## **Uruguay System of Production Lot Control**

The production lot control system is a mandatory requirement of the Uruguayan Ministry of Livestock Agriculture and Fisheries (MGAP) for exports of raw material for grinding that is to be exported to the US. It is also required for exports to Canada to ensure requirements are consistent with those for the US. If product is presented for export that does not conform to the requirements a health certificate will not be signed by MGAP.

The following describes the system and the controls that are in place both at the plant level and MGAP. While the plant controls are based on a visit to one plant, similar systems are in place for all other plants approved to export to the US as MGAP requires that all have computer based control systems in place that ensure the requirements described below are met.

- 1. The maximum lot size permitted by MGAP of raw material for grinding is one container load. The number of cartons in a load may vary by plant depending on how they pack their containers. In the case of the plant visited this was 955 cartons. However for most products the size of a production lot will be less that this number because they will not produce 955 cartons of that specification in one day. This will mean that often a container will contain more than one production lot.
- 2. The plants conduct an N=60 test for E. coli O157:H7 on each production lot of a product which in this case means at least one test for every 955 cartons but in the event that fewer cartons of a product are produced in a single day the N=60 test will be conducted on all of the cartons comprising that days production of this product.
- 3. In the case where more than 955 cartons of a product are produced on a production line the line will be stopped and a clean down performed before beginning production of the next production lot which will also be subject to an N=60 test.
- 4. A single production lot is identified by a unique eight digit number that cannot be repeated. The number comprises the date in the form yymmdd plus a 2 digit counter mark.
- 5. When the processor determines what they will be producing for export to the US that would be classed as raw material for grinding they advise this to MGAP so they are able to include it in their control program to ensure that the lot controls are in place for this product.
- 6. When a sale is made by the sales department they advise the administration and production departments the details of the product required so they produce this specific product and its particular production lot.
- 7. The production lots are each assigned a counter mark that is added to the date code to form the production lot code. A letter or some other easily visible mark is assigned to the counter mark to provide a more easily visible mark on the carton label. For example a counter mark of 01 may be represented as A, 02 as B etc. The carton label also contains a barcode that contains specific product information regarding the content of the carton, the production date and other additional data.
- 8. When a carton of product is produced the information is input into the computer system which then produces the label until the 955 cartons have been produced or the production ends for the day, and there is clean down in the boning room, at which time that production lot is finalized.
- 9. Where the production lot is less than a container load the production and administration departments will be advised how many more cartons are required to fill the container and that will be the number of

- cartons produced in the next production lot provided there are sufficient cartons produced on that particular day. If it isn't this would be repeated the next day until the container load is complete.
- 10. The counter mark assigned to the additional production lots produced for a container will be the same with the production lot being differentiated by the date part of the code.
- 11. The cartons produced in a lot are palletized and wrapped in plastic wrap and each pallet is assigned a pallet number that identifies the production lot of the cartons on the pallet. The pallets from a lot are then stored together.
- 12. The production lots are then held in storage until the N=60 test results are obtained and are confirmed negative. Product can then be loaded in a container when all of the lots designated for that container have been produced and cleared.
- 13. When the container is loaded the barcode on each carton is read with a wireless reader that checks that the cartons being loaded are correct for that container. If any barcodes are unable to read or there is any carton damage the cartons will not be loaded and the number of cartons shipped in the container will be reduced from the normal 955. These cartons are not allowed to be exported to the US or Canada and will be sold on the local market or to other export markets.
- 14. After the container has been loaded documents are printed out that detail the content of the container by product, number of cartons, date of slaughter, date of production, weight of product and production lot numbers. An internal transportation document is prepared and the official government vet onsite prepares, stamps and signs a official certificate permitting the container to be transported to the port for export.
- 15. All the documents that are prepared accompany the container to the port and the data detailing the load is input into the MGAP data base. The data input includes the processing plant and an 8 digit production lot number which is unique to that lot when associated with a specific plant. The software searches to determine if any of the production lots or shipping marks had been used previously. If they have the container will be rejected and must be returned to the plant.
- 16. The software searches the records for shipments from all export plants and consequently has had the added benefit that duplication of shipping marks is now being identified prior to shipment.
- 17. An official health certificate is only produced at the office of the MGAP located at the port in Montevideo and is only produced after all the checks have been made and the product is cleared.
- 18. The MGAP database is backed up each week to two computers, one onsite computer and one at a remote location. Access to the database is limited to two administrators, one a Ministry official and the other the developer of the software. There are six people with access to the input forms to allow the input of the data received from the plant.

The production lot control system described above provides a very high level of assurance that a production lot is only shipped in one container with computerized checks at the plant prior to and during load-out as well as checks by the Ministry at the port.