

Appendix II. Irish standardized study protocol for disinfection in slaughterhouses

Department of Agriculture, Food and the Marine

Trader Notice MH 07/2012

Alternative systems for disinfecting tools in meat plants

Background

Regulation (EC) 853/2004 requires that “food business operators have facilities for disinfecting tools with hot water supplied at not less than 82°C, or an alternative system having an equivalent effect”.

The objective of the requirement is to ensure that meat is not contaminated through equipment, e.g. knives.¹ Currently the use of the 2 knife technique at slaughterhouses ensures knives receive adequate contact time with 82°C water for disinfection to occur.

This Trader Notice outlines the necessary steps for food business operators (FBOs) seeking to use alternative methods for disinfection of cutting tools such as knives.

Notification of DAFM

The FBO must notify the department of Agriculture, Food and the Marine (DAFM) in advance of its intention to use an alternative system for disinfection of tools. The system to be used, the intended use, and appropriate validation data must be submitted. The proposed trial protocol and dates for the trial are also to be provided.

All documentation relevant to the alternative system and trial must be presented in **electronic format** to:

MeatHygieneSupplies@Agriculture.gov.ie

Approval of Validation Trial Protocol

When DAFM is satisfied with the trial protocol the FBO will be approved to move to stage 1 of the trial.

Validation Trial Criteria

1. **Disinfection point selection.** At least 4 disinfection points must be selected for the validation trial and agreed with the plant Veterinary Inspector. The selected points must be the most heavily soiled with fat and organic matter.
2. **Stage 1. Establishing baseline.** Swabbing of cutting tools at the selected points is to be conducted using the existing 82°C tool disinfection system. The left hand side of the cutting tool is to be swabbed immediately after use and prior to disinfection. The right hand side of

¹ European Commission guidance document on the implementation of certain provisions of Regulation (EC) No 853/2004 on the hygiene of food of animal origin

the cutting tool is to be swabbed immediately after disinfection. The water temperature and length of time the cutting tool is disinfected must be recorded for every swab. The FBO must present results of this stage to DAFM as soon as they are available. The FBO can only move to stage 2 of the trial upon approval from DAFM.

3. **Stage 2. Establishing efficacy of alternative system.** This stage requires a “double disinfection” step i.e. double dip of knives. The first step is disinfection of the cutting tool with the alternative system followed by a second disinfection step with the existing 82°C disinfection system before the tool is used again. The left hand side of the cutting tool is swabbed immediately after use and prior to disinfection with the alternative system. The right hand side of the cutting tool is swabbed immediately after disinfection with the alternative system. The length of time the cutting tool is disinfected using the alternative system must be recorded for every swab. The FBO must present results of this stage to DAFM as soon as they are available. The FBO can only move to stage 3 of the trial upon approval from DAFM.
4. **Stage 3. Alternative system alone.** Cutting tools are disinfected with the alternative system alone. The left hand side of the cutting tool is swabbed immediately after use and prior to disinfection. The right hand side of the cutting tool is swabbed immediately after disinfection. The length of time the cutting tool is disinfected using the alternative system must be recorded for every swab.

Sampling Methodology

The sampling methodology and subsequent handling of samples is to be provided to DAFM and should be based on a recognised standard e.g. ISO standards.

Frequency of Sampling

1. Each stage of the trial will consist of two separate days sampling. Day 1 should be the first day of the week’s production and day 2 should be later in the week, and preferably the last day of a period of consecutive days production e.g. if a slaughter plant normally slaughters 4 days of the week Monday, Tuesday, Wednesday and Friday the preferred sampling days are Monday and Wednesday. The days selected will be site specific.
2. Swabs are to be taken at each disinfection point during each stage of the trial over the full duration of a day’s production which must be at least 4 hours long.
3. Swabs are to be taken pre-operationally and then every hour during production with a final set of swabs been taken at the end of the day’s production.

Microbiological Assessment of Cutting Tool Swabs

1. The indicator organisms to be assessed are ACC, Ecoli, Enterobacteriaceae, and Salmonella.
2. Accredited testing procedures are to be used.

DAFM Approval of Alternative System

1. At the conclusion of the trail the FBO must present the results of the trial in electronic format to the veterinary office.

2. Prior to approval, an alternative means of ongoing verification of the system is to be provided to the satisfaction of DAFM i.e. alternative to temperature check of water in sterilisers.
3. Should the results of the trial be satisfactory, DAFM will consider the approval of the alternative system and what conditions of approval may apply.
4. As part of the approval, the FBO must undertake increased monitoring of tools disinfected using the alternative system under their sampling plan for food contact surfaces. The increased frequency of such sampling is to be decided in consultation with the plant Veterinary Inspector.

Official Sampling

Official samples may also be taken by DAFM both during the validation trial, and subsequently, should the alternative system be approved.

Meat Hygiene Section

28th February 2012