

## **E. COLI O157**

*Enforcement in slaughterhouses  
Sewage ludge*

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# FLEP QUESTIONNAIRE RELATING TO ENFORCEMENT ACTIVITIES OF SLAUGHTERHOUSES

## APPENDIX TO THE FLEP E COLI O157 WORKING PARTY REPORT

1. The final response rate to the enforcement activities in slaughter houses questionnaire – 8 returns.
2. There was generally a high degree of unanimity between member states with a very similar approach to enforcement being observed across all those who submitted returns
3. Action in relation to dirty animals arriving at the slaughter house.  
  
29% of responses indicated immediate rejection.  
29% indicated cleaning at the slaughter house.  
14% rejection after informal warning and warning letter.  
14% indicated that a fine would be issued  
14% indicated separate slaughter arrangements
4. Action in relation to unhygienic practices  
  
71% of responses indicated that the initial response on first offence to unhygienic practices would be an informal aural warning.  
  
29% indicated that it would be in the form of a letter.  
  
In all instances the action that followed would dependant upon the seriousness of the practices which were found and this would range from further informal letters through formal caution, to legal proceedings and or suspension of the slaughter house licence.
5. Action in relation to carcasses contaminated with E coli 0157  
  
Here action ranged from doing nothing, through heat treatment, to total destruction of the carcass.
6. Action in relation to carcasses contaminated with faecal matter  
  
Here the action taken was dependant on the extent of the contamination, where the contamination was superficial and limited the carcasses would be cleaned and the offending area trimmed off. In cases of substantial contamination then full or partial condemnation of the carcass would apply.
7. Authority to take formal enforcement action was as follows:  
  
71% the veterinarian  
29% veterinarians and veterinary auxiliaries

8. Enforcement practitioners in slaughterhouses carried out the full range of duties including advice and assistance to the slaughter house employers/employees and also animal welfare issues.

In some cases the enforcement practitioners offered training to slaughtermen on hygiene and safety issues.

9. Conclusions

It is pleasing to note the level of similarity in relation to enforcement activities at slaughterhouses and in particular the importance placed on dealing with dirty animals and contaminated carcasses.

## **FLEP E coli Working Party**

### **Sewage Sludge, Abattoir Waste etc. on Land**

#### **Background**

E coli 0157 is known to be carried by a proportion of food animals, in particular by cattle. What is not entirely clear is the source of this infection. It is anticipated that infection could originate from direct contact between infected and non infected animals, from feedstuffs and from environmental sources. The principle area of concern of this report is contamination through environmental sources.

#### **Environmental Contamination**

Contamination from the environment would normally infect animals through one of three sources;

1. From contaminated pasture
2. From contaminated feedstuffs
3. From contaminated water supply

The source of the E coli 0157 contamination may be direct from the faeces of an infected animal contaminating pasture and being consumed by a second animal. It could be through the application of farmyard manure, in particular where the application is of "non rotted" animal slurry. It could originate from the application to land of sewage sludge or alternatively from abattoir or food waste applied as a fertiliser.

#### **Controls**

Controls exist in relation to the application of sewage sludge to land and these controls relate to the whole of the European Union as they are contained in a Directive. The controls however are principally aimed at heavy metals and not primarily aimed at controlling microbiological contamination. A revised Directive on the application of sewage sludge land is currently being drafted and the consultation draft does include microbiological as well as chemical standards.

Abattoir waste. This is a particular problem in the United Kingdom where there are no formal controls although there are recommended standards laid down in codes of Good Agricultural Practice. The use of abattoir waste as a fertiliser is not widely known elsewhere in the European Union, although as the practice deals with a significant problem, namely the disposal of this hazardous waste product and also it has beneficial uses in terms of providing nutrients onto the land, it could be anticipated that the practice could well extend to other European countries.

The disposal of animal manure onto land again is largely controlled by Codes of Good Agricultural Practice, and in particular the need to ensure that animal manure is "well rotted"

so that the heat generated by the “composting” process would destroy pathogenic bacteria. However, there is increasing practice of spraying slurry from intensive animal rearing, straight onto the land and this would not have the safeguards one would normally associate with properly rotted manure.

## **Risks**

These practices, theoretically at least, offer significant risks both in terms of contamination of pasture land, of contamination of growing crops, salad and fruit and also the contamination of water which could be used for animal drinking purposes or for cleansing of fruit, salads or other crops.

In each case, the risk is theoretical and further research is necessary to determine the risk associated with each of the practices listed and the likelihood that E coli 0157 could be spread in this way.

## **Action**

### **Research**

A bid has been submitted by the Chartered Institute of Environmental Health in the UK with a commitment to work with other European countries, in particular the Netherlands and Denmark, to look at the risks associated with applying sewage sludge, abattoir waste etc. to the land. Currently this bid has been lodged with the UK Scientific Research Council but it is proposed that a further bid be submitted as a “FLEP” Research Project of the European Union. The basis of the research project would be to consider the application of these substances to land and the subsequent rate of contamination of pasture, crops and water courses with E coli 0157.

### **Controls**

These should flow from the research, but it is anticipated that as a minimum abattoir waste, sewage sludge and untreated animal slurry, should be subjected to pasteurisation, in order to prevent the risk of contaminating both animal and human food. It is proposed that this suggestion be submitted to the European Union, in relation to bringing under the jurisdiction of the Sewage Sludge Directive other potentially contaminated “fertilisers” for example abattoir waste, food waste and animal slurry. It is also proposed that the Directive be extended in terms of microbiological controls with a provision that the material applied to land should not contain any food borne pathogenic bacteria. The current draft Directive only refers to Salmonella.