1. SCOPE AND PURPOSE:

This method employs procedures for the detection of *Salmonella* species in foods, animal feeds, food and feed ingredients, and process/environmental sampling using the Hygiena™ rapid method detection system.

2. PRINCIPLE:

2.1. The use of the Hygiena™ Bax® has reduced the detection time to <48 hours for a negative *Salmonella* result. If the rapid method test is presumptive detected, confirmation of the *Salmonella* result must be carried out though serological and biochemical testing, per NPAL method "SMC". The SBAX method for detection typically follows three steps, primary enrichment, secondary enrichment, and PCR-based *Salmonella* detection.

2.2. The test code SBAX is used for swabs, sponges, and products with a sample weight of 25g. SB100, SB125 and SB375 are used when the product has a sample weight of 100g, 125g and 375g respectively. Smaller sample sizes (<25g) are typically reserved for performing matrix verifications, see NPSOPM1075, but can be performed if customer requests. Larger samples sizes (>375g) will need to be separated into smaller portions after discussion with the customer.

2.3. The Hygiena™ Bax® can detect a minimum of one *Salmonella* cell per sample size tested, and will be reported as "Not Detected/Detected/Presumptive Detection per unit". Increased sensitivity can be achieved by using a larger sample size.

2.4. Known Interferences: To see list of AOAC validated matrices and their specific requirements see the current Hygiena™ Bax® System User Guide. Failure for a *Salmonella* cell(s) to grow to a detectable amount can result from nutritional deficiencies of the enrichment, unfavorable incubation temperature or length of incubation, or failure of an injured cell to repair itself.

3. PRECISION:

Assay precision may vary with test matrix and physiological state of the microorganisms in the test sample. Guidelines used to describe method precision are defined in NPSOP3040, *Verification of Microbiological Tests*.

4. REFERENCES:

4.1. AOAC PTM #100201

4.2. AOAC International Official Method℠ 2003.09

4.3. LI-00.765 Microbiology Sample Preparation