PPS UPDATE 2009

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DPS I
NYS Ag & Mkts

Operating with a broken seal and Review of written procedures

Why are seals important?

- Seals are a visual indicator that the legal controls on a pasteurization system are intact

2007 PMO Guidelines

- Page 102
- Allows for temporary seals on an emergency basis provided that:
- The individual applying the seal is an employee of the milk plant
- The individual has completed training acceptable to the Regulatory Agency
- The individual has demonstrated the ability to conduct pasteurizer tests, in the presence of a Regulatory official within the past year
- The individual will notify the Regulatory agency of the broken seal- time, reason, repairs- and obtain permission to test and apply temporary seal

PMO guidelines con't

- The plant must understand that if the tests conducted by the Regulatory official are not in compliance then the milk and milk products run on that system may be recalled
- The system must be tested and resealed by the Regulatory agency within 10 working days

Part 2 sec. 2.48

4. Removal of regulatory seals and resumption of pasteurization. No equipment required to be sealed pursuant to section 2.46 of this Part shall be used if the regulatory seal has been broken unless the conditions set forth in subparagraphs (i) and (iii) herein are met.

(i) the commissioner is notified promptly;

(ii) the provisions of section 2.46 are otherwise continuously met and compliance therewith is documented in a form satisfactory to the commissioner;

(iii) a sample of the milk, milk product, melloream or frozen dessert processed or manufactured in such equipment is properly taken immediately after the resumption of pasteurization and every two hours thereafter and properly analyzed in an officially designated laboratory for the presence of phosphatase and is found to not exceed the phosphatase standard set forth in section 2.8 of this Part. No milk, milk products, melloream or frozen dessert processed or manufactured in equipment from which a seal has been broken shall be removed from the milk plant until the processing plant superintendent determines that all of the provisions set forth in subparagraphs (i) through (iii) herein have been met

When Seal is Broken

- Stop Production
- Notify Regulatory Agency
- Make Repairs
- Test Unit and Record Results on DMC 225
- Apply Temporary Seal
- Sample the Product from the Unit
- Phosphatase Test Product
- Use an Official Lab
- Record results on DMC 225

NEW YORK STATE
DEPARTMENT OF AGRICULTURE & MARKETS
DIVISION OF MILK CONTROL & DAIRY SERVICES
100 ADELINE DRIVE
ALBANY, NY 12210

BROKEN PASTEURIZER SEAL REPORT

PLANT _____ PLANT# _____

ADDRESS _____

PASTEURIZING UNIT _____

DATE & TIME SEAL BROKEN _____

DATE & TIME UNIT REPAIRED _____

SIGNATURE OF BROKEN SEAL CERTIFIED PERSONNEL RESPONSIBLE PERSON APPLYING TEMPORARY SEAL

_____

1. REASON FOR BROKEN SEAL _____

_____

2. WHAT REPAIRS WERE DONE? _____

_____

_____

3. FOLLOWING REPAIRS, WHAT TESTS WERE RUN? (RECORD OR ATTACH RESULTS) _____

_____

_____

4. WERE PHOSPHATASE TESTS RUN? (ATTACH LAB REPORTS) _____

_____

_____

AGRICULTURE & MARKETS PERSON NOTIFIED _____

DATE _____ TIME _____

REPORT COMPLETED BY _____

Necessary Items

- Written Test Procedure for Unit
- Last Pressure Tests for the Unit
- Last Holding Time for the Unit
- Last Can Fill
- Piping Arrangements

Written Procedures

- Specific to each unit

  Details, details, details

  Easily available

HTST – HHST Test Equipment

- Test Thermometer
- Stop Watch
- Pressure Tester
- Salt Test Kit
- Water/Oil Bath with Agitator
- GFI Extension Cord or Circuit

2007 PMO table page 105

Table 4. Equipment Tests - Batch, HTST, HHST and Aseptic Processing Systems

1.	Val, HTST, HHST, Aseptic indicating and airspace thermometers	Temperature accuracy
2.	Val, HTST, HHST, Aseptic recording thermometer	Temperature accuracy
3.	Val, HTST, HHST, Aseptic recording thermometer	Time accuracy
4.	Val, HTST, HHST, Aseptic indicating and recording thermometer	Recording vs. Indicating thermometer
5.1	HTST, HHST FDD	Leakage pass FDD
5.2	HTST, HHST FDD	FDD freedom of movement
5.3	HTST, HHST FDD	Device assembly (single stem)
5.4	HTST, HHST FDD	Device assembly (dual stem)
5.5	HTST FDD	Manual diversion
5.6	HTST, HHST FDD	Response time
5.7	HTST, HHST FDD	Time delay (inspect)
5.8	HTST, HHST FDD	Time delay (CIP)
5.9	HTST FDD	Time delay (leak-detect flush)

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6.	Vat leak protector valve(s)	Leakage
7.	HTST indicating thermometers	Response time
8.	HTST recording thermometers	Response time
9.1	HTST pressure switches	Regenerator pressures
9.2.1	HTST, HHST, Aseptic differential pressure controllers	Calibration
9.2.2	HTST differential pressure controllers	Regenerator pressure
9.2.3	HHST and Aseptic differential pressure controllers	Regenerator pressure
9.3.1	HTST booster pump/FDD	Inter-wiring check
9.3.2	HTST booster pump/metering pump	Inter-wiring check
10.1	HTST FDD	Temperature cut-in/cut-out
10.2	HHST FDD, Aseptic divert system (indirect heat)	Temperature cut-in/cut-out
10.3	HHST FDD, Aseptic divert system (direct heat)	Temperature cut-in/cut-out
11.1	HTST holding tubes/timing pumps (except magnetic flow meter based timing systems)	Holding time
11.2.a	HTST holding tubes/magnetic flow meter based timing systems	Holding time

2007 PMO table page 105

11.2.b	HTST, HHST, Aseptic magnetic flow meter based timing systems	Flow alarm
11.2.c	HTST, HHST, Aseptic magnetic flow meter based timing systems	Loss of signal/low flow
11.2.d	HTST magnetic flow meter based timing systems	Flow rate cut-in/cut-out
11.2.e	HTST magnetic flow meter based timing systems	Time delay
11.3	HHST holding tubes indirect heat	Holding time
11.4	HHST holding tubes direct injection heat	Holding time
11.5	HHST holding tubes direct infusion heat	Holding time
12.1	HHST, Aseptic systems indirect heating	Sequence logic
12.2	HHST, Aseptic systems direct heating	Sequence logic
13.	HHST, Aseptic systems	Pressure in the holding tube
14.	HHST, Aseptic systems using direct injection heating	Pressure differential across injector
15.	Vat, HTST, HHST, Aseptic (all electronic controls)	Electro-Magnetic Interference

Odds and Ends

- Participation in the program can be denied
- Product has to be held at the plant until the phosphatase results are in
- Work with the DPS
- New or updated systems- keep legal controls separate from operational controls

Any Questions ?

PROTECTION

- FROM CONTAMINATION

- WATER TO...

- PRODUCT

- FLUSH

COUNCIL I

PROPOSAL 112

PMO

MAKE THE FOLLOWING CHANGES TO SECTION 7. STANDARDS FOR GRADE "A" MILK AND MILK PRODUCTS ON PAGES 60 AND 75:

ITEMS 7p WATER SUPPLY
ADMINSTRATIVE PROCEDURES

10. Water supply piping connected to raw or pasteurized milk or milk product lines or vessels shall be protected with an effective backflow preventer.

NOTE: Refer to Item 15p.(A), ADMINISTRATIVE PROCEDURES, for additional requirements involving the protection of milk and milk products.

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COUNCIL I

PROPOSAL 112 (continued)

ITEM 15p.(B) PROTECTION FROM CONTAMINATION
ADMINSTRATIVE PROCEDURES

19. Water piping and raw milk and milk product lines and vessels may be separated by one (1) fail-safe valve that upon loss of air or power shall move to a position that will close or block the water lines from milk or milk product lines or vessels.

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COUNCIL I

PROPOSAL 112 (continued)

Water piping conducting water, which has undergone an equivalent process to pasteurization as described in Item 15p. (B)2. and pasteurized milk and milk product lines or vessels may also be separated by one (1) fail-safe valve.

In addition, a sanitary check-valve shall be located between the fail-safe valve and the milk product line(s) and/or vessel(s).

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COUNCIL I

PROPOSAL 112 (continued)

Sanitary piping shall be used downstream from the sanitary check-valve. Provisions shall be made for cleaning this sanitary piping.

NOTE: Refer to Item 7p, ADMINISTRATIVE PROCEDURES, for additional requirements involving the protection of the water system.

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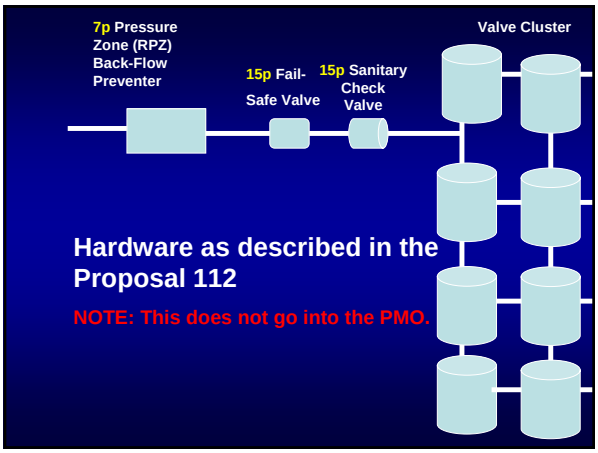
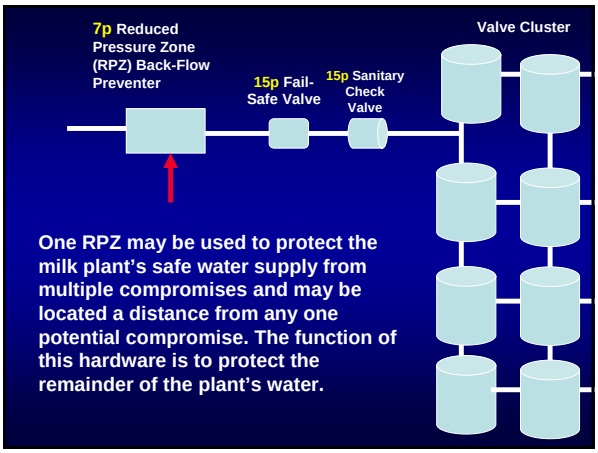
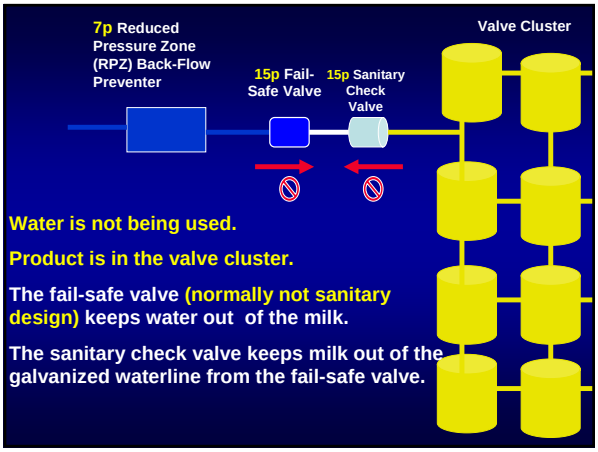
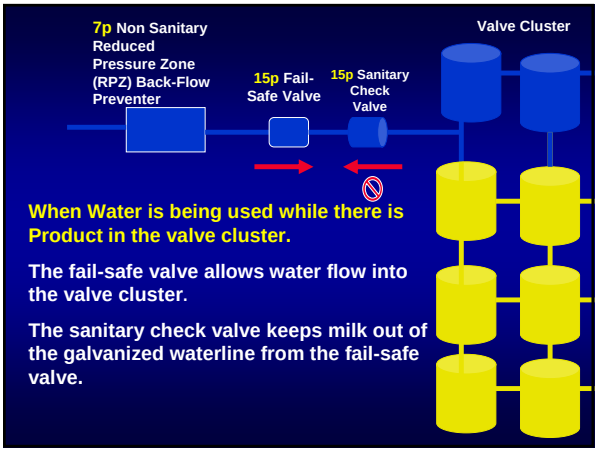
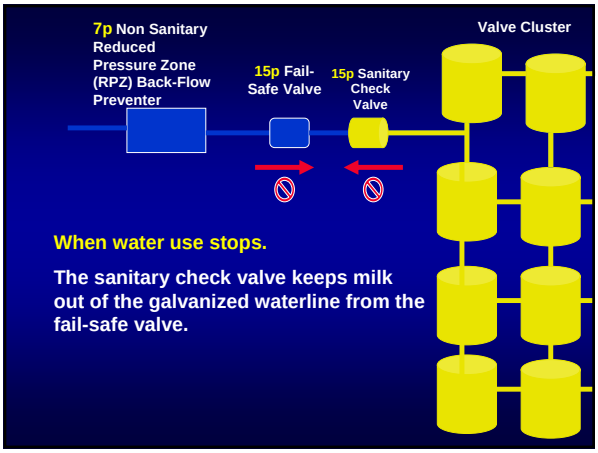
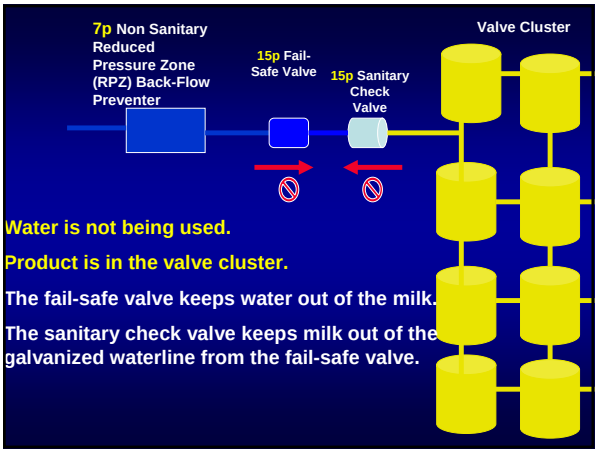

7p Pressure Zone (RPZ) Back-Flow Preventer
15p Fail-Safe Valve
15p Sanitary Check Valve
Valve Cluster
Hardware as described in the Proposal 112
NOTE: This does not go into the PMO.


7p Reduced Pressure Zone (RPZ) Back-Flow Preventer
15p Fail-Safe Valve
15p Sanitary Check Valve
Valve Cluster
One RPZ may be used to protect the milk plant's safe water supply from multiple compromises and may be located a distance from any one potential compromise. The function of this hardware is to protect the remainder of the plant's water.


7p Reduced Pressure Zone (RPZ) Back-Flow Preventer
15p Fail-Safe Valve
15p Sanitary Check Valve
Valve Cluster
Water is not being used.
Product is in the valve cluster.
The fail-safe valve (normally not sanitary design) keeps water out of the milk.
The sanitary check valve keeps milk out of the galvanized waterline from the fail-safe valve.


7p Non Sanitary Reduced Pressure Zone (RPZ) Back-Flow Preventer
15p Fail-Safe Valve
15p Sanitary Check Valve
Valve Cluster
When Water is being used while there is Product in the valve cluster.
The fail-safe valve allows water flow into the valve cluster.
The sanitary check valve keeps milk out of the galvanized waterline from the fail-safe valve.


7p Non Sanitary Reduced Pressure Zone (RPZ) Back-Flow Preventer
15p Fail-Safe Valve
15p Sanitary Check Valve
Valve Cluster
When water use stops.
The sanitary check valve keeps milk out of the galvanized waterline from the fail-safe valve.

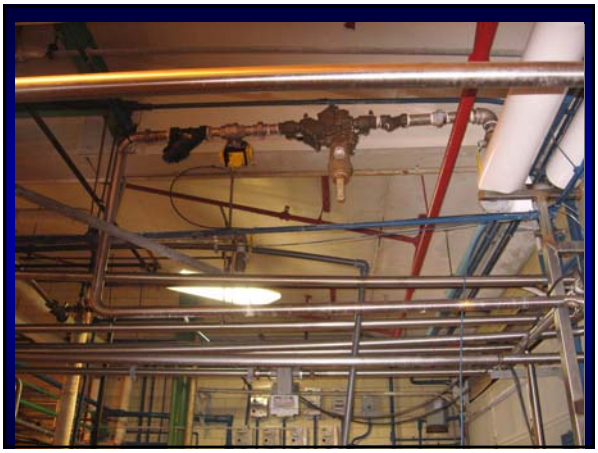

7p Non Sanitary Reduced Pressure Zone (RPZ) Back-Flow Preventer
15p Fail-Safe Valve
15p Sanitary Check Valve
Valve Cluster
Water is not being used.
Product is in the valve cluster.
The fail-safe valve keeps water out of the milk.
The sanitary check valve keeps milk out of the galvanized waterline from the fail-safe valve.

PASTEURIZED WATER EQUIVALENCY

- IS A CASE BY CASE DISCUSSION
- WORK WITH YOUR DPS 1 AND THE REGION SUPERVISOR

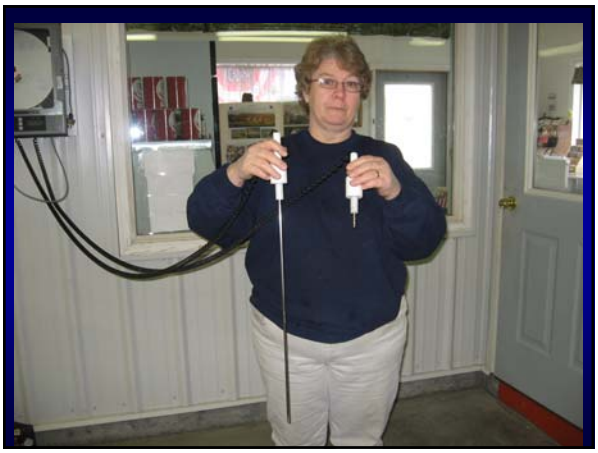
REAL WORLD APPLICATION

- SKIM MILK FLUSHED TO COTTAGE CHEESE VAT
- CREAM LOAD OUT LINES
- CONDENSED AND CONCENTRATED MILK LOAD OUT LINES
- YOGURT FILLERS FLUSHED BETWEEN FLAVOR CHANGES
- FLUSH LINES FROM THE TANK TRUCK RECEIVING ROOM TO RAW SILOS

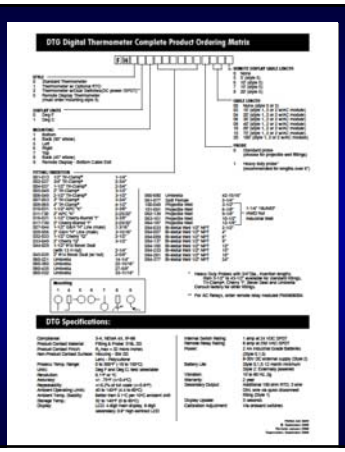


OVERVIEW OF SMALL PLANT EQUIPMENT AND ELECTRONIC THERMOMETERS

WHAT'S IN A SMALL PLANT?



"DTG" Digital Temperature Gauge


DTG Digital Thermometer Complete Product Ordering Matrix

DTG Specifications:

I. Original Memo for Anderson Digi-ThermM-b-326 - Anderson Digi-Therm Digital IndicatingThermometer (09/26/96)

The Anderson Digi-Therm self powered digital indicating thermometer has been reviewed and found to comply with the applicable provisions of the Grade A Pasteurized Milk Ordinance (PMO) for use in milk storage tanks and refrigerated rooms. This battery operated thermometer may be used in storage tank and room applications where mercury-in-glass or bi-metal thermometers have traditionally been used.

This thermometer has been found to meet the applicable Appendix H criteria. It has a low battery indicator. Before accuracy is at risk, the LCD temperature display will blank. Temperature can be adjusted to q 1.0 oF. If this adjustment is not sufficient the thermometer should be replaced. The Digi-Therm is available for thermowell or sanitary installation.

Subject: Anderson “DTG” Digital Temperature Gauge

This memorandum is a supplement to M-b-326 (Anderson Digi-Therm Digital Indicating Thermometer), issued September 26, 1996.

The “Digi-Therm” outlined in the original M-b-326 has been discontinued from the Anderson product line as of September 2008. The “DTG” shall act as a direct replacement going forward. This product is also a battery operated device, remaining functionally identical to the original Digi-Therm.

All original text, as outlined in M-b-326, shall remain in effect when referring to the DTG models FH0, FH1, FH2 and FH5.

As further clarification, the following shall also be noted:

The DTG shall not be used in place of an approved Reference Thermometer for VAT, HTST, UHT or Aseptic pasteurizers.

As with the original Digi-Therm, the DTG has been designed to replace traditional mercury-in-glass thermometers used in cold rooms or storage vessels.

Accuracy of this device is +/-0.75 deg F

THANK YOU!!