceptable (reject if necessary).
 - b. **Wash hands** thoroughly and dry with a clean single service towel or acceptable air dryer immediately prior to measuring and/or sampling the milk.
 - c. **Record milk temperature, time, date of pick up and** hauler/sampler identification on the farm weight ticket; monthly the hauler/sampler shall check the accuracy of the thermometer on each bulk tank and record results. Pocket thermometer must be sanitized before use.
4. **Milk Measurements.**

- a. The measurement of the milk shall be taken before agitation. If the agitator is running upon arrival at the milk room, the measurement can be taken only after the surface of the milk has been quiescent.
- b. Carefully insert the measuring rod, after it has been wiped dry with a single service towel, into the tank. Repeat this procedure until two identical measurements are taken. Record measurements on weight ticket.
- c. Do not contaminate the milk during measurement.

5. Universal Sampling System.

It is required that if hauler/samplers collect cow milk samples, the "universal sampling system" be employed, whereby milk samples are collected every time the milk is picked up at the farm. This system permits the enforcement agency, at its discretion, at any given time and without notification to the industry, to analyze samples collected by the hauler/sampler. The use of the "universal sample" puts more validity and faith in samples collected by industry personnel.

- a. Pick up and handling practices are conducted to prevent contamination of milk contact surfaces.
- b. The milk must be agitated a sufficient time to obtain a homogeneous blend. Follow State and/or manufacturer's guidelines.
- c. While the tank is being agitated, bring the sample container, dipper, dipper container and sanitizing agent (for outlet valve), or single-service sampling tubes into the milk room aseptically. Remove cap from tank outlet valve and examine for milk deposits or foreign matter and then sanitize if necessary. Remove cap from transfer hose, prevent contamination of hose cap.
- d. After the milk has been properly agitated, a sample may be taken. Remove dipper or sampling device from sanitizing solution or sterile container and rinse at least twice in the milk.
- e. Collect representative sample or samples from the farm tank. When transferring milk from the sampling equipment, caution should be used to assure that no milk is spilled back into the tank. Do not fill sampling container more than 3/4 full. Close cover on sample container.
- f. The sample dipper shall be rinsed free of milk and placed in its **carrying container**.
- g. Close cover or lid of bulk tank.
- h. The sample must be so identified with the producer's number at the point of collection.

- i. A **temperature control sample** must be taken on the first stop of each load. This sample must be labeled with time, date, temperature and producer and hauler/sampler identification.
- j. Place sample or samples immediately into the sample storage case.

6. Pump Out Procedures.

- a. Once measurement and sampling procedures are completed, with the agitator still running, open the outlet valve and start the pump. Turn off the agitator when the level of the milk is below the level that will cause over-agitation.
- b. When the milk has been removed from the tank, disconnect the hose from the outlet valve and cap the hose.
- c. Observe the walls and bottom of the tank for foreign matter or extraneous material and record any objectionable observations on the weight ticket.
- d. With the outlet valve open, thoroughly rinse the entire inside surface of the tank with warm water.

7. Sampling Responsibilities.

- a. All sample containers and single-service sampling tubes used for sampling shall comply with all the requirements that are in the *Standard Methods for the Examination of Dairy Products*. Samples shall be cooled to and held between 0°C (32°F) and 4°C (40°F) during transit to the laboratory.
- b. Means shall be provided to properly protect samples in sample case. Keep refrigerant at an acceptable level.
- c. Racks must be provided so that the **samples are properly** cooled in an ice bath.
- d. Adequate insulation of sample container box or ice chest shall be provided to maintain the proper temperature of the samples throughout the year.

The State Sampling Surveillance Officer conducts periodic evaluations of sampling procedures. This program will promote uniformity and compliance of sample collection procedures.

II. MILK TANK TRUCK PERMITTING AND INSPECTION

For the purposes of permitting and the inspection of a milk tank truck, the requirements established in Sections 3. and 5. of the *Grade "A " Pasteurized Milk Ordinance* are to be evaluated at least once each year using FDA form 2399b-MILK TANK TRUCK

INSPECTION FORM.

Permitting: Each milk tank truck shall bear a permit for the purpose of transporting milk and milk products. (Section 3 of the *Grade "A" Pasteurized Milk Ordinance*) This permit shall be issued to the owner of each milk tank truck by an authorized regulatory agency. It is recommended that this permit be renewed each year pending satisfactory completion of an inspection as outlined in the following "Inspection: " section.

Reciprocity: Each permit shall be recognized by other regulatory agencies under the reciprocal agreements of the National Conference on Interstate Milk Shipments and supporting documents of the *Grade "A" Pasteurized Milk Ordinance*. A milk tank truck need only bear one permit from an appropriate regulatory agency. A milk tank truck may be inspected at any time when deemed appropriate by the regulatory agency. Absent proof of a current permit and current inspection, when the milk tank truck is inspected by a regulatory agency other than the permitting agency, an inspection fee may be charged to the owner of the milk tank truck. This is necessary to allow a milk tank truck to pickup and deliver in several jurisdictions without the need for more than one permit. A regulatory agency may have the option of inspecting any milk tank truck at any time when milk and milk products are transported in or out of a particular jurisdiction. It is the responsibility of the milk tank truck owner or operator to maintain a current proof of inspection to avoid a re-inspection fee. Disputes concerning reciprocal agreements on milk tank truck inspection between regulatory agencies may be tendered to the Chairman of the National Conference on Interstate Milk Shipments or the chair's designee for resolution.

Inspection: Each milk tank truck shall be inspected at least once each year by a regulatory authority. (Section 5 of the *Grade "A" Pasteurized Milk Ordinance*) A copy of the current inspection report shall accompany the milk tank truck at all times.

When significant defects or violations are encountered by a regulatory authority, a copy of that report shall be forwarded to the permitting agency and also carried on the milk tank truck until the violations are corrected.

Milk tank truck inspection shall be conducted in a suitable location, i.e. a dairy plant, milk receiving or transfer station or milk tank truck cleaning facility. Inspection may not require entry of confined spaces as defined by the *OSHA* standards. When significant cleaning, construction or repair defects are noted the milk tank truck shall be removed from service until proper confined entry safety requirements can be satisfied to determine cleaning or repairs needed. Cleaning or repairs may be verified by a qualified individual to the satisfaction of the regulatory agency.

Inspection reports completed by regulatory authorities other than the permitting agency shall be forwarded to the permitting agency for verification of annual inspection as required in the 'permitting' section. The permitting agency may use these reports to satisfy permit requirements.

Milk Tank Truck Standards: All items of the milk tank truck inspection report fall into the categories of 'Compliance', 'Non Compliance' or 'Not Applicable' (NA) as determined during inspection.

1. Samples and Sampling Equipment. (When provided.)
 - a. Sample containers shall be stored to preclude contamination.
 - b. Sample box shall be in good repair and kept clean.
 - c. Sample transfer instrument shall be cleaned and sanitized to insure that proper samples are collected.
 - d. Sample transfer instrument container is provided and adequate means for maintaining sanitizer solutions is on hand.
 - e. Samples are properly stored to preclude contamination.
 - f. Sample storage compartment shall be clean.
 - g. Samples are maintained at an acceptable temperature (32°F to 40°F) and a temperature control sample is provided.
 - h. An approved thermometer is available for use by the sampler. (Accuracy of thermometer checked every six months with check recorded on carrying case.)
2. Product Temperature 45°F or Less.
 - a. Product temperature must meet all the requirements of Section 7, Item 18r and 17p, Cooling of Milk, of the Grade "A " Pasteurized Milk Ordinance.
 - b. Product that remains in external transfer systems that exceeds 45°F is discarded. (This includes pumps, hoses, air elimination equipment or metering systems.)
3. Equipment Construction, Cleaning, Sanitizing and Repair.

Items A. through K. on the MILK TANK TRUCK INSPECTION form shall be evaluated according to the following criteria:

- a. Construction and Repair Requirements.
 1. The milk tank truck and all appurtenances shall meet applicable requirements of Section 7, Item 10p. Sanitary Piping and Item 1 lp. Construction and Repair of Containers and Equipment, of the Grade "A " Pasteurized Milk Ordinance. Equipment manufactured in conformity with 3-A Sanitary Standards complies with sanitary design and construction requirements of this *Ordinance*.

2. The interior of the milk tank truck shall be constructed of smooth, non-absorbent, corrosion-resistant, non-toxic material and it shall be maintained in good repair.
3. The appurtenances of the milk tank truck includes hoses, pumps and fittings, shall be constructed of smooth, non-toxic cleanable material and shall be maintained in good repair. Where flexibility is required, the fluid transfer system shall be free draining and so supported to maintain uniform slope and alignment. They shall be easily disassembled and accessible for inspection.
4. The cabinet portion(s) of the tank, where applicable, used for storage of appurtenances and sampling equipment shall be constructed to preclude contamination by dust, dirt, and be clean and in good repair.
5. The milk tank truck dome lid assembly, vent and dust cover shall be designed to protect **the tank and** milk from contamination.

b. Cleaning and Sanitizing Requirements.

1. The milk tank truck and all of its appurtenances shall be cleaned and sanitized in accordance with applicable requirements of Section 7, Item 12p, Cleaning and Sanitizing of Containers and Equipment, of the *Grade "A Pasteurized Milk Ordinance*.
2. **The milk tank truck shall be cleaned and sanitized prior to first use. When time elapsed after cleaning and sanitizing before first use exceeds 72 hours, the tank must be re-sanitized.**
3. It is allowable to pickup multiple loads continuously within a 24-hour period provided that the milk tank truck is washed after each day used.
4. Exterior Condition of Tank. The exterior of the milk tank truck is properly constructed and in good repair. Defects and damage that would adversely affect products contained in the milk tank truck are pointed out on the inspection sheet and corrective actions are prescribed. Cleanliness of the milk tank truck exterior is evaluated with consideration for existing weather and environmental conditions.
5. Wash and Sanitize Record.
 - a. The bulk milk hauler/sampler shall be responsible for assuring that the milk tank truck has been properly cleaned and sanitized. A milk tank truck without proper cleaning and sanitizing documentation shall not be loaded or unloaded until the proper cleaning and sanitation can be verified.

- b. A cleaning and sanitizing tag shall be affixed to the outlet valve of the milk tank truck until the milk tank truck is next washed. When the milk tank truck is washed, the previous cleaning and sanitizing tag shall be removed and stored at the location where the milk tank truck was washed for a period of no less than 15 days.
- c. The following information shall be recorded on the cleaning and sanitation tag:
 1. Identification of the milk tank truck.
 2. Date and time of day the milk tank truck was cleaned and sanitized.
 3. Location where the milk tank truck was cleaned and sanitized.
 4. Signature or initials of person who cleaned and sanitized the milk tank truck.
- d. The maintenance of all information on the cleaning **and sanitizing tag shall** be the responsibility of bulk milk hauler/sampler or the milk tank truck operator.

6. Location of Last Cleaning.

The location of the last cleaning shall be verified by the regulatory agency during any milk tank truck inspection and recorded on the inspection sheet.

7. Labeling.

The maintenance of all pertinent information on all shipping documents, shipping invoices, bills of lading or weight tickets is the responsibility of the bulk milk hauler/sampler. A milk tank truck transporting raw, heat-treated or pasteurized milk and milk products to a milk plant from another milk plant, receiving or transfer station is required to be marked with the name and address of the milk plant or hauler and the milk tank truck shall be under a proper seal. All shipping documents must contain the following information as outlined in Section 4. - Labeling of the Grade "A " Pasteurized Milk Ordinance.

- a. Shipper's name, address, and permit number. Each milk tank truck load of milk shall include the IS Bulk Tank Unit (BTU) identification number(s) or the IS listed Plant Number (for farm groups listed with a plant) on the weight ticket or manifest.
- b. Permit identification of hauler, if not an employee of the shipper.
- c. Point of origin of shipment.

- d. Milk tank truck identification number.
- e. Name of product.
- f. Weight of product.
- g. Temperature of product when loaded.
- h. Date of shipment.
- i. Name of supervising regulatory agency at the point of origin of shipment.
- j. Whether the contents are raw, pasteurized, or in the case of cream, lowfat or skim milk, whether it has been heat-treated.
- k. Seal number on inlet, outlet, wash connections and vents.
- l. Grade of product.

All information contained on the above described documents shall be verified by the regulatory agency and recorded on the appropriate inspection sheet for any bulk milk tank trucks under inspection.

8. Vehicle and Milk tank trucks Properly Identified.

It shall be the responsibility of the milk tank truck owner or operator to insure the proper and legible identification of the milk tank truck in their possession.

9. Previous Inspection Sheet Available.

When a milk tank truck transports milk and milk products from one regulatory jurisdiction to another it is not necessary to inspect each milk tank truck upon each arrival. Tank truck owners and operators shall carry proof of annual inspection from a recognized regulatory agency. A milk tank truck may be inspected at any time or at the discretion of any regulatory agency responsible for the milk supply.

10. Sample Chain of Custody.

When samples for official laboratory analysis are transported by any individual where sample chain-of-custody must be established, the driver may be required to carry a valid permit for the collection of samples for official laboratory analysis. As an alternative, a sample case sealed as required by the regulatory agency may be accepted.

Memo

To: Dairy Inspectors
From: Donna B. Izac
Subject: Milk hauler evaluations
Date: May 18, 1998
CC: John A. Beers

W. J. Farley, Jr.

I recently worked with Lloyd Kinzel to become re-certified as the Milk Sampling Surveillance Officer for the state. It became apparent during the evaluation procedure that there needs to be more emphasis on proper training and instruction to the milk haulers when evaluating them. The things that were obvious and are routinely NOT done are:

1. Milk haulers rarely use thermometers if they have them at all. Most of the haulers we worked with were debited for not having them and/or not having them calibrated. All haulers should have a thermometer in the truck; should have them checked for calibration frequently by an inspector. Since it is difficult to attach that information to the thermometer, it has been suggested that the date and name of the person checking the thermometer be written on the back of the hauler's license. As well, the hauler should use this thermometer to check the milk temperature and put that information on the recording thermometer charts.
2. The milk haulers are getting debited for dippers which are either dirty or improperly constructed. Lloyd suggested that each hauler carry his own dipper and dipper case with the proper strength sanitizer in the dipper case. Many haulers already do that.

For those of you whose haulers use the dippers on the farm, please ask your dairymen to provide a properly constructed dipper and a clean plastic jug with fresh sanitizer somewhere obvious in the milkroom so that the hauler can use that to get that producer's sample. Also, please inspect the dippers so they can be replaced when needed. Dippers stored and cleaned in the wash vat are not considered properly sanitized unless they are clean and wet with sanitizing solution just like any other milk contact surface. Many of the haulers I worked with last week got debited for the dippers the dairymen provided for them to use and for the condition of the sanitizing solutions. Let's help the haulers do the best job they can on the farms!

3. Lloyd suggested that the haulers use test strips to test the strength of sanitizer prior to sanitizing dipper. I realize that most of the time we are lucky if we can get the milk haulers to use sanitizer much less get them to use test strips to check the strength, but they do get debited if they don't use them or if the sanitizer is too weak, dirty or too strong.
4. In many instances, we found samples floating in iced water or buried under the ice. Some sort of coated metal or floating styrofoam rack to place samples in would prevent debits for these conditions.

As Milk Sampling Surveillance Officer for the State, I delegate my authority to evaluate milk haulers to the inspectors. Lloyd told me that I needed to work with each inspector evaluating milk haulers in the same manner that we survey the farms for each inspector. I will be asking to work with each of you and haulers in your territories in the next couple of months, as per Lloyd's direction.

Over the years, the hauler program has been neglected. It needs more attention than it is getting. If you hear of hauler meetings in your area, please let me know so that either I can attend them to provide some training or I can provide you with training materials.

Recently, Lloyd was in the office reviewing records. His suggestion was that each newly permitted milk hauler be evaluated within a 30 day period. If you permit someone at a milk plant who does not pick up milk in your area, please let the inspector for the area where the hauler picks up milk know that you have permitted a new person so that the inspector can follow-up on that hauler. When you do evaluate milk haulers, please take the time to mention the above items and ask for correction of problems observed on the farm.

Thanks for your help.

Dairy Services Policy and Procedure Manual

Number: 13.1
Date: August 1, 1994
Revision: October 1, 2007
Effective: December 1, 2007

UNIFORM RETAIL FROZEN DESSERTS ESTABLISHMENT INSPECTION AND SAMPLING PROGRAM

A. INTENT, SCOPE AND INTERPRETATION:

The Virginia Department of Agriculture and Consumer Services in conjunction with the Virginia Department of Health finds and declares that a uniform retail frozen desserts establishment inspection and sampling program is needed to govern the production, processing, labeling, and distribution of ice cream and similar products within the Commonwealth of Virginia. This program relating to ice cream and similar products shall be applicable throughout the Commonwealth of Virginia and shall be enforced on a statewide basis. Products produced, processed, or manufactured under the provisions of this program may be sold in all counties, cities, and towns in this state. They shall not be subject to regulation by ordinance or otherwise to supervision, or to inspection by any political subdivision.

B. DIVISION OF INSPECTION RESPONSIBILITIES:

1. MEMORANDUM OF UNDERSTANDING Between The Virginia Department of Health and The Virginia Department of Agriculture and Consumer Services MILK, FROZEN DESSERTS AND FOOD SANITATION PROGRAM

Section II. Ice Cream and Similar Products Law

The Commissioner of Agriculture and Consumer Services and his agents are charged with administering and enforcing all regulations adopted under the Ice Cream and Similar Products Law; however, to prevent unnecessary duplication of effort and to ensure that each establishment will be inspected by one regulatory agency, the following is agreed:

a. Permits:

1. VDH will initiate the issuance, suspension, reinstatement and revocation of permits for all frozen desserts plants which are an integral part of any premise including Grade "A" milk plants, hotels, restaurants, and mobile units where frozen desserts are frozen or partially frozen or dispensed for sale at retail normally permitted by VDH pursuant to Sections 35.1-1 to -26

and Section 3.1-562.6 of the Code of Virginia.

2. VDACS will initiate the issuance, suspension, reinstatement and revocation of permits for frozen desserts plants which do not qualify for a permit issued by VDH. VDACS shall issue a permit to these establishments under the provisions of Section 3.1-562.6 of the Code of Virginia. Also, the VDACS will issue a permit to all out-of-state firms who desire to manufacture ice cream and similar products, including mix, for sale in the Commonwealth of Virginia.

b. Inspections:

VDH will inspect all places or premises permitted by VDH as often as necessary to insure compliance with all applicable laws, rules and regulations. VDACS will inspect all places permitted by VDACS as often as necessary to insure compliance with all applicable laws, rules and regulations, including Section 7.1 or 2 VAC 5-510-10 thru 2 VAC 5-510-660, RULES AND REGULATIONS GOVERNING THE PRODUCTION, PROCESSING AND SALE OF ICE CREAM, FROZEN DESSERTS AND SIMILAR PRODUCTS.

c. Sampling and Testing:

VDH will be responsible for the regular collection and analysis of samples from places permitted by VDH as often as necessary to insure compliance with all applicable laws, rules and regulations. VDACS will be responsible for regular collection and analysis of samples from places permitted by VDACS as often as necessary to insure compliance with all applicable laws, rules and regulations.

2. In accordance with the Memorandum of Understanding Between the Virginia Department of Agriculture and Consumer Services and The Virginia Department of Health titled "MILK, FROZEN DESSERTS AND FOOD SANITATION PROGRAM," the following interpretation of Section II. Ice Cream and Similar Products Law, part A. Permits, paragraph two concerning Frozen Desserts Retail Establishments is provided.

VDACS will be responsible for inspection and sampling activities at all those frozen desserts retail establishments which:

- a. are an integral part of any retail grocery store, retail food store, convenience food store or similar establishment where frozen desserts or frozen desserts mix are regularly processed and served or sold at retail which do not qualify for a permit from the Virginia Department of Health; or
- b. derive their principle income by processing and/or selling ice cream, frozen

desserts and similar products as defined in 2 VAC 5-510-10 thru 2 VAC 5-510-660, RULES AND REGULATIONS GOVERNING THE PRODUCTION, PROCESSING AND SALE OF ICE CREAM, FROZEN DESSERTS AND SIMILAR PRODUCTS, PURSUANT TO Section 3.1-562.1 through Section 3.1-562.10 Code of Virginia, beverages, toppings, condiments or other incidentals, but which do not otherwise qualify for a permit from the Virginia Department of Health.

C. PERMITS:

1. Frozen desserts retail establishments which produce ice cream, frozen desserts and similar products from only pre-packaged mix or reconstitute dry mix only with potable water for sale at retail and do not flavor the mix with anything other than pre-packaged, labeled flavorings intended for that purpose or add other ingredients to the mix prior to freezing and serving will not be issued a permit.
2. Frozen desserts retail establishments which produce ice cream, frozen desserts and similar products from mix and add or prepare and add flavorings not specifically labeled and intended for that purpose, eggs, fresh fruits, nuts, sweeteners or other ingredients prior to freezing will be required to obtain a permit from the Virginia Department of Agriculture and Consumer Services prior to offering for sale any product at wholesale or retail.

D. LABELING:

1. Name and address of manufacturer, statement of quantity, product identity and optional ingredients.
 - a. Any frozen dessert or frozen dessert mix in which a standard of identity has been established shall be deemed to be misbranded if in container or package form unless it bears a label containing:
 1. The name and address of the frozen desserts plant or retail establishment in which the frozen dessert or frozen dessert mix is manufactured, or the name and address of the manufacturer's principal office and a code designation approved by the Commissioner of Agriculture and Consumer Services identifying the plant or establishment in which the food was manufactured.
 2. An accurate statement of the quantity of content in terms of liquid measure.
 3. The name of the frozen dessert or frozen dessert mix defined under the standards of identity.
 4. The label statement of optional ingredients.

b. Where the frozen dessert or frozen dessert mix is not manufactured by the person whose name appears on the label, the label shall identify the manufacturing plant by a code designation approved by the Virginia Commissioner of Agriculture and Consumer Services.

E. FREQUENCY OF INSPECTION OF FROZEN DESSERTS RETAIL ESTABLISHMENTS:

1. Each frozen desserts retail establishment shall be inspected at least twice each year. One of these inspections should be performed after the equipment has been cleaned and is disassembled.
2. Violations discovered by inspection should be documented on the inspection report form, discussed with the operator of the frozen desserts retail establishment, and a re-inspect date determined. Repeat violations should be handled: (i) according to procedures established within the Virginia Department of Health to enforce requirements for restaurant permits; or (ii) according to procedures established within the Division of Dairy and Foods to enforce the requirements under the Virginia Food Law.

F. PRODUCT TEST PROCEDURES AND QUALITY REQUIREMENTS:

1. No routine sample testing program will be required for ice cream and frozen dessert products processed and sold in retail establishments. Samples may be collected at the discretion of the sanitarian or inspector to support inspection findings, respond to complaints, public health outbreaks or other information.
2. Products sampled shall be tested in accordance with tests and examinations contained in Standard Methods for the Examination of Dairy Products or Official Methods of Analysis of the Association of Official Analytical Chemist.
3. Quality standards for ice cream, frozen desserts and similar products shall comply with the following standards:

	Standard Plate Count Not More Than	Coliform Determination Not More Than
Plain or Vanilla flavored Frozen Dessert.....	50,000/gr.	10/gr.
Chocolate, fruit, nuts or other bulky flavored frozen dessert.....	50,000/gr.	20/gr.

A. ENFORCEMENT: ICE CREAM, FROZEN DESSERTS AND SIMILAR

PRODUCTS QUALITY STANDARDS:

1. Violation of the quality standards will be followed up by inspecting the frozen desserts retail establishment to determine the cause of the violation. Samples will be taken where appropriate.
2. Violations of the quality standards on two consecutive samples or the presence of E. coli bacteria may result in the suspension of production and sales until test results confirm compliance with the quality standards or in the case of repeated violations an administrative conference may be held requiring the frozen desserts retail establishment to show cause why they should be allowed to continue production and sale of ice cream, frozen desserts or similar products.

H. SPECIFICATIONS FOR FROZEN DESSERTS RETAIL ESTABLISHMENTS' PREMISES, BUILDINGS, FACILITIES, EQUIPMENT AND UTENSILS:

Retail frozen desserts establishments will comply with the inspection criteria of Rules and Regulations of the Board of Health Governing Restaurants and the Retail Food Store Regulations. The following is presented to provide guidance and training instruction.

1. RETAIL PREMISES.

The frozen desserts retail establishment premises and surroundings shall be kept clean, orderly and free from refuse and rubbish, smoke, excessive dust and air pollution, and strong or foul odors.

2. BUILDING.

- a. Buildings shall be of sound construction. The exterior and interior shall be kept clean and in good repair to protect against dust, dirt and smoke, and to prevent the entrance or harboring of insects, rodents, vermin and other animals.
- b. All rooms, compartments, coolers, freezers and dry storage space in which any mix, packaging material, ingredient supplies or finished products are handled, processed, packaged or stored shall be designed and constructed to assure clean and orderly operations. Toilet rooms supplied with hand washing facilities, hot and cold running water through a mix valve and single service towels or equivalent shall be provided and conveniently located. Doors on all toilet rooms shall be self-closing; and fixtures shall be kept clean and in good repair.

3. INTERIOR FINISHING.

Area below, above and around the operating equipment and freezer shall be constructed of easily cleanable materials, smooth, floors graded to drain where applicable and drains trapped.

4. VENTILATION AND LIGHTING.

- a. All rooms and compartments (including storage space and toilet room) shall be ventilated to maintain sanitary conditions, prevent undue condensation of water vapor, and minimize or eliminate objectionable odors.
- b. Lighting, whether natural or artificial, shall be of good quality and well distributed in all rooms and compartments where mix and frozen desserts are handled, processed, packaged or where equipment or utensils are washed. Light bulbs and fluorescent tubes shall be protected against breakage.

5. WATER SUPPLY.

Both hot and cold water of safe and sanitary quality shall be available in sufficient quantity for all operations and facilities. There shall be no cross-connection between safe and unsafe water lines or between private and public supply. Bacteriological examination of private water supplies shall be made at required frequencies.

6. DISPOSAL OF WASTE.

Approved sewage disposal shall be provided at each frozen desserts retail establishment sufficient in capacity to remove readily all waste from the premises.

7. EQUIPMENT AND UTENSILS:

a. CONSTRUCTION AND INSTALLATION.

1. Equipment and its installation shall comply with 3-A sanitary standards. Equipment and utensils coming in contact with mix or frozen desserts, including sanitary pumps, piping, fittings and connections, shall be constructed of stainless steel or other equally corrosion-resistant material. Nonmetallic parts having product contact surfaces shall be of materials that meet 3-A sanitary standards for plastic or rubber-like materials.
2. All equipment and piping shall be designed and installed to be easily accessible for cleaning, shall be kept in good repair, and free from cracks and corroded surfaces. Equipment shall be set away from any wall or spaced in such a manner to facilitate proper cleaning and good housekeeping. All parts or interior surfaces of equipment, pipes, or fittings, including valves and connections shall be accessible for inspection.

b. CLEANING AND SANITIZING.

1. For manual cleaning and sanitizing of equipment and utensils, a sink with two or three compartments shall be provided and used. Sink

compartments shall be large enough to accommodate the immersion of most equipment and utensils, and each compartment of the sink shall be supplied with hot and cold potable running water. Where immersion in sinks is impracticable (e.g., because equipment is too large), equipment and utensils shall be cleaned and sanitized manually or by pressure spray methods.

2. Drain boards or easily movable utensil tables of adequate size shall be provided for proper storage and handling of soiled utensils prior to cleaning and for cleaned utensils following sanitizing and shall be located so as not to interfere with proper use of the warewashing facilities.
3. The sinks shall be cleaned before use.
4. Equipment, sanitary piping, and utensils used in receiving, storing, processing, manufacturing, packaging, and handling milk, dairy products, mix or frozen desserts, and all product contact surfaces shall be cleaned after each use and at least once each day.
5. The packing glands on all agitators, pumps, and vats shall be inspected at regular intervals and kept clean.
6. After being cleaned and immediately before use, all equipment coming in contact with milk, dairy products, mix or frozen desserts shall have an effective bactericidal or sanitizing treatment.
7. Before use, equipment not designed for C-I-P cleaning shall have been disassembled and thoroughly cleaned and sanitized. Dairy cleaner, wetting agents, detergents, sanitizing agents, or other similar material may be used that will not contaminate or adversely affect dairy products. Steel wool or metal sponges shall not be used in the cleaning of any dairy equipment or utensils.
8. C-I-P cleaning shall be used only on equipment and pipeline systems that are designed and engineered for that purpose. Installation and cleaning procedures shall comply with 3-A Accepted Practices for Permanently Installed Sanitary Product - Pipelines and Cleaning Systems. An outline of the cleaning procedures to be followed shall be posted near C-I-P equipment.

8. OPERATIONS.

- a. Frozen desserts retail establishments which reconstitute powder or dry frozen desserts mix. Powder or dry frozen desserts mix shall be reconstituted with potable water in one of the following ways:

1. If the retail establishment possesses and uses a mechanical means capable of cooling the reconstituted mix to 45 degrees F within four hours, cold tap water may be used.
 2. If the retail establishment does not possess or use a mechanical means capable of cooling the reconstituted mix to 45 degrees F or below within four hours, only potable water at a temperature of 40 degrees F or below shall be used.
- b. Freezer cleaning. Equipment used to freeze frozen dessert mix shall be emptied and cleaned at least once each day unless otherwise designed and approved.
 - c. Rerun. Rerun is any product and/or mix salvaged for re-use from frozen dessert freezer machines when emptied. The use of rerun is not recommended. If product is salvaged and reused it must be handled in a sanitary manner, protected from contamination and properly refrigerated. Samples of unopened frozen dessert mix and frozen dessert product dispensed from freezers may be taken for comparison to demonstrate adulteration and support inspection findings.
 - d. Packaging. Frozen dessert mix remaining in the frozen desserts freezer may be packaged in properly labeled and designed containers and offered for sale at retail. Properly packaged frozen desserts shall be stored and displayed in freezers or cabinets capable of maintaining the products in a firm, frozen condition. Properly packaged frozen desserts shall not be sold or offered for sale except on the premises where packaged.
 - e. Thermometers. Each frozen dessert retail establishment shall have available a metal stem-type numerically scaled indicating thermometer, accurate to plus or minus 2 degrees Fahrenheit for use to assure attainment and maintenance of proper temperature during preparation and storage of frozen desserts mix and frozen desserts.

I. MOBILE FOOD UNITS:

Mobile food units will be inspected prior to registration to ensure their compliance with these requirements and at least yearly thereafter. Mobile food unit operators will be required to furnish the regulatory agency with their intended locations of operation, dates and times prior to setting up for business anywhere in the Commonwealth of Virginia and maintain their calendar on a continuous basis with the regulatory authority.

1. MINIMUM STANDARDS: Mobile food units shall comply with the following requirements except that the absence of toilet facilities shall be permitted.
 - a. Water supply. An approved potable water supply under pressure shall be

provided and kept in a supply tank having a capacity sufficient to furnish enough hot and cold water for food preparation, utensil cleaning and sanitizing, and hand washing as required by regulation but not less than 20 gallons. The tank shall be installed to permit complete drainage, and a suitable drain cock shall be provided. The water inlet pipe shall be of removable flexible copper or other approved tubing, with the nozzle for hose connection capped when not in use. A hose for connection to the potable water supply shall be provided, and it shall be equipped with an approved backflow prevention device.

- b. Personnel sanitation. A hand wash sink, with running hot and cold water, soap and single service or individual towels or mechanical hand dryer shall be provided.
- c. Waste-water tank. A suitable waste-water tank with a capacity at least 15% larger than the water storage tanks capacity shall be provided. The tank shall be installed to permit complete drainage and shall be provided with a suitable drain, emptied and flushed as often as necessary, and shall be maintained in a sanitary condition.
- d. Refrigeration. A refrigerated box capable of maintaining a temperature not exceeding 45 degrees Fahrenheit shall be provided for holding the various ingredients or frozen desserts mix. The box shall be of ample capacity and of stainless steel or other noncorrosive material. It shall be provided with metal racks or platforms or shelves on which to store products or ingredients and shall be equipped with an indicating thermometer.
- e. Partition. There shall be a partition or self-closing doors between the driver's seat and the manufacturing and serving area, unless an air conditioner is operating.
- f. Return to depot. Mobile food units that do not return to a depot each evening shall be equipped with hot and cold water and a sink large enough to accommodate the largest piece of equipment to be cleaned.
- g. A suitable refuse container with suitable cover shall be provided inside the vehicle. The outside of the mobile unit shall be equipped with a suitable waste container for the depositing of cups, cones, napkins, etc. by patrons.

2. OPERATING FROM DEPOT REQUIRED:

- a. All mobile food units, except those operated exclusively at fairs, outings, carnivals and other affairs of short duration, shall operate from depots. Such depots shall be large enough to accommodate one or more mobile food units for cleaning and sanitizing.

- b. Units shall return to their respective depots at least once a day for cleaning and sanitizing
- c. Depots shall comply with the following requirements:
 - 1. Walls. Walls shall be reasonably smooth and clean. There shall be no opening in the walls or at the base of doors where vermin or rodents may enter.
 - 2. Floors. The floors shall be constructed of impervious materials and shall be provided with a drain and sloped to the drain. The juncture of the floor and walls shall be coved.
 - 3. Ventilation. Adequate ventilation facilities shall be provided and shall be screened or otherwise protected to prevent the entrance of flies, other insects, vermin or rodents.
 - 4. Personnel sanitation. Suitable toilet facilities, hand washing facilities equipped with hot and cold running water, soap, single service towels or air dryers, clothes lockers and garbage cans shall be provided.
 - 5. Sink. A sink large enough to accommodate the largest piece of equipment to be washed, drain boards of impervious material and a sufficient supply of hot and cold running water shall be provided.
 - 6. Lighting. Adequate lighting shall be provided.
 - 7. Hoses. Hoses shall be equipped with a backflow prevention device to eliminate possible contamination from return flow, and hoses shall be stored to permit complete drainage and to avoid contamination.
 - 8. Drying rack. A metal pipe drying rack or its equivalent for drying utensils and equipment shall be provided.
 - 9. Storage of wastes. Suitable covered storage facilities or containers for all refuse and waste shall be provided. Refuse and waste shall be removed daily from each depot.
 - 10. Separation of areas. A physical separation between the area where the trucks are located and the area where food is stored shall be required.
 - 11. Storage of food. If frozen desserts, frozen desserts mix, flavors, syrups, fruit and other edible materials are stored at a depot, they shall be stored in rooms completely separated from rooms where cleaning and sanitizing are done. Food materials shall be kept at temperatures necessary to prevent spoilage and under conditions which will prevent contamination.

12. Water supply. Depots shall be equipped with an adequate supply of potable, hot and cold water from an approved source.

13. Water testing. Samples for bacteriological testing of individual water supplies shall be taken upon the initial approval of the supply, a frequency of not less than once every 12 months thereafter and when any repair or alteration of the water supply system has been made.

3. **PUSHCARTS:**

Mobile food units and pushcarts that serve only food that is prepared, packaged in individual servings, transported, and stored under conditions meeting the requirements of this program, or beverages that are not potentially hazardous and are dispensed from covered urns or other protected equipment, need not comply with those requirements pertaining to the necessity of water and sewage systems nor to those requirements pertaining to the cleaning and sanitization of equipment and utensils if the required equipment for cleaning and sanitization exist at the depot.

- a. Single service articles. Mobile food units and pushcarts shall provide only single-service articles for use by a consumer.
- b. Depot required. Mobile food units and pushcarts shall operate only from an approved depot.

Dairy Services Policy and Procedure Manual

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REGISTERING A NEW RETAIL FROZEN DESSERTS ESTABLISHMENT

Each retail frozen desserts establishment must complete the "RETAIL FROZEN DESSERTS REGISTRATION" form to register their firm in our database. It is essential for the perspective **business owner** to contact the local health department if the dip shop is located on private land to obtain approval for their drain field and the business they intend to operate. Water and waste needs are dependent on the specific type of business operated on the site. **Letters of approval from the local department of health must be obtained before registering and opening for business.** If the business model changes the business owners must advise the local department of health so they can determine if the drain field will be adequate after the change.

RETAIL FROZEN DESSERTS INSPECTIONS

When performing retail frozen desserts inspections, Dairy Services will use the Food Safety and Security Program's Inspection Report Form (See Copy of form following this section).

A. Completing the Inspection report:

1. If this is a new firm and/or has changed ownership since your last inspection, a Retail Frozen Desserts Registration form needs to be filled out by the owner. If the firm was operating under a previous owner, an inspection report with the term "OOB - Out of Business" should be sent in to cancel the record of the former owner. The new inspection report with the Firm# section left blank or with the term "NEW FIRM" and the completed registration form should be sent in with the cancellation papers for the old registration. An explanation, such as, "This business is under new ownership" and stating the name, address and telephone numbers in the remarks section is helpful, particularly if the name of the business (example: TCBY) has not changed.
2. Each of the 55 items on the inspection report are required to be marked as either "IN=in compliance", "OUT=not in compliance", "NO=not observed", or "NA=not applicable" under the column for "Compliance Status". "Compliance Status" is the first column after the item number. If an item is marked as "OUT" under the compliance column and it is corrected on-site during the inspection then mark the column labeled "COS" (forth column) with "COS" for that item also. If an item was marked on the most recent previous inspection and it is marked on the current inspection then record an "R" in the last column for that item.

In cases where a number of violations exist and it is necessary to further describe conditions present, the Inspector Comments area should be used. State objectionable conditions found during an inspection of a retail frozen desserts firm or dipshop. An example of the way to cite objectionable conditions is, "Employees working without hair restraints."

Terms for Classifying Inspection Sheets

It is important that inspectors understand inspection frequencies placed on inspection sheets when they are classifying an inspection must be observed. This should not affect the way a firm is classified because

the classification of the inspection is based on the number and nature of the violations observed and recorded. The following are guidelines for classifying inspections and the frequency guidelines which go with the classifications.

1. NAI - no action indicated; This classification indicates substantial compliance with the Virginia Food Laws. An NAI classification should be used when only minor violations are cited and there is no evidence of rodents or insects. This classification has a reinspection rate of a maximum of 6 months from the date of the last inspection.
2. VAI - Voluntary Action Indicated - This classification should be used when violations observed are not an immediate hazard. This classification would be used when minor insect problems exist, temperature violations of 5°F or less are observed, or sanitizer strips are not being used but the sanitizer is at acceptable concentration. A more frequent inspection rate is warranted. Reinspection of firms with this classification should be performed within two to three months after the last inspection but should not exceed 90 days from the date of the last inspection or the end of the month designated in the inspection classification. For example, if an inspection is classified as a VAI and you put May as the month of inspection, you must reinspect by the end of month of May unless that time period would be greater than 90 days.
3. OAI - Official action indicated; This classification should be used when serious violations are observed. Examples of violations which warrant an OIA classification are: temperature violations of the food product of 10°F or greater, rodent or significant insect activity, very dirty equipment or multiple pieces of equipment used in processing food and failure to sanitize equipment are violations for which an OAI classification would normally be used. As well, OAI should be used if previously marked violations of the same kind are not corrected since last inspection. A reinspection rate of 2 weeks to no more than 30 days from the date of the last inspection is warranted when an OAI classification is used. A warning letter may be sent to the client about conditions where grievous violations are noted.

COMMONWEALTH OF VIRGINIA
 Department of Agriculture & Consumer Service
 Food Safety and Security Program
 PO Box 1163
 Richmond, VA 23218

Inspection Report	No. of Critical Violations		Date:	
	No. of Repeat Violations		Time Spent:	
	No. of Non-Critical Violations		Telephone:	

Firm Name **INSTRUCTIONS:** Record in the column under "Compliance Status" one of the following for each item: "IN", "OUT", "NO" or "NA"
 Address If the item was Corrected On-Site then record "COS" under the column identified by "COS"
 City/State/Zip Code If the item is a "Repeat Violation" then record an "R" in the column identified by "R" for that item.

Firm #	Owner	Purpose of Inspection
Retail Frozen Desserts Shop	Mobile Unit	Other
Inspection Classifications	No Action Indicated	Voluntary Action Indicated
		Official Action Indicated
		Regulatory follow-up Inspection
		Next Inspection

Compliance Status		Violations	
IN	OUT	NO	NA
Compliance Status		Violations	
IN	OUT	NO	NA
Supervision			
1	NO	Person in charge present, demonstrates knowledge, & performs duties	
Employee Health			
2	NO	Management, food employee and conditional employee; knowledge, responsibilities and reporting	
3	NO	Proper use of reporting, restriction & exclusion	
Good Hygienic Practices			
4	IN	Proper eating, tasting, drinking, or tobacco use	
5	IN	No discharge from eyes, nose, and mouth	
Preventing Contamination by Hands			
6	IN	Hands clean & properly washed	
7	OUT	No bare hand contact with ready-to-eat foods or pre-approved alternate method properly followed	R
8	IN	Adequate handwashing facilities supplied & accessible	
Approved Source			
9	IN	Food obtained from approved source	
10	IN	Food received at proper temperature	
11	IN	Food in good condition, safe, & unadulterated	
12	NO	Required records available: shellstock tags, parasite destruction	
Protection from Contamination			
13	IN	Food separated and protected	
14	IN	Food-contact surfaces: cleaned & sanitized	
15	IN	Proper disposition of returned, previously served, reconditioned, & unsafe food	
Potentially Hazardous Food (Time/Temperature Control for Safety Food)			
16	NO	Proper cooking time & temperatures	
17	NO	Proper reheating procedures for hot holding	
18	OUT	Proper cooling time & temperatures	COS
19	NO	Proper hot holding temperatures	
20	IN	Proper cold holding temperatures	
21	IN	Proper date marking & disposition	
22	NO	Time as a public health control: procedures & records	
Consumer Advisory			
23	NO	Consumer advisory provided for raw or undercooked foods	
Chemical			
24	IN	Food additives: approved & properly used	
25	IN	Toxic substances properly identified, stored, & used	
Conformance with Approved Procedures			
26	NO	Compliance with variance, specialized process, and HACCP plan	
Safe Food & Water			
27	NO	Pasteurized eggs used where required	
28	IN	Water & ice from approved source	
Safe Food & Water			
29	NO	Variance obtained for specialized processing methods	
Food Temperature Control			
30	IN	Proper cooling methods used; adequate equipment for temperature control	
31	NO	Plant food properly cooked for hot holding	
32	IN	Approved thawing methods used	
33	IN	Thermometers provided & accurate	
Food Identification			
34	IN	Food properly labeled; original container	
Prevention of Food Contamination			
35	IN	Insects, rodents, & animals not present	
36	IN	Contamination prevented during food preparation, storage & display	
37	IN	Personal cleanliness	
38	IN	Wiping cloths: properly used & stored	
39	NO	Washing fruits & vegetables	
Proper Use of Utensils			
40	IN	In-use utensils: properly stored	
41	IN	Utensils, equipment & linens: properly stored, dried, & handled	
42	IN	Single-use & single-service articles: properly stored, & used	
43	IN	Gloves used properly	
Utensils, Equipment and Vending			
44	IN	Food & nonfood-contact surfaces cleanable, properly designed, constructed, & used	
45	IN	Warewashing facilities: installed, maintained, & used; test strips	
46	IN	Non-food contact surfaces clean	
Physical Facilities			
47	IN	Hot and cold water available; adequate pressure	
48	IN	Plumbing installed; proper backflow devices	
49	IN	Sewage & waste water properly disposed	
50	IN	Toilet facilities: properly constructed, supplied, & cleaned	
51	IN	Garbage & refuse properly disposed; facilities maintained	
52	IN	Physical facilities installed, maintained, & clean	
53	IN	Adequate ventilation & lighting; designated areas used	
Preoperational Inspections and Plan Approval			
54	NO	Preoperational inspection conducted	
Health Hazards			
55	NO	Cease operations during certain circumstances	

H:\Dairy Services\forms\Inspection Report Food Safety Program (5) Revised with instructions FINAL.docx

Temperatures							
Item/Location	Temp	Item/Location	Temp	Item/Location	Temp	Item/Location	Temp

Inspector Comments:

Adulterated food items listed above (if any) were destroyed with my consent: _____

Establishment (Signature)	Signature of responsible person at firm
Inspector (Signature)	Received By:
	Inspector Name:

Dairy Services Policy and Procedure Manual

Number: 13.3
Date: August 1, 1994
Revision: October 1, 2007
Effective: December 1, 2007

RETAIL FROZEN DESSERTS SAMPLING PROCEDURE

In order to standardize the submission of SAMPLE COLLECTION REPORTS for retail frozen desserts samples, the following instructions are provided:

A. SUBMITTING SAMPLES TO DEPARTMENT OF CONSOLIDATED LABORATORY SERVICES (DCLS) IN RICHMOND, VIRGINIA

DCLS in Richmond, Virginia keys sample results into the Bureau of Food Inspection data base. In order for them to key the results for us, we must first key in the sample collection information contained on the SAMPLE COLLECTION REPORT. For this reason the handling of SAMPLE COLLECTION REPORTS will be different than when samples are submitted to DCLS laboratories in Luray and Abingdon, Virginia.

1. Complete SAMPLE COLLECTION REPORT as indicated by attached examples.
2. Remove the pink copy from the SAMPLE COLLECTION REPORT and mail directly to the Richmond Office on the same day as the samples are collected.
3. Deliver the remaining copies of the SAMPLE COLLECTION REPORT with the samples. Enclose all SAMPLE COLLECTION REPORTS in an envelop and attach to the outside of the sample shipping container.
4. When the completed SAMPLE COLLECTION REPORTS are returned to the Richmond Office, the white copy will be filed in the establishment folder, the yellow copy will be returned to the establishment, and a copy will be made for return to the sampling inspector.

B. SUBMITTING SAMPLES TO DEPARTMENT OF CONSOLIDATED LABORATORY SERVICES(DCLS) IN LURAY AND ABINGDON, VIRGINIA

1. Complete SAMPLE COLLECTION REPORT as indicated by attached examples.
2. Deliver all copies of the SAMPLE COLLECTION REPORT with the samples.

Enclose all SAMPLE COLLECTION REPORTS in an envelop attached to the outside of the sample shipping container.

3. When the completed SAMPLE COLLECTION REPORTS are returned to the Richmond Office, the white copy will be filed in the establishment folder, the yellow copy will be returned to the establishment, and the pink copy will be returned to the sampling inspector.

C. ROUTINE SAMPLE COLLECTION PROCEDURES

1. Collect all samples in sterile 4 oz. cups provided.
2. Identify the sample with the sample identification number at the top of the SAMPLE COLLECTION REPORT, the date, and your initials.
3. Use tamper evident tape on all samples collected to support inspection findings and on all samples collected to follow up on previous sample results.
4. Complete the INSPECTOR'S STATEMENT and mail to the Richmond Office when using tamper evident tape on samples. Keep the green copy for yourself.

NOTE: SAMPLES FROM UNOPENED MIX SHOULD BE RECORDED ON THE DAIRY SERVICES FROZEN DESSERTS TRANSCRIPT 16-A IF THEY ARE TO BE REPORTED AGAINST THE PLANT PERMIT.

D. COMPLIANCE SAMPLE COLLECTION PROCEDURES

1. Collect all samples in sterile 4 oz. cups provided.
2. Identify the sample with the sample identification number at the top of the SAMPLE COLLECTION REPORT, the date, and your initials.
3. Record the sample identification number, date, and your initials on the tamper evident tape. Place the tamper evident tape over the top of the sample cup.
4. Complete the INSPECTOR'S STATEMENT and mail to the Richmond Office when using tamper evident tape on samples. Keep the green copy for yourself.
5. Remember to offer the establishment a duplicate sample when you collect compliance samples. All compliance samples must be submitted in duplicate to DCLS laboratories. A temperature sample must also be included in the shipping container for use by the laboratory.

06009

FOR ONE SAMPLE
COMMONWEALTH OF VIRGINIA
DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
~~BUREAU OF FOOD AND DRUGS~~ Dairy Services Branch
SAMPLE COLLECTION REPORT

No. 83151

Date Collected _____

Identification Soft Serve Vanilla Ice Milk

Collected from a lot of Soft Serve Machine (number 1)

Consisted of one 4oz. container

Prepared in the following manner Sample was officially indentified as 83151, 7-30-92, JAB

Delivered to DCLS, Richmond on (date shipped) or delivery date

Analyses requested bact, coli

Establishment, where collected name of establishment
address Central File No. 0003678

Distributor or Manufacturer of mix, address, product codes

Shipper who delivered product to store Date of Shipment

Remarks _____

Related samples _____

Cost of Samples state cost if any INSPECTOR _____

DIVISION OF CONSOLIDATED LABORATORY SERVICES

SAMPLE ANALYSIS REPORT

Laboratory number _____ Analyst(s) _____

Date received _____ Group leader _____

Condition of seals _____ Date reported _____

METHODS AND RESULTS:

06009

FOR MULTIPLE SAMPLES

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
~~DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES~~ Dairy Services Branch

SAMPLE COLLECTION REPORT

No. 83151

Date Collected _____

Identification Soft Serve Vanilla Yogurt Sub A; Soft Serve Chocolate Yogurt
Sub B; Soft Serve Strawberry Yogurt Sub C.

Collected from a lot of Soft Serve Machines (Number 1,2,3)

Consisted of 3 - 4oz samples

Prepared in the following manner samples officially identified as 83151 sub A, 7-30-92, JAB;
83151 sub B, 7-30-92, JAB; 83151 sub C, 7-30-92, JAB

Delivered to DCLS, Richmond on date shipped or delivered _____

Analyses requested Coli

Establishment where collected name of establishment

Central File No. 0000487

Distributor or Supplier Manufacturer of Mix, Product Codes

Shipper who delivered mix to store Date of Shipment _____

Remarks _____

Related samples _____

Cost of Samples cost if any INSPECTOR _____

DIVISION OF CONSOLIDATED LABORATORY SERVICES

SAMPLE ANALYSIS REPORT

Laboratory number _____ Analyst(s) _____

Date received _____ Group leader _____

Condition of seals _____ Date reported _____

METHODS AND RESULTS:

Dairy Services Policy and Procedure Manual

Number: 13.4
Date: August 14, 2012
Revision: None
Effective: August 14, 2012

CLEANING FREQUENCY OF EQUIPMENT AND FREEZERS MAXIMUM NUMBER OF DAYS MIX MAY BE RETAINED

This policy is based on Article 6, Cleaning of Equipment and Utensils, § 2VAC5-585-1780.
Equipment food-contact surfaces and utensils.

"A....B....C....

D. Surfaces of utensils and equipment contacting potentially hazardous food may be cleaned less frequently than every four hours if:

1. In storage, containers of potentially hazardous food and their contents are maintained at temperatures specified under Part III (2VAC5-585-260 et seq.) of this chapter and the containers are cleaned when they are empty;
2. Utensils and equipment are used to prepare food in a refrigerated room or area that is maintained at one of the temperatures in the following chart and:
 - a. The utensils and equipment are cleaned at the frequency in the following chart that corresponds to the temperature; and

Temperature	Temperature Cleaning Frequency
41°F (5.0°C) or less	24 hours
>41°F - 45°F (>5.0°C - 7.2°C)	20 hours
>45°F - 50°F (>7.2°C - 10.0°C)	16 hours
>50°F - 55°F (>10.0°C - 12.8°C)	10 hours

- b. The cleaning frequency based on the ambient temperature of the refrigerated room or area is documented in the food establishment.

3. Containers in serving situations such as salad bars, delis, and cafeteria lines hold ready-to-eat potentially hazardous food that is maintained at the temperatures specified under Part III, are intermittently combined with additional supplies of the same food that is at the required temperature, and the containers are cleaned at least every 24 hours;

4. Temperature measuring devices are maintained in contact with food, such as when left in a container of deli food or in a roast, held at temperatures specified under Part III;

5. Equipment is used for storage of packaged or unpackaged food such as a reach-in

refrigerator and the equipment is cleaned at a frequency necessary to preclude accumulation of soil residues; or

6. The cleaning schedule is approved based on consideration of:
 - a. Characteristics of the equipment and its use;
 - b. The type of food involved;
 - c. The amount of food residue accumulation; and
 - d. The temperature at which the food is maintained during the operation and the potential for the rapid and progressive multiplication of pathogenic or toxigenic microorganisms that are capable of causing foodborne disease; or

7. In-use utensils are intermittently stored in a container of water in which the water is maintained at 135°F (57°C) or more and the utensils and container are cleaned at least every 24 hours or at a frequency necessary to preclude accumulation of soil residues.”

Interpretation:

§ 2VAC5-585-1780 D 3 establishes the maximum permissible length of time between cleaning utensils, equipment and freezers is 24 hours.

§ 2VAC5-585-1780 D 6 provides for other cleaning frequencies based on the characteristics of the equipment used, the type of food, the amount of residue accumulation, and the temperature of the food and potential to cause the rapid growth of microorganisms.

We will approve freezer cleaning schedules at frequencies greater than 24 hours if the equipment manufacturer recommends one in writing in their equipment operator's manual for the specific piece of equipment. Letters from the manufacturer recommending alternative cleaning schedules may also be approved. We will not accept letters or documents recommending alternative cleaning schedules from dealers or sales representatives. All letters must come from the manufacturer of each specific piece of equipment.

An example of equipment that has an approved alternative cleaning schedule is a soft-serve machine with an integrated pasteurization and cooling cycle commonly found in McDonald's Restaurants. Their cleaning schedule is once every fourteen days.

MAXIMUM NUMBER OF DAYS MIX MAY BE RETAINED

Frozen desserts mix removed from each freezer barrel prior to cleaning may be captured in food grade containers, stored covered under refrigeration to thaw, and returned to the freezer each morning for a maximum of seven days. Mix must be totally discarded at least once each week and freezers charged with entirely new mix to break the cycle of returning mix to the machines. This procedure will ensure fresh mix will not be continually contaminated with previously used mix and limit the potential to spread contaminants if the mix becomes adulterated during handling.

Dairy Services Policy and Procedure Manual

Number: 14.1
Date: August 1, 1994
Revision: October 1, 2007
Effective: December 1, 2007

SALE OF RAW MILK TO CONSUMERS

Procedures outlined under this section are based on Regulations Governing Grade "A" Milk, Section 2 VAC 5-490-70.

1. It shall be the responsibility of Dairy Services, Office of Dairy and Foods, Department of Agriculture and Consumer Services, to prevent the sale of any product which is not grade A pasteurized, ultra-pasteurized, or aseptically processed milk or milk product to the final consumer, or to restaurants, soda fountains, and grocery stores. No person may sell in, or expose for sale in the Commonwealth any pasteurized, ultra-pasteurized, or aseptically processed milk or milk product which has not been graded or the grade of which is not known to the final consumer, or to restaurants, soda fountains, and grocery stores in the State of Virginia for human consumption.
2. Procedures to follow to prevent the sale of ungraded milk and milk products for sale to the consumer for human consumption:
 - a. When information is obtained that "ungraded milk" or "ungraded milk products" are being sold for human consumption, it is the responsibility of the inspector obtaining such information to investigate the source to determine if ungraded milk or ungraded milk products are being sold for human consumption within their territory.
 - b. Investigations should include the following observations:
 1. Any form of advertisement such as signs indicating milk for sale.
 2. Observation of the delivery of the milk to the consumer, either by vehicle or visits of consumer to the farm to obtain milk or milk products.
 3. Observation of the manner in which milk is packaged such as bottles, small cans or fruit jars which might indicate "the intent to sell".
 4. Obtain names and addresses of persons purchasing milk. In some cases, it might be well to purchase milk yourself. However, this should be done with

considerable planning and may be far more effective in the case of retail stores. In cases involving grocery stores and other establishments or city markets, the investigation should follow through to the producer.

5. Record information on the following:
 - a. number of cows, goats or sheep
 - b. estimated volume of milk
6. Use the sanitary observation sheet for a written record and report of your investigation. An inspection using the sanitary observation sheet should be made on each producer investigated.
- c. If it is determined that ungraded milk or milk products are being sold, an official notice prepared for this purpose shall be issued.
- d. A second investigation shall be made within ten days to determine if the violation has been discontinued. A report of the second investigation shall be made to the office using the sanitary observation sheet. If the violation is being continued, instructions to follow shall be obtained from the office.
- e. Guidelines to follow:
 1. It is assumed that restaurants; holding a restaurant permit are regulated and inspected by the agency issuing the restaurant permit, and it is not the responsibility of the Department of Agriculture to inspect such establishments for the sale of ungraded milk or milk products.
 2. Retail stores suspected of selling ungraded milk and milk products shall be investigated and handled as stated in A, B, C, & D.
 3. A milk producer distributing, selling, or having in his possession with the intent to sell ungraded milk or cream shall be handled as in A through D.
 4. A person who has in his possession ungraded milk or ungraded milk products which are being made available to the consuming public shall be treated as having ungraded milk or ungraded milk products in his possession with intent to sell and shall be handled as set forth in A through D.
 5. Call your Regional Manger to keep him informed of your actions. It is best if you can take your regional manager with you on investigations so to have a witness. This will be helpful if you have to go to court.

Dairy Services Policy and Procedure Manual

Number: 14.2
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PROCEDURE FOR PROCESSING AN ICE CREAM COMPLAINT

A. RECORD OF COMPLAINT FORM

When an ice cream complaint is received, it is necessary to get the most complete information possible in order to perform a proper investigation. The parts of the complaint form (see copy, following page) are as follows:

1. Phone number of the complainant.
2. Date the complaint was received by Dairy Services Branch personnel.
3. Complainant: name and address of the individual making the complaint about the product.
4. Product: Brand name, flavor, standards of identity definition (ice cream, ice milk, quiescently frozen dairy confection, etc.).
5. Container Codes: Embossed plant code and other embossed information or a manufacturer's plant code if printed on carton (should be one or the other).
6. Dealer: Complete name and address of retail outlet where product was purchased.
7. Manufacturer: The plant that actually manufactures the product not the company which distributes the product. If this information is not readily available, get the distributor information for the product.
8. Date purchased: The date the product was purchased.
9. Nature of Complaint: Specifics about the product characteristics and illness; onslaught, duration, symptoms concerning illness. Time between consumption of product and onslaught of illness. How many people affected? Was medical care needed or received?
10. Complaint received by, date/time: Name of individual who took the complaint,

date and time of day the complaint was received.

11. Disposition, Date: How the complaint was handled. Date of resolution. Outcome of investigation. Signature of the individual who finished the Record of Complaint form and placed it in the file.

B. INVESTIGATION PROCEDURES:

If instructions are not given, information is not clear, and/or if more details are needed, the complainant may need to be contacted. At times the complainant has physical evidence or there is information on the product container which makes it necessary to re-contact the complainant and/or visit the complainant to thoroughly investigate the complaint.

1. Unless instructed to do so, do not collect the complainant's sample of the product. An unopened sample of the identical product with the same plant code should be collected from the retail outlet where product was purchased or from another retail outlet.
2. An ice cream transcript (Dairy and Foods form 16-A) with complete information should be filled out with specific information concerning the types of analyses to be performed on it. Submit this form with the sample to the laboratory where sample is taken. This transcript should be cross-referenced (put information in a blank area on the form) indicating that it goes with a certain complaint. This will enable staff in the Richmond office to match this form with other information about the complaint for the Ice Cream Complaint file.
3. An original copy of a detailed report concerning the investigation should be sent to the Richmond office immediately and a copy should be sent to your supervisor.

C. RESOLUTION OF THE COMPLAINT:

Once the analysis of the sample has been completed and all the reports regarding the complaint have been received by the Richmond office, the investigation will be considered complete or further instructions concerning follow up will be given to the inspector involved in the investigation. The complainant will be contacted by the Richmond office to inform them of our findings and the disposition of the case.