

# EUROPEAN COMMISSION HEALTH AND CONSUMERS DIRECTORATE-GENERAL

Directorate F - Food and Veterinary Office

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# FINAL REPORT OF AN AUDIT

**CARRIED OUT IN** 

THE UNITED KINGDOM

FROM 06 TO 14 MARCH 2012

IN ORDER TO EVALUATE THE CONTROL SYSTEM IN PLACE GOVERNING THE PRODUCTION OF MECHANICALLY SEPARATED MEAT

In response to information provided by the Competent Authority, any factual error noted in the draft report has been corrected; any clarification appears in the form of a footnote.

## **Executive Summary**

This report describes the outcome of a Food and Veterinary Office audit in the United Kingdom, which took place from 6 to 14 March 2012, in order to evaluate the official food safety control system in place governing the production and placing on the market of mechanically separated meat.

The report concludes that the official controls implemented by the United Kingdom Competent Authorities do not guarantee that the EU requirements applicable to the production of mechanically separated meat are respected.

The creation of a product category, non-existent in current EU legislation, called "desinewed meat", with the backing of the United Kingdom Competent Authorities has led to major non-conformities such as the use of ruminants' bones for the production of mechanically separated meat, the production of mechanically separated meat without respecting all EU requirements and the placing on the market of products incorporating mechanically separated meat without identifying it on the label.

The report includes a number of recommendations addressed to the United Kingdom Competent Authorities, aimed at rectifying the identified shortcomings and deficiencies identified and enhancing the implementation of the official control system in place.

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## ABBREVIATIONS AND DEFINITIONS USED IN THIS REPORT

Abbreviation	Explanation
CA / CCA	Competent Authority / Central Competent Authority
DEFRA	Department for Environment, Food and Rural Affairs
EC	European Community
EU	European Union
FVO	Food and Veterinary Office
FBO	Food business Operator
FSA	Food Standards Agency
HACCP	Hazard Analysis – Critical Control Points
ISO	International Organization for Standardization
LA	Local Authority
MIG	Meat Industry Guide: food hygiene and other regulations for the UK meat industry
MSM	Mechanically Separated Meat
ОЈ	Official Journal
RASFF	Rapid Alert System for Food and Feed
SANCO	Health and Consumers Directorate General of the European Commission
UKAS	United Kingdom Accreditation Service
UK	The United Kingdom

#### 1 Introduction

The audit took place in the United Kingdom (UK) from 6 to 14 March 2012 and was undertaken as part of the Food and Veterinary Office's (FVO) audit programme.

The audit team comprised three auditors from the FVO. Representatives from the competent authority (CA) accompanied the team during the whole audit.

An opening meeting was held on 6 March 2012 in London with the Central CA (CCA), the Food Standards Agency (FSA). At this meeting the team confirmed the objectives of, and itinerary for the audit, requested the clarification of certain points of information provided by the CCA before the audit as well as additional information regarding specific elements of the control system in place.

## 2 OBJECTIVES

The objective of this audit was to assess, in the sector of production of mechanically separated meat (MSM), whether:

- the general rules for performance of official controls laid down in Regulation (EC) No 882/2004 are complied with, and
- the official control system in place for the production chain and placing on the market of MSM is in compliance with EU requirements<sup>1</sup>.

The table below lists the sites visited and the meetings held in order to achieve the above objectives:

Competent authority		
Central	3	Opening and closing meeting and a clarification meeting
Food processing facilities		
Cutting plants	2	Poultry cutting plants (one of them colocated with a MSM producer)
MSM production establishments	6	Three establishments producing chicken MSM, one producing pork MSM, one producing pork, bovine and ovine MSM and one producing MSM from the four species
Meat product / Meat preparation establishments	2	Using MSM

# 3 LEGAL BASIS

The audit was carried out under the general provisions of EU legislation and, in particular Article 45 of Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

A full list of the legal instruments referred to in this report is provided in Annex and refers, where applicable, to the last amended version.

<sup>1</sup> MSM is defined in Regulation (EC) No 853/2004 (Annex I, point 1.14) and specific requirements for its production are described in Annex III, Section V of the same Regulation.

#### 4 BACKGROUND

## 4.1 Previous FVO mission

This was the first audit to the UK specifically on MSM.

## 4.2 PRODUCTION AND TRADE INFORMATION

The table below was provided by FSA and indicates the quantity of MSM produced in the UK in 2010 and 2011 broken down by species.

Species	Year 2010	Year 2011
Chicken	29,153	18,572
Turkey	1,734	1,355
Pork	2,252	1,212
Bovine	0	110
Ovine	839	1,557
Total	33,978	22,806

The audit team was informed by the CCA that in the UK:

- Of the 33,978 tonnes of MSM produced in 2010, 7,590 tonnes were placed on the market of other Member States and 3,412 were exported to third countries;
- Of the 22,806 tonnes of MSM produced in 2011, 6,260 tonnes were placed on the market of other Member States and 3,840 were exported to third countries.

However, according to the information provided by FSA, in addition to the above mentioned figures "desinewed meat" (explanation of this term can be found in section 5.2 of this report) was produced in the following amount in the UK:

Species	Year 2010	Year 2011
Chicken	9,200	8,700
Turkey	2,150	1,061
Pork	11,376	7,810
Bovine	2,750	3,250
Ovine	1,000	1,000
Total	26,476	21,821

- Of the 26,476 tonnes of "desinewed meat" produced in 2010, 9 tonnes were placed on the market of other Member States and none was exported to third countries;
- Of the 21,821 tonnes of "desinewed meat" produced in 2011, 26 tonnes were placed on the market of other Member States and none was exported to third countries.

## 5 FINDINGS AND CONCLUSIONS

## 5.1 Competent authority

# Legal requirements

Articles 4, 8, 54 and 55 of Regulation (EC) No 882/2004.

## **Findings**

FSA and Local Authorities (LAs) are the CAs responsible for the official controls carried out in the MSM production chain. Competencies are distributed as follows:

- The FSA for MSM production establishments that are co-located with a slaughterhouse or a cutting plant;
- The LAs for stand-alone establishments.

The Department for Environment, Food and Rural Affairs (DEFRA) is responsible for food labelling where it does not relate to food safety or nutrition in England. FSA retains responsibility for all these areas in Scotland, Wales and Northern Ireland.

A more detailed description of the CAs can be found in the country profile for the UK on the following website: <a href="http://ec.europa.eu/food/fvo/country">http://ec.europa.eu/food/fvo/country</a> profiles en.cfm.

The audit team visited six establishments under FSA supervision and two under LA supervision. The audit team noted in FSA supervised establishments visited that official controls overall were sufficiently effective, leading to appropriate sanitary conditions (with some deficiencies of the premises highlighted in section 5.3.2 of this report). However, this was not the case in one of the LA supervised establishments visited where unacceptable sanitary conditions were observed. More detailed description of this issue can be found in section 5.3.4 below.

No findings were made by the audit team in relation to the CAs, which could have put into question the CAs legal powers or the measures implemented to ensure coordination and cooperation between the CAs, and absence of conflict of interest.

The FSA has issued a number of documented procedures, covering the area evaluated in this audit, which are published on the internet and regularly updated. For example, the "Manual for Official Controls" which provides details of the tasks, responsibilities and duties of FSA staff and veterinary contractors undertaken in approved establishments.

#### **Conclusions**

CAs are clearly designated, have adequate legal powers and comprehensive documented procedures to perform official controls within the scope of this audit in line with Article 4 of Regulation (EC) No 882/2004.

Effectiveness of the official controls performed by LAs was not demonstrated (see Article 4.2.(a) of Regulation (EC) No 882/2004).

#### 5.2 LEGISLATION, IMPLEMENTING MEASURES AND GUIDELINES

# Legal requirements

Article 291(1) of the Treaty on the functioning of the EU requires that the Member States adopt all measures of national law necessary to implement legally binding Union acts.

Article 7 of Regulation (EC) No 852/2004 stipulates that Member States shall encourage the development of national guides to good practice for hygiene and for the application of HACCP in accordance with Art. 8 of the Regulation. Art. 8(1) of the same Regulation stipulates that national guides to good practice shall be developed and disseminated by food business sectors in consultation with the stakeholders.

## **Findings**

FSA published several guidance documents on the internet for the meat industry. Among these, the "Meat Industry Guide" (MIG): food hygiene and other regulations for the UK meat industry". "Information, support and advice for the UK meat industries that should be followed for the sampling and testing of minced meat, MSM and other processed meat products". and the "Food Law Practice Guidance (England)" which provides non-statutory guidance to LAs on the enforcement of food law.

Regulation (EC) No 853/2004 (Annex I, point 1.14) defines MSM as the product obtained by removing meat from flesh-bearing bones after boning or from poultry carcases, using mechanical means resulting in the loss or modification of the muscle fibre structure.

On 7 September 2010, the FSA issued an information letter to Food Business Operators (FBOs) and to the enforcement authorities.

According to this letter, products obtained from flesh-bearing bones after boning or from poultry carcases with the aid of mechanical means may be categorised as either:

- MSM (as defined above); or
- Desinewed meat (in the form of a 'meat preparation', as defined in Annex I, point 1.15 of Regulation (EC) No 853/2004)

In this document "desinewed meat" is described as:

- Fresh meat from which sinews and tendons have been separated by mechanical means at low pressure,
- Produced from fresh meat or from the removal of residual meat from bones (including ruminants' bones),
- Produced by passing meat trim or meaty bones through a low pressure machine in a one or two stage process,
- Meat which does not satisfy the third element of the definition of MSM as muscle fibre structure is not lost or modified to any significant extent.

The accompanying document to this letter indicates that in order to make the distinction between MSM and desinewed meat, the FBOs shall provide the CA with microscopy analyses results demonstrating that the muscle fibre structure of the product at the end of the process has not been lost or modified. In this case, the desinewed meat produced will fall under the definition of meat preparation. As a consequence, the establishment producing desinewed meat will be approved for the production of meat preparation and not for MSM production. According to the procedure described in the document, the key determining factor as to whether a product falls within the definition of MSM or desinewed meat is the laboratory microscopy analysis result.

The CA funded the development of a specific microscopy method which can be used by the FBOs to demonstrate that they produce desinewed meat and not MSM. However, this method is neither recognised under EU legislation nor validated at any other international level. Moreover there is no evidence that the sample tested is representative of the current desinewed meat production and official samples are never taken to verify the validity of the FBO's sample.

Furthermore, the audit team noted in all establishments visited where desinewed meat was produced that these microscopy analyses results (where available) never indicated that there was no loss or no modification of the muscle fibre structure. On the contrary, a modification up to a certain extent was always reported.

## **Conclusions**

The product called "desinewed meat" falls within the definition of MSM as all three criteria of EU legislation (meat removed from flesh-bearing bones after boning; use of mechanical means, and loss or modification of the muscle fibre structure) are met (see Annex I, point 1.14 of Regulation (EC) No 853/2004).

The CA incorrectly considers desinewed meat as meat preparation. This has serious implications such as the use of ruminants' bones to produce MSM in contravention to Article 9 of Regulation (EC) No 999/2001 and the wrongly labelled end-products incorporating MSM, (non-compliance with Articles 2 and 3(1) of Directive 2000/13/EC and with Article 16 of Regulation (EC) No 178/2002) (see also Section 5.3.2 and 5.3.6 of this report).

# 5.3 OFFICIAL CONTROLS OF PRODUCTION AND PLACING ON THE MARKET

# 5.3.1 Approval procedures

# Legal requirements

Article 6 of Regulation (EC) No 852/2004,

Article 4 of Regulation (EC) No 853/2004.

Article 31 (2) of Regulation (EC) No 882/2004.

# **Findings**

According to the system in place for approval of establishments under the remit of the FSA (colocated establishments) and under the remit of LAs (stand-alone establishments) FBOs have to submit an application to the CA. Then an on-site visit is carried out and a conditional approval may be given if necessary. In this case, the report of the visit includes a request to correct deficiencies. A second conditional approval may be granted before full approval is then issued, or the full approval is not issued in case of failure to comply or the application is withdrawn.

However, as mentioned in section 5.2, establishments producing desinewed meat are considered by the CAs as meat preparation establishments. Therefore they are approved under the requirements applicable to establishments producing meat preparations and not under the provisions of MSM producing establishments.

According to the information provided by the FSA, at the time of the FVO audit there were 15 establishments approved for the production of MSM and nine establishments producing desinewed meat and approved as meat preparation establishments in the UK.

However, the FSA explained to the audit team that since establishments producing desinewed meat are approved as meat preparation establishments they do not have comprehensive information of the number of FBOs involved or the quantities produced.

In one of the establishments visited neither the FBO nor the CA was able to demonstrate to the audit team with documented evidence that an approval was granted in accordance with EU requirements (Article 4(3) point (a) of Regulation (EC) No 853/2004 and Article 3(3) of Regulation (EC) No 854/2004). This establishment presented many significant deficiencies as described in Section 5.3.4 of this report.

## **Conclusions**

The system for approval of establishments is overall in line with the relevant EU requirements. However, as a consequence of the incorrect classification of desinewed meat as meat preparation, certain establishments producing MSM are not approved for such production.

5.3.2 Official controls at MSM production establishment level

## Legal requirements

Article 4 of Regulation (EC) No 854/2004.

Article 9 of Regulation (EC) No 999/2001.

# Findings concerning general hygiene requirements

The audit team visited, in total, six establishments, of which four produced chicken MSM. According to the terminology used in the UK one establishment produced both MSM and desinewed meat, whilst the other three, produced desinewed meat only. One of these four establishments also produced desinewed meat from pig, bovine and ovine bones.

Of the remaining two establishments, one produced desinewed meat from pork only and the other from pork, lamb and bovine bones.

All establishments visited were under official control by the FSA. The frequency of the audits performed by the FSA is based on risk categorisation of the establishments, taking into account different risk criteria among other things type of products, throughput, level of compliance, consumers potentially at risk and confidence in management. The audit team also noted that in all MSM producing establishments visited this auditing frequency was once every five months.

Official control reports were available. When deficiencies had been found by the CA, corrective actions were requested and followed up. The deadline for the correction of deficiencies is agreed with the FBO during the final meeting at the end of each control. Follow-up is thereafter organised to enable the CA to evaluate the correct implementation of the action plan.

During the visits the audit team found several deficiencies which had been neither identified nor reported by the CA.

For example (not all deficiencies were present in each establishment):

- Surfaces (floors, walls and equipment) were not maintained in a sound condition (damaged, cracked, uneven surfaces, accumulation of meat debris, presence of mould, rust, flaking paint and mastic on the ceilings, in some instances above exposed product); These findings are not in compliance with paragraph 1 (a), (b), (f) Chapter II of Annex II to Regulation (EC) No 852/2004.
- Premises were not protected against the formation of condensation. This is not in compliance with paragraph 2(b), Chapter I of Annex II to Regulation (EC) No 852/2004.
- Insufficient protection of products against contamination during processing (e.g. a hopper with MSM was underneath a platform/stairs used by the staff). This is not in compliance with paragraph 2(c), Chapter I of Annex II to Regulation (EC) No 852/2004.
- Water leaks and pooling of water on floors; Defrost pipes from the evaporators of chilling equipment are not positively ducted into drains. These are not in compliance with paragraph 8, Chapter I of Annex II to Regulation (EC) No 852/2004.

• The audit team also identified deficiencies related to hygiene practices e.g. plastic containers with inadequately protected products were stored on top of each other; plastic containers with plastic liners inside were stored in such a way that the liners touched the floor; Reuse of dirty cardboard sheets. These are not in compliance with Chapter IV and X of Annex II to Regulation (EC) No 852/2004.

All establishments visited had Hazard Analysis Critical Control Points (HACCP) based procedures in place and the relevant records were kept. However, the audit team noted some deficiencies in the implementation of HACCP plans, as follows:

- In three establishments visited the critical limit for frozen MSM temperature was −12 °C instead of −18 °C required by EU legislation. This is not in compliance with points 3(c) or 4(e) Chapter III, Section V, Annex III to Regulation (EC) No 853/2004;
- In one establishment visited a part of the MSM production was not frozen immediately after production but was sent to another establishment (cold store) for freezing. This procedure was not described in the FBO's HACCP plan (neither in the flowchart nor in the hazard analysis);
- Although verification of monitoring of Critical Control Points was carried out in the establishments visited, this verification procedure was not always described in the HACCP plans.

The above deficiencies related to HACCP plans are not in compliance with Article 5 of Regulation (EC) No 852/2004.

# Findings specifically concerning MSM production requirements

None of the six MSM producing establishments visited fully complied with all criteria for MSM referred to in point 3, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004. For example the mechanical separation was not performed immediately after de-boning, alteration of the bone structure was observed and in some cases the calcium content was higher than the legal limit (see Annex IV to Regulation (EC) No 2074/2005) or not tested. As a consequence this product should be categorised as MSM referred to in point 4, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004.

Regarding the calcium content, in four of six establishments visited test results were available. All results observed were below the EU limit set for MSM referred to in point 3, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004 (i.e. 1000 ppm) except in one establishment for beef desinewed meat. For the two without test results available, the calcium content has never been tested.

Concerning bone structure, other than in those cases where only chicken wishbones were used for MSM production, the audit team observed alteration in the bone.

The shelf life (as indicated on the label) of the frozen MSM produced was at least one year (in one case it was 18 months) in four out of six establishments instead of the required three months for MSM referred to in point 4, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004. This is not in compliance with point 4(f), Chapter III, Section V, Annex III of Regulation (EC) No 853/2004.

In accordance with point 3(e), Chapter III, Section V, Annex III of Regulation (EC) No 853/2004 if MSM does not comply with the criteria for MSM referred to in point 3, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004, it may only be used to manufacture heat-treated meat products. However, this was not the case in two establishments visited as MSM referred to in point 4, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004 was used as an ingredient to

produce meat preparations (see section 5.3.4 of this report).

In one establishment producing chilled MSM not meeting all the criteria for MSM referred to in point 3, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004, the attributed shelf life was from seven to ten days. This is not in compliance with Point 4 Chapter III Section V of Annex III to Regulation (EC) No 853/2004 which stipulates that if after chilling, MSM is not processed within 24 hours, it must be frozen within 12 hours of production to –18°C within six hours.

Two establishments visited produced MSM from ruminants' bones (bovine and ovine animals), including vertebral columns, originated from the UK and another Member State. According to the FBOs the bones were from bovine animals under 30 months and from ovine animals under 12 months. Nevertheless, the use of ruminants' bones is not in compliance with Article 9 of Regulation (EC) No 999/2001 which stipulates that "Bones of bovine, ovine and caprine animals from countries or regions with a controlled or undetermined BSE risk shall not be used for the production of MSM". The audit team was informed by the FBOs concerned that this MSM from ruminants is used as an ingredient in the production of meat preparations and meat products.

#### **Conclusions**

The official controls concerning general hygiene requirements were overall adequate although the CA failed to identify a number of deficiencies related to sanitary conditions of establishments and to HACCP plans. Nevertheless, these controls failed to identify deficiencies related to specific EU requirements applicable to each category of MSM (i.e. MSM referred to in point 3 or MSM referred to in point 4, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004) and failed to ensure that ruminants' bones are not used for the production of MSM.

5.3.3 Official controls at level of establishments producing raw material

# **Findings**

The audit team visited two poultry cutting plants supplying poultry carcasses and chicken wishbones to other establishments in the UK and in other Member States for MSM production.

The audit team noted during these visits that carcasses stored in plastic containers before despatch were insufficiently protected against contamination as:

- no plastic liners were used or;
- plastic sheets on the top of the containers were unlikely to withstand international transport;
- in many cases these plastic containers were damaged and were no longer easy to clean and disinfect.

These conditions of storage and transport of foodstuffs are not in compliance with the requirements of Chapter IV and point 2 Chapter IX of Annex II to Regulation (EC) No 852/2004.

The audit team noted in both establishments visited that in the HACCP plans, the transport temperature for de-boned carcasses was set at below +2°C, which is in line with Regulation (EC) No 853/2004.

#### **Conclusions**

Official controls in the establishments producing raw material were inadequate in relation to the hygiene requirements for storage and transport required by Article 4 of Regulation (EC) No 854/2004.

# **Findings**

The audit team visited two establishments using MSM for manufacturing meat preparations and meat products. Both were under LA supervision. One used chicken, lamb and pork MSM for the production of meat preparations (burgers). The other establishment used chicken MSM to produce mainly non-heat treated sausages (meat preparations) and some heat-treated meat products.

As mentioned in section 5.3.2 of this report, none of the FBOs could provide evidence that the MSM used was the MSM referred to in point 3, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004. On the contrary, based on the available documentation, the MSM used was of the one which does not meet all the criteria laid down in point 3, Chapter III, Section V, Annex III to Regulation (EC) No 853/2004. Therefore it was not eligible for the production of meat preparations but only for heat-treated meat products.

The audit team noted very different situations in these two establishments. One of them was largely in compliance with EU requirements, whilst the other one had numerous significant deficiencies. For example:

- Inadequate storage conditions for packaging and wrapping material (unprotected wrapping and packaging material stored together with dirty equipment, food waste (causing bad odour) and wooden pallets). This is not in compliance with provisions of Chapter VI and X of Annex II to Regulation (EC) No 852/2004.
- Surfaces (floors, walls and equipment) were not maintained in a sound condition (rust, dirt, peeling paint, etc) and were not easy to clean and disinfect. This is not in compliance with paragraph 1 (a), (b), (f) Chapter II of Annex II to Regulation (EC) No 852/2004.
- Equipment used for processing food and rooms where food is prepared were not adequately cleaned. This is not in compliance with the provisions of Chapter II and V of Annex II to Regulation (EC) No 852/2004.
- Containers (freezers) used for storing frozen exposed meat were extremely dirty (floors were not cleanable and were contaminated with dust and woodchips). This is not in compliance with provisions of Chapter II of Annex II to Regulation (EC) No 852/2004.

None of these deficiencies had been reported in the last official control report (October 2010). In spite of major deficiencies related to structure, layout, maintenance, sanitary conditions and hygiene practices, the risk categorisation assessment of the establishment led to an inspection frequency of once every 18 months.

The LA, in cooperation with FSA, committed to perform a thorough inspection of this establishment and to provide a comprehensive action plan addressing all the deficiencies found by the audit team.

As described in section 5.3.1 of this report, evidence of the approval of the facilities could not be provided to the audit team by either the FBO or the CA (LA).

#### **Conclusions**

The official controls carried out by the LA in establishments using MSM in meat preparations and meat products were inadequate to detect deficiencies related to the correct use of raw materials and in one case to sanitary conditions.

## Legal requirements

Art. 4 of Reg. (EC) No 854/2004, in particular paragraphs (2), (5) and (8).

Article 11 of Regulation (EC) No 882/2004.

Regulation (EC) No 2073/2005.

## **Findings**

FBOs sampling activities:

In all establishments visited a sampling plan for microbiological analyses was in place. However, when reviewing the FBO sampling plans and their implementation, the audit team noted that none of them were in compliance with all requirements of Regulation (EC) No 2073/2005. The most common deficiencies were as follows:

- Insufficient sampling frequency (less frequent than weekly),
- Insufficient sample units (only one instead of the required five) taken,
- Pooling of samples at establishment level,
- Analytical methods different from the EU reference methods as laid down in Regulation (EC) No 2073/2005. No evidence of validation was available when alternative methods were used,
- No indication on the test results available in the establishment of the analytical method used by the laboratory.

No non-compliant results concerning FBOs' conformity with microbiological criteria were found by the audit team in the establishments visited.

Although the audit team found evidence in each establishment visited that the CA regularly verifies FBOs' records of own-check sampling programmes and their results with regard to compliance with microbiological criteria, the above mentioned deficiencies had never been detected nor reported during the official controls.

Concerning the pooling of the samples, the CA inspectors on the spot indicated that the FSA guidance document ("Information, support and advise for the UK meat industries that should be followed for the sampling and testing of minced meat, MSM and other processed meat products") supports this practice for *Salmonella* analyses. The CCA explained later that this would be acceptable but only at laboratory level, in line with ISO 6579 standard and that the guidance would need to be clarified.

Indeed ISO 6579 standard allows pooling of samples but evidence must be available to demonstrate that compositing (pooling the test portions) does not affect the result for that particular food. Such evidence was not provided to the audit team to support the FSA guidance.

The audit team also noted that all the laboratories used by the FBOs for own-check sample analyses were accredited by the United Kingdom Accreditation Service (UKAS) to ISO 17025 standard. The CA and the FBOs frequently misinterpreted this as a criterion of full compliance with the requirements of Regulation (EC) No 2073/2005.

# Official sampling:

Official samples for microbiological tests to verify FBOs' own checks are not taken in the UK as routine.

## **Conclusions**

The CAs do not require the FBOs to apply the relevant provisions of Regulation (EC) No 2073/2005 (sampling protocol, analytical methods) nor do they apply official sampling as a control method (Article 4, 8(c) of Regulation (EC) No 854/2004). As a consequence they are not in a position to completely verify FBOs' compliance with all the microbiological criteria set out in Regulation (EC) No 2073/2005.

5.3.6 Traceability – Labelling – Identification marking

# Legal requirements

Article. 4(2) of Regulation (EC) No 854/2004 and Chapter IV, Section V, Annex III to Regulation (EC) No 854/2004 (Labelling).

Article 4(6) of Regulation (EC) No 854/2004 and Section I, Annex II to Reg. (EC) No 853/2004 (Identification marking).

Regulation (EC) No 178/2002 (Traceability and labelling).

# **Findings**

# Traceability

Satisfactory traceability systems were in place in the establishments visited. Traceability checks are regularly performed by the CAs during the official controls.

## Labelling

The audit team noted that in each establishment producing desinewed meat that products were placed on the market under several denominations such as "ground pork", "degristled pork", "desinewed beef/lamb/chicken/pork", "chicken mince", "frozen minced lamb", etc. Some denominations used (ground pork, chicken mince, "viande d'agneau hachée congelée") are misleading as the product could be taken for minced meat.

On several occasions the FBOs clearly explained to the audit team that retailers do not want the term MSM to appear on the label of products sold to the consumers. In line with the incorrect FSA classification of desinewed meat as a meat preparation these new denominations of the raw material permitted the FBOs:

- To place on the market end-products incorporating desinewed meat with a label not identifying the MSM component, making the MSM invisible to the consumer,
- To count MSM as part (%) of the meat content of the product,
- To produce MSM from ruminants' bones, and incorporate it into meat products/ preparations.

However one FBO manufacturing sausages, explained that he clearly includes the term MSM on his labels as his products were sold to caterers and the label will never be read by the end consumer.

# Identification marking

All but one establishment visited, where part of the raw material (frozen meat and fat) stored was unpacked and unidentifiable, were compliant as regards identification marks.

## **Conclusions**

Official controls were overall adequate in relation to traceability and identification marking.

Concerning labelling, FBOs' practices are not in compliance with the provisions of:

- Article 3(1) of Directive 2000/13/EC (the labelling shall indicate the ingredients and their quantities in compliance with the relevant provisions of the same Directive)
- Article 2 of Directive 2000/13/EC and Article 16 of Regulation (EC) No 178/2002 (the labelling shall not mislead the consumers).

The official controls do not ensure that EU requirements concerning labelling are met (Chapter IV, Section V, Annex III of Regulation (EC) No 853/2004).

5.3.7 Rapid Alert System for Food and Feed (RASFF)

# Legal requirements

Article 50 of Regulation (EC) No 178/2002.

Regulation (EU) No 16/2011.

## **Findings**

There have been no RASFF notifications linked to MSM from the UK in the past three years.

#### 6 Overall Conclusions

The official controls implemented by the UK CAs do not guarantee that the EU requirements applicable to the production of MSM are respected.

The creation of a product category, non-existent in current EU legislation, called "desinewed meat", with the backing of UK CAs has led to major non-conformities such as the use of ruminants' bones for the production of MSM, the production of MSM without respecting all EU requirements and the placing on the market of products incorporating MSM without identifying it on the label.

## 7 CLOSING MEETING

During the closing meeting held in London on 14 March 2012, the audit team presented the main findings and preliminary conclusions of the audit to the CA.

During this meeting the CCA acknowledged the findings related to sanitary conditions in the establishments and undertook to address them.

However, FSA representatives did not react to the main finding set out above (creation of the product category "desinewed meat" and its consequences) explaining that the FSA is in discussion with the EU Commission on this issue.

## 8 RECOMMENDATIONS

The CCA should provide Commission services with guarantees and an action plan, including a timetable for its completion, within twenty five working days of receipt of the report, in order to address all the deficiencies identified in the report and in particular the following recommendations:

N°.	Recommendation
1.	In order to avoid risks to public health and comply with the EU requirements the CA should take urgent measures to stop the production of MSM from ruminants' bones (see Article 9 of Regulation (EC) No 999/2001).
2.	The CA should ensure that commodity currently denominated "desinewed meat" is fully categorised as MSM in accordance with the definition in point 1.14 of Annex I to Regulation (EC) No 853/2004.
3.	In order to comply with EU requirements, the CA should ensure that deficiencies found are corrected in the establishments visited and are not present in other approved ones (see Article 54 of Regulation (EC) No 882/2004).
4.	The CA should ensure that EU requirements for the production of MSM are respected (Chapter III (3) and (4) of Section V of Annex III to Regulation (EC) No 853/2004).
5.	The CA should ensure that when FBO own-check sampling programmes are implemented, the sampling protocols and test methods used are in compliance with EU requirements (see Regulation (EC) No 2073/2005).
6.	The CA should ensure that procedures based on HACCP principles maintained by FBOs are fully in compliance with EU requirements (Article 5 of Regulation (EC) No 852/2004).
7.	The CA should ensure that products containing MSM intended for supply to the end consumer are correctly labelled in accordance with EU requirements (Chapter IV, Section V, Annex III of Regulation (EC) No 853/2004 and Directive 2000/13/EC).

The competent authority's response to the recommendations can be found at:

http://ec.europa.eu/food/fvo/rep\_details\_en.cfm?rep\_inspection\_ref=2012-6432

Annex 1 - Legal References

Legal Reference	Official Journal	Title
Reg. 999/2001	OJ L 147, 31.5.2001, p. 1-40	Regulation (EC) No 999/2001 of the European Parliament and of the Council of 22 May 2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies
Reg. 178/2002	OJ L 31, 1.2.2002, p. 1-24	Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety
Reg. 852/2004	p. 1, Corrected and	Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs
Reg. 853/2004	p. 55, Corrected and	Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal origin
Reg. 854/2004	p. 206, Corrected and	Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption
Reg. 882/2004		Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules
Reg. 2073/2005	OJ L 338, 22.12.2005, p. 1-26	Commission Regulation (EC) No 2073/2005 of 15 November 2005 on microbiological criteria for foodstuffs

Legal Reference	Official Journal	Title
Reg. 2074/2005	OJ L 338, 22.12.2005, p. 27-59	Commission Regulation (EC) No 2074/2005 of 5 December 2005 laying down implementing measures for certain products under Regulation (EC) No 853/2004 of the European Parliament and of the Council and for the organisation of official controls under Regulation (EC) No 854/2004 of the European Parliament and of the Council and Regulation (EC) No 882/2004 of the European Parliament and of the Council, derogating from Regulation (EC) No 852/2004 of the European Parliament and of the Council and amending Regulations (EC) No 853/2004 and (EC) No 854/2004
Reg. 16/2011	OJ L 6, 11.1.2011, p. 7-10	Commission Regulation (EU) No 16/2011 of 10 January 2011 laying down implementing measures for the Rapid alert system for food and feed
Dir. 2000/13/EC	OJ L 109, 6.5.2000, p. 29-42	Directive 2000/13/EC of the European Parliament and of the Council of 20 March 2000 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs