

APPENDIX 12

***Salmonella* sampling and testing procedure**

Please reference the "Defra Code of Practice for the Control of *Salmonella*"

The aim of the monitoring is to check on the environmental hygiene of the premises, equipment, incoming and outgoing products and, if necessary, take corrective action.

The buildings, environment, plant and equipment, as well as incoming and outgoing product, must be subject to appropriate monitoring. Sampling schedules should take account of:

1. Intended use;
2. Inherent bacteriological risks;
3. Nature and sources; and
4. Past results

Please refer to the *Salmonella* code for full details, the following is a suggested appropriate sampling regime.

1. Storekeepers must arrange for samples to be taken from goods and analysed, where this is not done by the owner of the goods, as follows:

- a. Incoming goods. The frequency of sampling should be based on high, medium and low risk- composite samples are acceptable by product type. Data may already be available from the supplier or owner of the goods. For high risk products every load should be sampled. From a historical analysis of Defra data, isolations (weighted by tonnage) have been most frequent in rape, fishmeal, cocoa and soya beans and their derivatives.
- b. Outgoing goods. Manufactured products by product or process type-composite samples are acceptable, frequency based on high, medium and low risk also taking into account the processing carried out.
- c. Samples must be drawn into a new clean bag using the "reverse bag" sampling method as a minimum. A minimum sample size of 60g is required but the exact requirement should be agreed with the testing laboratory.

2. Storekeepers must arrange for the following samples to be taken and analysed as follows:

- a. Buildings. Samples from ledges, walls, floors, storage bin tops and outloading areas and where health and safety rules allow -samples from dust units, vacuum cleaners and the inside of storage bins may be included. Samples of dust can be taken direct into a "reverse bag" or sterile pot or, if quantities are too small, by using swabs. Dust samples are normally much more effective than swab samples and are therefore preferred. The sampling points must be determined using HACCP Risk Assessment

principles. Samples from common equipment areas such as vacuum cleaners and dust units are useful to determine the overall *Salmonella* risk in the storage area.

b. The best method of sampling is to take approximately 20g bulked samples comprising dust from at least ten places around the building. These can be taken into an inverted polythene bag or with new disposable plastic gloves. Where dust levels are insufficient for 20g then a greater number of sampling places may be used. The use of a brush is not recommended to help collect samples unless it can be washed in a sterilising solution and fully dried; a plastic scraper washed in a sterilising solution and dried may help in the sample collection.

c. If swab samples are utilised they must be taken with sterile swabs according to the supplier's instructions. Swabbing normally consists of wiping of the swab (after removal from its transportation tube) over as large and representative an area as practicable until the swab is well coated with dust, or accumulated aggregate within equipment. Disposable wooden scrapers or plastic spoons can also be used to sample adherent material. The sample is returned to the tube and labelled with details of the sample area and date of sampling.

d. Frequency of sampling should be based on Risk Assessment for a high risk product weekly testing is recommended. If the risk status of the product cannot be determined it should at least initially be considered as high risk.

e. Plant and equipment. Loading equipment, elevators, conveyors, dust filters, intake and loading areas in stores either dust or swab samples. Frequency of sampling based on Risk Assessment- weekly suggested when materials are of unknown or high risk

f. Vehicles. Buckets and vehicle bodies of loading shovels – dust or swab samples.

3. Analysis.

a. Samples must be tested in accordance with approved methods laid down in The Animal By-Products Regulations 2005 (SI No 2005/2347) at a Defra listed laboratory that is approved under those regulations or to ISO 17025 standards.

4. Action to be taken following isolation.

a. The following should be advised of isolations of *Salmonella*:

i. Defra and, where appropriate, the relevant devolved administrations (the Zoonoses Order 1989 requires laboratories to report all isolations of *Salmonella* from animal/poultry feedstuffs and ingredients to Defra).

ii. If incoming goods are found to be positive then the Storekeeper must immediately discuss remedial action with the owner of the goods.

b. Where there is contamination with a regulated serovar (regulated serovars are those of major public health significance which currently are *S. Enteritidis*, *S. Typhimurium*, *S. Infantis*, *S. Virchow* and *S. Hadar*.), or where the same serovar is regularly detected over time, then detailed investigation to identify the source or to ensure there is no ongoing contamination is recommended. If there is persistent contamination samples should be taken and tested after any remedial action.

c. Increasing the level of testing of the product should be considered

d. Further actions are detailed in the Defra Code of Practice for the Control of *Salmonella* and will depend on the circumstances of isolation.