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1. Investigating E. coli O157:H7 False Positives Research Project - *Nicola Dermer, Roger Cook, David Tisdall & Janine Collier*

Notification: A project funded by NZFSA from the Industry Initiatives Fund is being undertaken by AsureQuality and AgResearch to investigate issues observed during the last very young (bobby) calf processing season where the E. coli O157:H7 screen tests produced a high number of false positive results. The project involves testing calf meat samples from the US monitoring programme using up to 8 extra screen tests, in addition to the standard BAX-MP screen testing kit.

While this project is occurring it is critical that industry operators and Verification Agency staff:

Review AsureQuality laboratory reports and the VTEC database carefully to determine whether or not a screen positive detection has occurred.

Where any doubt exists, seek clarification of results before releasing product.

A screen positive with any of the test kits, trial included, is to be treated as per the usual process for a screen positive detected under the US OMAR monitoring programme. This means that the affected product would need to be VA retained, and the VTS would notify results to ecoli.results@nzfsa.govt.nz. Product disposition would be determined by a Technical Coordinator.

A screen positive through a test other than BAX-MP will be reported as a trial positive in the VTEC database. The laboratory report will show a detected result for "¿½NZFSA Research method"¿½ on the laboratory report.

This project only relates to premises using AsureQuality as their laboratory for E. coli O157 testing, and only relates to very young calf samples.

A notification will be sent out when the project has been completed and the additional testing is no longer occurring. This is expected to be approximately 3 weeks.

Background: There is a chance during this project that a screen positive will be detected through one of the other screen kits but not through the BAX-MP kit. The VTEC database has been changed to capture this scenario by enabling entry of both the BAX-MP screen test result and any additional test results from the other screen kits. The VTEC database will show that the result was screen negative for BAX-MP but positive for the trial.

In order to maintain confidence in New Zealandi¿½s official assurances, a screen positive detected through any of the other test kits must be followed by confirmatory testing and product disposition as per the usual process for

screen positives. It is therefore critical that Industry and VA are aware that this additional testing is occurring to ensure positive product is not inadvertently released.

FAQs:

Why is this project being carried out? NZFSA and industry technical managers were concerned with the high numbers of false (not confirmed) screen positives that occurred during 2008 and requested a project to identify if something can be done to stop this occurring in the future. False positives result in unnecessary hold up of product and unnecessary work for industry and VA.

Who was involved in the design of the project? The project was designed by AsureQuality and AgResearch and agreed to by NZFSA and the MIA prior to commencement.

Chris Mawson

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