9GEORGIA DEPARTMENT OF CORRECTIONS Standard Operating Procedures		
Functional Area: CORRECTIONS DIVISION/ FACILITIES OPERATIONS	Reference Number: IVM01-0004	Revises Previous Effective Date:
Subject: Dairy Operation		12/15/02
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I. POLICY:

The GDC Dairy at Rogers SP shall have the goal of efficient production of milk and milk products of the highest quality while meeting all standards and practices outlined in applicable laws, rules, regulations, and directives.

II. APPLICABILITY:

Rogers State Prison Farm Dairy.

III. RELATED DIRECTIVES:

- A. ACA Standards 2-4239
- B. OCGA 40-7-1, OCGA 40-7-5
- C. GDC SOP IVL01-0022

IV. <u>DEFINITIONS</u>:

NONE

V. ATTACHMENTS:

NONE

VI. PROCEDURE:

- A. Dairy Operations:
 - 1. GDC Dairy facilities are operated under the regulations and continuous inspection of the United States Department of Agriculture and Georgia Department of Agriculture. Inspectors of these agencies submit reports and, if deficiencies are

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determined to exist, actions are taken immediately and as needed to regain compliance as required by law.

- 2. The dairy is operated under contract with the University of Georgia College of Veterinary Medicine. The dairy is operated for the preeminent purpose of providing the inmate population with a wholesome dairy product while providing agribusiness job training for offenders.
- Research, teaching, and demonstration efforts are 3. incidental to the contracted purposes and are not to interfere with the primary function of milk Research the University proposes production. conduct shall be discussed with the State Farm Administrator and the State Farm Advisor prior to Data obtained from research and its initiation. demonstration efforts will be made available to the benefit of all Georgians according to University's policies.
- 4. Production goals are set cooperatively by the Food Service Administrator and the State Farm Administrator in context of the demands of the Food Service Master Menu. Various milk products possible from the dairy's processing plant shall be determined for production by consultation with the Food Service Administrator, State Dietitian, and the Food and Farm Services Manager.
- 5. The Food and Farm Services Information Resources Manager shall assist University personnel in matters relating to milk processing and quality of the dairy products.
- 6. All farm staff in non-security positions shall be acutely aware of the need for inmate security at all times and shall support correctional officers in security-related functions if it is necessary for the maintenance of security. Said staff shall also observe all facility rules concerning security in all contexts, and shall seek clarification from supervisors or correctional officers when in doubt

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concerning some security aspect of the farm operation.

7. Security staff assigned to this unit must be knowledgeable of the technical procedures of the operation and should not be routinely rotated once trained.

B. Care of Animals and Breeding:

- 1. All staff shall hold the care and health of animals used in the operation to be of the utmost importance. Animal abuse or mistreatment by inmates or staff shall be vigorously prohibited and dealt with in an appropriate manner if it occurs. Offenders shall not be allowed to work in a GDC animal enterprise if they have any history of animal abuse.
- 2. All dairy animals are bred artificially, except in instances that makes use of a bull advisable.
- 3. The bulls or service sires are selected from all potential artificial insemination studs, and are selected from those summarized by USDA and ranking in the top 100 TPI bulls of the Holstein breed. Pedigree information is reviewed so that inbreeding is avoided. By selecting top bulls, genetic progress can be maximized.
- 4. Bulls are selected on the potential milk production of their daughters, generally +1000 PDI, especially strength of udder support, median suspensory ligament, shallowness of udder, desirable set to rear legs, and steepness of foot angle.
- 5. Cows are evaluated for strengths and weaknesses. Bulls who will strengthen weaknesses and enhance existing desirable traits are to be selected and used.
- 6. Postpartum evaluations are to be made and appropriate treatment administered so that cows will have returned to normal and be ready to breed by 45 to 60 days after calving.

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- a. Those cows that have not cycled by 45 days are administered prostaglandin.
- 7. The projected need for milk is determined by consultations among the State Farm Administrator, Food and Farm Services Manager, Food Service Administrator, and the State Dietitian and is taken into consideration when determining the time that a dairy cow is to be bred. Other factors include weight, age, and previous number of breedings.
- 8. The ideal weight and age for breeding heifers are 700 pounds by the attainment of 15 months of age.
- 9. A freshening weight of at least 1,000 pounds by 34 months of age is essential.
- 10. Generally, heifers, which have not conceived by the third breeding, are culled.
- 11. All Farm Staff assigned to the Dairy Unit will be held accountable for insuring the availability of adequate feed and water on a daily basis.

C. Milking Procedures:

- 1. The milking cows are maintained in four production groups. The groupings are determined by production level, stage of lactation, number of calvings, reproductive status, and udder health.
- 2. When the milking process begins, cows are first placed in the holding area where the Bossie Bath is run for 15 minutes.
- 3. The washed group is then moved from the wash area and allowed to dry, so that the cows come into the milking parlor dry.
- 4. If the cow's udder is free of debris, the teats are then predipped and dried with paper towels.
- 5. If a cow's udder is not visually clean, the udder is to be thoroughly hand washed with warm water and completely dried with paper towels. Teats are then predipped and dried.

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- 6. All quarters are stripped.
- 7. After approximately one minute, milking machine is applied.
- 8. When milking is completed the machines are removed either automatically or manually.
- 9. Whenever new cows enter the milking herd, their milk will be tested for presence of antibiotics prior to transferring the milk to the holding tanks. If presence of antibiotics is detected, the milk from that cow will be dumped.
- 10. Post-milking teat dip is applied to the cows.

D. Processing Procedures:

- 1. It is imperative that the milk product be maintained under refrigerated conditions throughout storage and distribution at or below 45°F.
- 2. Proper sanitizing procedures are to be followed for the processing equipment.
- 3. After pre-processing sanitizing is complete, processing procedures should begin:
 - a. Turn up steam control and allow temperature to stabilize at 173°F. Flow Diversion Valve will switch to forward flow at 164°F. At this time adjust the pressure valve to allow the pasteurized pressure to 5-6 psi above the raw side, booster pump will kick in.
 - b. Shut off water and allow the float bowl to almost empty, then start milk flow. Open valve for chill water and adjust homogenizer to 1300 psi.
 - c. Divert flow of milk to finished product tank.

 Constantly check temperature, it must stay
 below 45°F. Temperature charts are to be dated
 and filed for future reference.

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- d. Turn on the switch to the pump to start the flow of milk to the carton machine.
- e. The milk is then packaged in half-pint cartons and placed in the walk-in coolers for later distribution.
- f. Cartons shall be visually inspected for accurate date stamp and sufficient seal to prevent leakage. This inspection must be completed by the packaging supervisor a minimum of once every thirty minutes while packaging.
- g. Each carton of milk shall be labeled. Label shall be date-stamped to show date sixteen days after processing.
- 4. Following processing, equipment is thoroughly cleaned and sanitized:
 - a. Rinse down the surge tank, filler and filler lines with warm water (not greater than $140^{\circ}F$) to remove residual milk.
 - b. For cleaning, use an alkaline detergent at a water temperature specified by label directions, in range of 160°F to 195°F. A blended alkaline detergent with polyphosphate and a surfactant is preferable.
 - c. Rinse down the equipment and parts with warm water (120°F to 140°F) to remove debris and residual alkali.
 - d. Use an acid cleaner on the stainless steel to remove films caused by protein and minerals. Avoid contact between the tygon tubing and acid cleaner.
 - e. Sanitize either chemically or thermally. Sodium hypochlorite can be used to chemically sanitize equipment and parts.

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- f. Water temperature should not exceed $75^{\circ}F$, as chlorine can cause pitting of stainless steel and corrosion of gaskets.
- g. For chemical sanitizers follow label instructions exactly.
- h. Thermal sanitizing can be achieved by direct contact of the equipment and parts with hot water at 190°F for 8 to 10 minutes.
- 5. After cleaning and sanitizing, fill out information required on charts.

E. Record Keeping/Reporting:

- 1. Accurate records pertaining to farm inventory are maintained, and Livestock Monthly Report (IVM01-0001, Attachment 5) is submitted to the State Farm Headquarters.
- 2. Livestock inventories will be monitored by the State Farm Advisor, who will conduct an inventory audit on a quarterly basis.
- 3. Accurate records regarding milk processing, packaging and distribution are to be kept on site and will include the following items.
 - a. Processing Charts
 - b. Temperature Charts (ie. storage tanks, coolers, trailers, etc.)
 - c. Daily quantities processed and packaged
 - d. Daily shipping records

F. Security:

1. Syringes, needles, medicines, scalpel blades, and similar supplies are stored in a secure place, and are only checked out to inmates in accordance with institutional security regulations. A record is

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kept indicating what was issued, to whom issued, and the time that the item was returned.

- 2. Other tools are issued in the same manner.
- 3. A daily and monthly inventory is kept on all items for security and restocking purposes. Disposable items such as needles, syringes, and scalpel blades are accounted for and secured in the same manner as non-disposable items.

G. Quality Control:

- 1. All staff should be conscientious of quality control and managers will be specifically held responsible for all finish products leaving their operation.
- 2. All noted processing deviations that may result in the loss of product (i.e. temperature fluctuations, sanitation problems, leaking cartons, incorrect date stamp, etc.) must be reported immediately upon detection to the following staff members: Food and Farm Services Information Resources Manager, RSP Farm and Livestock Manager, State Farm Administrator and the Food and Farm Services Manager.
- H. Milk Samples: Two samples will be taken from each product daily (i.e. 2%, Whole, Skim) and placed in the cooler and monitored by use by date for spoilage.

I. Safety:

- 1. Weekly safety meetings pertaining to work area specific topics will be mandatory. A copy of the meeting minutes including a list of attendees should be maintained on site for a period of two (2) years.
- 2. It will be the responsibility of all farm staff to monitor farm operations on a daily basis to insure the safety of both the staff and the inmates assigned to this work area.