HACCP Study

Raw Milk Collection, Transportation and Delivery

Dairy UK
Dairy Transport Assurance Scheme
Reviewed 14.03.2024

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HACCP study overseen and validated by:

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1. Introduction

The scope of this HACCP is Raw milk from farm collections including any reload operation within the UK and delivered to processing site or disposal facility.

In January 2006, existing legislation was replaced by new EC food hygiene regulations. These regulations are intended to ensure that all primary producers and businesses involved in the processing and manufacture of food products take all appropriate steps to control potential food safety hazards at every stage of the operation.

The following HACCP study was developed using the information gathered during the milk quality harmonisation group meetings attended by representatives from Arla Foods, Dairy Farmers of Britain, Saputo Dairy UK, First Milk, Milk Link and OMSCo. The objective of this HACCP study is to identify and consider any potential food safety hazards associated with raw milk collection, transportation and delivery to a registered processing facility. Utilising a risk-based approach will concentrate the appropriate resources on those steps that could critically affect product safety.

Despite the presence of a wide range of anti-microbial systems, milk supports the growth of a wide range of microorganisms and temperature is the major growth-limiting factor. Microorganisms can enter the milk from a large number of sources, and it must be remembered that this study is only concerned with raw milk collection, transportation and delivery of raw milk. Subsequent steps at the processing site such as filtration and heat-treatment are designed specifically to eliminate identified food safety hazards or reduce the likely occurrence to an acceptable level.

In April 2011 the Dairy Industry, through Dairy UK, launched a standard for the haulage of raw milk and bulk liquid milk fractions, known as the Dairy Transport Assurance Scheme (DTAS). The standard includes the requirement for HACCP and an annual HACCP review. From April 2012 the management of this HACCP study and the ongoing annual review process has been adopted by Dairy UK through the DTAS Management Committee.

Please note that EU law as it stood on 11pm on 31st December 2020 continues to be applicable in GB until further notice. The Retained EU Law Dashboard is the comprehensive and official GB reference point for retained EU law (now known as assimilated law) on 31 December 2020 at 11pm. EU law and future amendments to it continue to apply to Northern Ireland.

2. Process and product background information

2.1 Terms of reference (raw milk)

RAW WHOLE MILK (Pre Heat-Treatment)	
1. Product Name	Raw Cows' and Goats' milk
2. HACCP study	Bulk raw milk collection, transportation (include any reload operation) and delivery to an appropriate processing or disposal facility
3. Hazards considered	Microbiological, physical, chemical, allergen and radiological
4.Consumers at high risk	Infants, children, elderly, allergy sufferers, pregnant women and immune-suppressed
5. Specific microbiological hazards	Significant microbiological hazards to be considered by this HACCP study
	Salmonella spp *E. coli (verocytotoxin)* *Listeria monocytogenes* *Staphylococcus aureus* *Mycobacterium bovis (TB)* *Brucella spp* *Streptococcus spp* *Campylobacter jejuni* *Bacillus cereus* *Clostridium spp*
	Generic low risk hazards to be considered by prerequisite programme
	Aflatoxin
6. Specific chemical hazards	Significant chemical hazards to be considered by this HACCP study
	Antibiotic residues and other anti-microbial drugs
	Generic low risk chemical hazards to be considered by prerequisite programme
	Heavy Metals Environmental chemicals – Pesticides Cleaning chemicals (including QAC, cyanuric acid & chlorates) Allergens from official list (Appendix A) Parasiticides Radiological
7.Specific physical hazards	Significant physical hazards to be considered by this HACCP study
	None
	Generic low risk physical hazards to be considered by prerequisite programme
	Metal, Glass, Pests, Plastic
8.Legislation & supporting documents	Detailed under Appendix A
9.Shelf life	As required by customer specification and defined by industry best practise.

2.2 Terms of reference – (finished product)

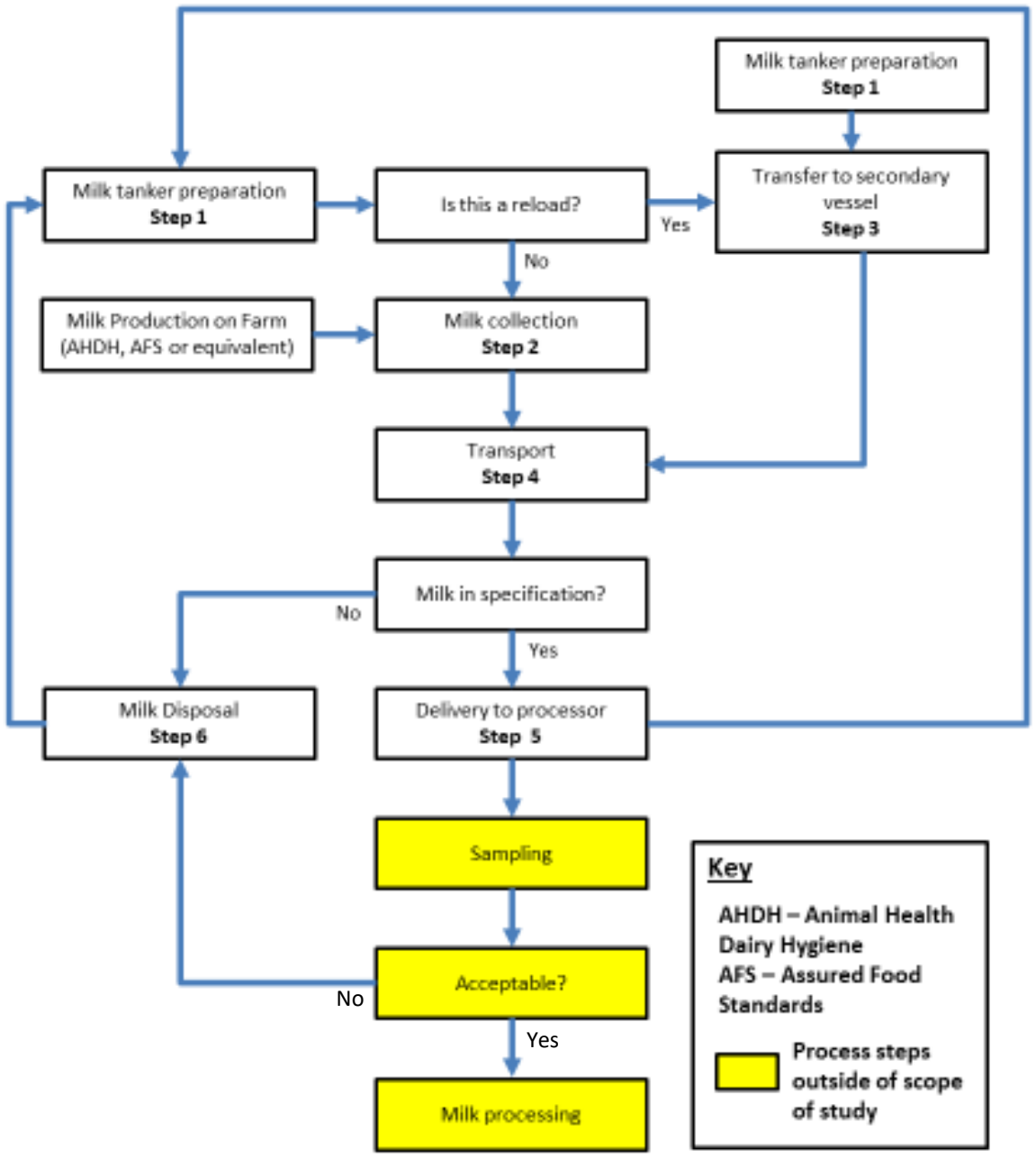
FINISHED PRODUCT (Post Heat-Treatment)	
1. How the end product is to be used?	Direct consumption or further processed
2. Where the products will be sold?	Domestic / Retail / Export / Foodservice / Out-of-home / Delivery to home
3. Distribution control	Chilled/Ambient/Frozen
4. Shelf life	As defined by the end product
5. Important final product characteristics	Heat treatment of raw milk. Product judged safe at point of despatch from processing site

2.3 (Original) HACCP food safety team (FST) members

Name	Company, job title & HACCP qualifications	Dairy Experience
Peter Dawson (FST Leader)	Dairy Crest - Technical Development Manager – Advanced certificate in HACCP principles (RIPH) MSc HACCP, Lead Assessor, SOFHT HACCP Trainer	25 Years
Diana Brydson	First Milk – Group Milk Quality Technical Specialist - Intermediate certificate in HACCP Principles	27 Years
David Baxter	Dairy Farmers of Britain – Quality and Compliance Manager	32 Years
Linda Clow	Arla Foods - Technical Support Manager	30 Years
Stan Coleman	Arla Foods – Bulk Farm Liaison Manager	34 Years
Tim Hampton	Milk Link – Quality Standard Manager - Intermediate certificate in HACCP principles	30 Years
Roger Duckett	OMSCo Ltd – Quality Manager	5 Years
Steven Pinchbeck	Arla Foods – Technical Manager (Ashby) Validation (consultation and proof reading) - Advanced certificate in HACCP Principles (RIPH)	15 Years

20th December 2005

2.4 Flow diagram



2.5 Process flow description

PROCESS STEP	PROCESS FLOW DESCRIPTION
1. Milk Tanker Preparation (for milk collection from farm and reloaded milk)	Raw milk collection tankers are cleaned at least once every 24hrs. Cleaning is normally carried out by connecting the tanker to a registered cleaning (CIP) system while in the reception area or at a defined cleaning station. Planned maintenance and regular inspections of collection tankers are carried out at a defined frequency as required within DTAS standards. Filter integrity checked pre-shift, before and after every collection and delivery and at end of shift.
2. Milk Collection	Raw milk is stored on the farm in refrigerated bulk tanks. The collection of raw cows' milk normally takes place daily or on alternate days. For goats' milk, may be up to every 3 days. On arrival at the farm the driver undertakes preliminary checks prior to loading the milk into the tanker. A loading hose from the tanker is connected to the outlet on the bulk tank.
3. Transfer to Secondary Vessel (reloaded milk)	The transfer of raw milk from a tanker that has collected raw milk direct from the farm, which is then transferred to another tanker at a reload point.
4. Milk Transport	Once the milk tanker has completed its scheduled route, milk is transported either direct to the processing site or to a reload point.
5. Milk Delivery	A delivery of a milk tanker at the receiving processing site with a batch of raw milk. The first thing carried out at the processing site is to determine the quantity of milk collected. Afterwards quality of milk is verified by organoleptic assessment, antibiotic detection, and several analytical tests. Upon satisfactory completion of these checks the milk is then pumped into a raw milk silo.
6. Milk Disposal	Milk rejected on Food Safety grounds will always be disposed of as a minimum Category 2 Animal By Product. Milk rejected against commercial specifications and not salvaged will be disposed of as a minimum Category 3 Animal By-products.

3. Prerequisite programme

Prerequisites are recommended and proven management procedures that help prevent 'low risk' food safety problems from occurring and are the foundation of this HACCP study. The HACCP team agreed to group the prerequisites into the following categories:

3.1 – Prerequisites

No	PRP	Hazard	Control Measure	Documentation
P1	Milk collection, hygiene, temperature and sampling operations including product transport standards - DTAS	Contamination of tanker / product by physical / chemical / microbiological hazards Growth of spoilage or pathogenic organisms / Cross contamination from other milk types / products (i.e. goats' milk, Halal, Organic, allergens)	Adherence to Driver's/Hauliers handbook Adherence to Standard operating procedures DTAS compliance Raw milk specification Producer contracts Condition and maintenance of tankers – integrity. Segregation procedures for milk / product types Adherence to CIP procedures	Collection and reload records. CIP records Sample traceability labels Maintenance records Pre-use checks Damage and defect reporting
P2	Farm and vehicle security Vehicles security tagged or accompanied during collection	Malicious contamination and/or fraud of tanker / equipment / product by any hazard	Adherence to Driver's/Hauliers handbook Adherence to Standard operating procedures Vehicle security logbook DTAS Standard compliance Simulated security breaches / challenge	Seal records Vehicle security logbook Security challenge records
P3	Temperature and age of milk	Microbiological hazards	Adherence to Driver's/Hauliers handbook Adherence to Standard operating procedures Raw milk specification Producer contracts	Collection and reload records
P4	Filtration during loading (1.75 x 1.25 mm, diamond shape)	Physical hazards (foreign bodies)	Adherence to Driver's/Hauliers handbook Adherence to Standard operating procedures	Maintenance records
P5	Product traceability	Withdrawal of unsafe food/products and prevention of unsafe food/products being despatched Unable to trace product	Adherence to Driver's/Hauliers handbook Adherence to Standard operating procedures DTAS compliance Traceability maintained throughout the process –transport management system. Tankers marked	Traceability and quarantine procedure Load documentation Product recall procedure. Crisis / emergency plan
P6	Driver competency & training (Including non-directly employed staff)	Microbiological, physical or chemical hazards due to inadequate training of the food transported	Staff training and communication DTAS compliance Ensure training is to a level commensurate with their job	Procedure and process training Individual training records.
P7	Agreed milk quality standards	Microbiological hazards	Raw milk specification Producer contracts Milk quality (payment scheme) Minimum Legislative standards	Raw milk specification Producer contracts
P8	Haulier approval	Microbiological, physical or chemical hazards due to not complying to agreed specification	Evaluation and approval of bulk milk hauliers (DTAS). Registered with local authority to ensure compliance with legislation	Haulier DTAS approval Haulier controlled subcontractor service level agreements
P9	Approved facility	All relevant hazards	DHI/EHO Licensed (or equivalent)	Proof or registration
P10	Quality Assurance	Relevant microbiological hazards. Poor farm / vat hygiene leading to physical / chemical hazards	Assured Dairy Farms scheme	Farm records Traceability procedure Load documentation
P11	Tanker cleaning – internals, hoses, ancillary equipment, back box, external cleaning. CIP Wash station risk assessment / approval	Microbiological contamination Physical contamination Allergen contamination Taint risks Chemical Hazards	Maintenance and cleaning of milk collection vehicles. Approved haulage depots (DTAS) and CIP of milk transfer equipment. Use of approved wash stations either:	CIP records Wash books Pre-use inspection CIP station risk assessment/ approval records

	Condition and maintenance of equipment and transport vehicles		• Own CIP • Customer defined • Standard defined e.g. at dairy (processor controlled) • Other risk assessed / approved CIP (by haulier) Sealing protocols (clean/dirty) Condition and maintenance of equipment and transport vehicles DTAS tanker specification. New / hired tanker controls Tankers marked food products only	Seal records
P12	Disposal of milk	Risk of contaminated / unsafe milk being processed onto market (e.g. antibiotics)	Adherence to ABP regulations / Feed Hygiene Legislation / Hauliers handbooks and Standard Operating procedures	Disposal records
P13	Driver Personal hygiene	Microbiological contamination Physical contamination	Adherence to Site hygiene requirements Uniform and PPE	Training requirements Personal hygiene procedure Fitness to work controls Site visitor control procedure Jewellery policy
P14	Planned preventative maintenance of vehicles and equipment – including calibration of temperature probes and flow meters	Microbiological, physical and chemical hazards due to poorly maintained / calibrated equipment	Maintenance & calibration schedule adhered to correctly	Maintenance / calibration records
P15	Staff Health	Microbiological hazard due to illness of staff	Illness reporting Return to work form	Company personal hygiene procedure Fitness to work procedure
P16	Staff personal hygiene	Physical / biological contamination of product (staff health/personal hygiene)	Adherence to Personal Hygiene policy Staff training Adequate welfare facilities	Personal Hygiene Procedure Staff training
P17	Control of contractors	Physical contamination of load/ product by engineering debris	Engineering controls; Condition and maintenance of equipment and transport vehicles; Staff training. Hand back / pre-use checks e.g. on tankers – wash if internal works	Wash records Maintenance records
P18	Complaints and non-conformance control	Issues not properly addressed and dealt with leading to repeats/ wider problems	Adherence to Complaints and non-conformance procedure	Complaint / non-conformance logs
P19	Crisis Management/ Business Continuity plan	Inappropriate response to emergencies that may affect product safety	Adherence to Haulier Emergency response manual / procedures	Emergency response manual / procedures

3.2 - Special measures

No:	Activity	Control Measure
SM1	Foot and mouth disease	Associated with animal health and welfare. Operate to Ministry guidelines.
SM2	Notifiable diseases such as Tuberculosis and Bluetongue.	Associated with animal health and potentially human health. Adhere to legislation via Drivers / Hauliers manuals and Standard Operating procedures – Effective heat-treatment.
SM3	Radioactive fallout affecting agricultural land or haulage operation	Procedures and monitoring in place to monitor radioactive contamination in UK. Regional monitoring and alerts / notifications

		from the Government agencies, FSA and Environment Agency. Any potential radiological risk would be immediately notified by FSA, EA and NRPB.

4. Regulatory minimum quality standards

4.1 – Regulatory quality standards

Regulatory Compliance (EC) No: 853/2004
II. HYGIENE ON MILK PRODUCTION HOLDINGS
A. Requirements for premises and equipment
1. Milking equipment, and premises where milk is stored, handled or cooled must be located and constructed so as to limit the risk of contamination of milk.
2. Premises for the storage of milk must be protected against vermin, have adequate separation from premises where animals are housed and, where necessary to meet the requirements in part B, have suitable refrigeration equipment.
3. Surfaces of equipment that are intended to come into contact with milk (utensils, containers, tanks, etc., intended for milking, collection or transport) must be easy to clean and, where necessary, disinfect and be maintained in a sound condition. This requires the use of smooth, washable, and non-toxic materials.
4. After use, such surfaces must be cleaned and where necessary, disinfected. After each journey, or after each series of journeys when the period of time between unloading and the following loading is very short, but in all cases at least once a day, containers and tanks used for the transport of raw milk must be cleaned and disinfected in an appropriate manner before re-use.
B. Hygiene during milking, collection and transport
1. Immediately after milking, milk must be held in a clean place designed and equipped to avoid contamination. It must be cooled immediately to not more than 8^0C in the case of daily collection, or not more than 6^0C if collection is not daily.
2. During transport the cold chain must be maintained and, on arrival at the establishment of destination, the temperature of the milk must not be more than 10^0C.
3. Food business operators need not comply with the temperature requirements laid down in points 1 or 2 if the milk meets the criteria provided in Part III and either (a) the milk is processed within two hours of milking or (b) a higher temperature is necessary for technological reasons related to the manufacture of certain dairy products and the competent authority so authorises.

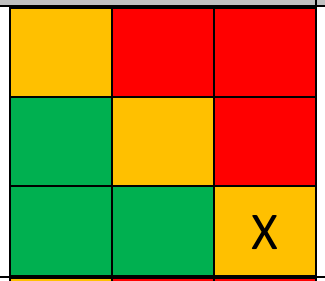
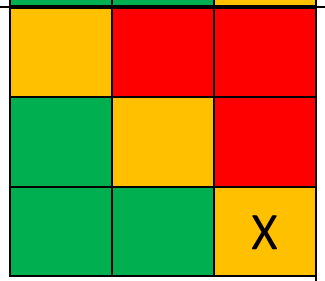
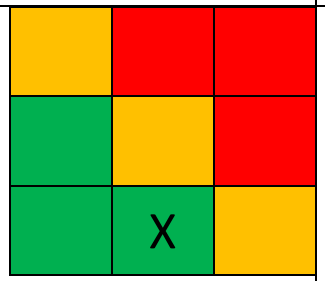
4.2 – Regulatory quality standards

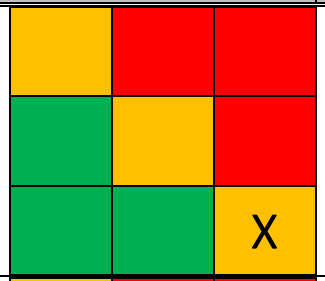
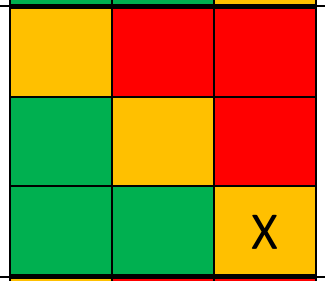
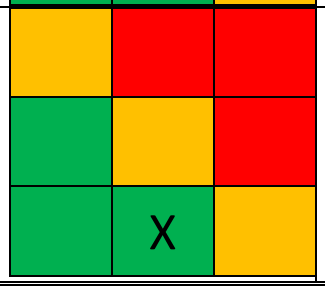
Regulatory Compliance (EC) No: 853/2004
III. CRITERIA FOR RAW MILK
1. The following criteria for raw milk apply pending the establishment of standards in the context of more specific legislation on the quality of milk and dairy products.
2. A representative number of samples of raw milk collected from milk production holdings by random sampling must be checked for compliance with points 3 and 4. The checks may be carried out by, or on behalf of: (a) the food business operator producing the milk; (b) the food business operator collecting or processing the milk; (c) a group of food business operators; or (d) in the context of a national or regional control scheme.
3. (a) Food business operators must initiate procedures to ensure that raw milk meets the following criteria: (i) for raw cow's milk Plate count at 30^0C (per ml) <100,000(*) Somatic cell count (per ml) <400 000(**) (*) Rolling geometric average over a two-month period, with at least two samples per month. (**) Rolling geometric average over a three-month period, with a least one sample per month, unless the competent authority specifies another methodology to take account of seasonal variations in production levels.
4. Without prejudice to Directive 96/23/EC, food business operators must initiate procedures to ensure that raw milk is not placed on the market if either: (a) it contains antibiotic residues in a quantity that, in respect of any one of the substances referred to in Annexes I and III to Regulation (EEC) No 2377/90, exceeds the levels authorised under that regulation. or (b) the combined total of residues of antibiotic substances exceeds any maximum permitted value.

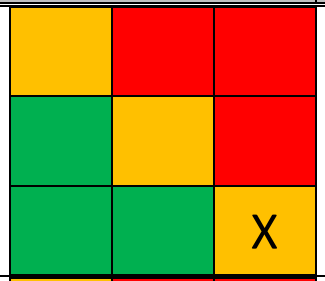
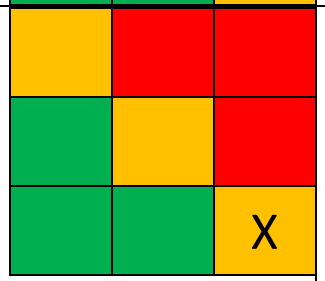
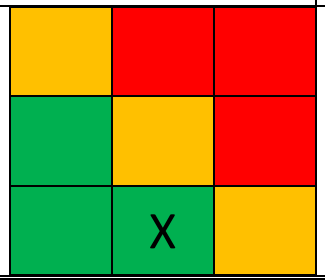
NB. Milk purchasers in their commercial contracts may require temperatures of 5 ^{0}C or lower to safeguard quality and shelf life of their products.

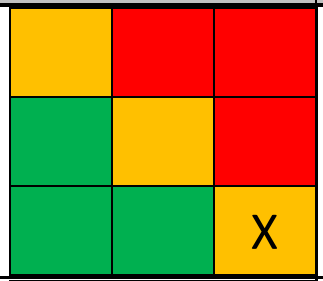
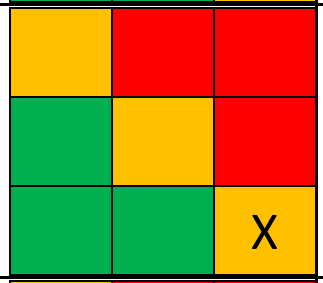
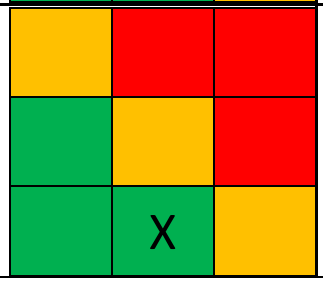
5.0 HACCP

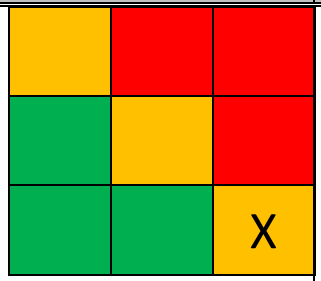
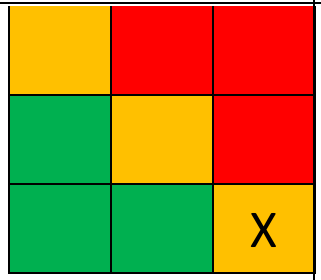
5.1 Hazard analysis

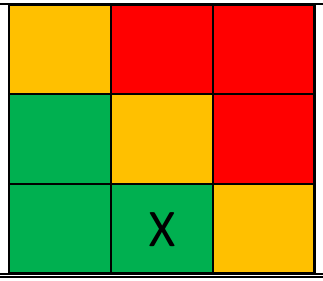
Step	Potential Hazard Introduced or Controlled	Is the Potential Hazard Significant	Justification for Inclusion or Exclusion as a Significant Hazard	Likelihood (y) and Severity (x)	Preventative Measures of the Significant Hazards
1 **Milk Tanker Preparation**	<u>Biological</u> Potential for material to be contaminated by collection tanker.	No	Not reasonably likely to occur; controlled by adherence to Milk Collection and Customer Delivery Procedures. Vehicle maintenance and cleaning controlled by prerequisite programme. CIP logbook verified by driver prior to milk collection.		
	<u>Chemical</u> Potential for material to be contaminated by collection tanker.	No	Not reasonably likely to occur; Vehicle maintenance and cleaning controlled by prerequisite programme. Drivers' responsibility to ensure that the tanker is completely drained of liquids after C.I.P. including visual inspection (e.g. adverse weather conditions).		
	<u>Physical</u> Potential for material to be contaminated by collection tanker.	No	Not reasonably likely to occur, controlled by adherence to Milk Collection and Customer Delivery Procedures and prerequisite programme. Filter integrity checked pre-shift, before and after every collection and delivery and at end of shift. Milk filtered (1.75 x 1.25 mm diamond shape) during collection and delivery.		

Step	Potential Hazard Introduced or Controlled	Is the Potential Hazard Significant	Justification for Inclusion or Exclusion as a Significant Hazard	Likelihood (y) and Severity (x)	Preventative Measures of the Significant Hazards
2 **Milk Collection**	<u>Biological</u> Potential for material to be contaminated during scheduled collection.	No	Not reasonably likely to occur; controlled by adherence to Milk Collection and Customer Delivery Procedures.		
	<u>Chemical</u> Potential for material to be contaminated during scheduled collection.	No	Not reasonably likely to occur; controlled by adherence to Milk Collection and Customer Delivery Procedures. Ongoing Government surveillance. Any potential radiological risk would be immediately notified by FSA / EA.		
	<u>Physical</u> Potential for material to be contaminated during scheduled collection.	No	Not reasonably likely to occur, controlled by procedures and prerequisite programme. Milk filtered (1.75 x 1.25 mm diamond shape) during collection. Milk visually inspected prior to collection.		

Step	Potential Hazard Introduced or Controlled	Is the Potential Hazard Significant	Justification for Inclusion or Exclusion as a Significant Hazard	Likelihood (y) and Severity (x)	Preventative Measures of the Significant Hazards
3 **Transfer to Secondary Vessel**	<u>Biological</u> Potential for contamination during transfer to secondary vessel.	No	Not reasonably likely to occur; controlled by adherence to Milk Collection and Customer Delivery Procedures. Temperature and age of milk covered by prerequisite programme.		
	<u>Chemical</u> Potential for material to be contaminated during transfer to secondary vessel.	No	Not reasonably likely to occur; Vehicle maintenance and cleaning controlled by prerequisite programme. Driver's responsibility to ensure that the tanker is completely drained of liquids after CIP. Including visual inspection (e.g. adverse weather conditions).		
	<u>Physical</u> Potential for material to be contaminated during transfer to secondary vessel.	No	Not reasonably likely to occur; controlled by adherence to Milk Collection and Customer Delivery Procedures.		

Step	Potential Hazard Introduced or Controlled	Is the Potential Hazard Significant	Justification for Inclusion or Exclusion as a Significant Hazard	Likelihood (y) and Severity (x)	Preventative Measures of the Significant Hazards
4 **Milk Transport**	<u>Biological</u> Potential for material to be contaminated during transportation.	No	Not reasonably likely to occur; controlled by adherence to Milk Collection and Customer Delivery Procedures. Temperature and age of milk covered by prerequisite programme.		
	<u>Chemical</u> Potential for material to be contaminated during transportation.	No	Not reasonably likely to occur; controlled by adherence to Milk Collection and Customer Delivery Procedures.		
	<u>Physical</u> Potential for material to be contaminated during transportation	No	Not reasonably likely to occur; controlled by adherence to Milk Collection and Customer Delivery Procedures.		

Step	Potential Hazard Introduced or Controlled	Is the Potential Hazard Significant	Justification for Inclusion or Exclusion as a Significant Hazard	Likelihood (y) and Severity (x)	Preventative Measures of the Significant Hazards
5 Milk Delivery	<u>Biological</u> Potential for material to be contaminated during delivery.	No	Due to preventative control measures, the presence or growth of pathogens in the raw product is not considered significant at this stage. Raw milk not deemed safe to consume at this point. The raw product will undergo some form of bacteria-reducing process prior to consumption. Tanker cleaning details verified upon delivery. Vehicle security status verified upon delivery. Raw milk quality, age and temperature verified prior to acceptance.		
	<u>Chemical</u> Antibiotic residues detectable due to inadequate withdrawal time or improper treatment or by accident. Other drugs with milk withdrawal period	**Yes** No	Presence of veterinary residues may potentially be allergenic and/or cause antibiotic resistance in humans. No evidence of any issues at any significant level within the industry Managed at farm level by both legislation and the requirement for a veterinary prescription for these drugs. Statutory and non-statutory surveillance schemes run by the appropriate Government bodies.		Analytical analysis of each batch of milk prior to processing by receiving site. On site verification of farm. Periodic testing of producer samples.

	<u>Physical</u> Potential for material to be contaminated during delivery.	No	Milk filtered during transfer to raw milk holding silo. Further filtration steps during processing (typically 1mm).		

5.2 Determination of critical control points

Process Step	Hazard	Q. #1 Do control preventative measures exist? No – Not a CCP – However, if control preventative measures are required to ensure safety, then modify step, product, or process Yes – to **Q.#2**	Q. #2 Is the step specifically designed to eliminate or reduce the likely occurrence of the hazard to an acceptable level? No – to **Q.#3** Yes - CCP	Q. #3 Could contamination with identified hazards occur in excess of acceptable levels or could these increase to unacceptable levels? No – Not a CCP Yes – to **Q.#4**	Q. #4 Will a subsequent step eliminate identified hazards or reduce the likely occurrence to an acceptable level? No - CCP Yes – Not a CCP	CCP Yes or No
5 **Milk Delivery**	Antibiotic residues above MRL and / or detectable levels due to inadequate withdrawal time or improper treatment	Yes	No	Yes	Yes (Milk receiving site)	No

5.3 HACCP plan

NO CCPs identified within the scope of this study.

Appendix A - Supporting documentation considered in construction of this HACCP – correct at time of publication (May 2023)

Standard Operating Procedures

1. Drivers Handbook – Milk collection and customer delivery procedures.
2. Hauliers Manual.
3. CIP code of practice for milk tankers.
4. Animal By-Products procedures.
5. Crisis management procedures.

Relevant UK & assimilated EU Legislation and relevant guidelines

1. Regulation (EC) No 852/2004 on the hygiene of foodstuffs.
2. Regulation (EC) No 853/2004 laying down specific hygiene rules for food of animal origin.
3. Regulation (EU) No 2017/625 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products.
4. Regulation (EC) No 2073/2005 on microbiological criteria for foodstuffs.
5. Commission Regulation (EC) No 2074/2005 laying down implementing measures for certain products
6. The Veterinary Medicines Regulations 2013 (SI 2033/2013)
7. Commission Regulation (EU) No 37/2010 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin
8. Food Safety Act 1990
9. Regulation (EC) No 178/2002 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
10. Regulation (EC) No 1069/2009 laying down health rules as regards animal by-products and derived products not intended for human consumption
11. Commission Regulation (EU) No 142/2011 implementing Regulation (EC) No 1069/2009 laying down health rules as regards animal by-products and derived products not intended for human consumption
12. The Animal By-Products (Enforcement) Regulations 2013, 2014, 2015
13. Commission Regulation (EU) 1881/2006 on maximum levels for certain contaminants in food.
14. Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin
15. Regulation (EC) No 183/2005 laying down requirements for feed hygiene
16. Dairy UK – Industry Guide to Good Hygiene Practice – Milk and Dairy Products. – UNDER REVIEW
17. FSA – Information and guidance on the testing of milk for antibiotic residues (2015)
18. Codex Alimentarius - General Principles of Food Hygiene (CXC 1-1969) and HACCP annex (revised 2020)
19. ACMSF – The possible health risks to consumers associated with Mycobacterium bovis and milk. Part I – Pasteurised milk and milk products (ACM /995)
20. Dairy Transport Assurance Scheme (DTAS), revised standards May 2023-March 2024 v13 (as at March 2023)
21. Dairy UK Tanker Cleaning Code of Practice (v3 May 2021)
22. Dairy Transport Assurance Scheme Guide to outbased reload sites

23. IDF Guide to Prudent Use of Antimicrobial Agents in Dairy Production (2013)
24. FSA Food Handlers: Fitness to Work
25. Dairy UK Due Diligence Scheme (annual report)
26. Joint statement from the National Office of Animal Health (NOAH) and the Veterinary Medicines Directorate (VMD) on the use of flukicides in dairy cattle (2020)
27. Annex II of the EU Food Information for Consumers Regulation No.1169/2011 and Commission Delegated Regulation (EU) No. 78/2014 amending Annex II to Regulation (EU) No 1169/2011 [list of 14 allergens that must be labelled or indicated as being present in foods].
28. Current prevailing Red Tractor Assurance Standards October 2022 v5
29. Organic standards (relevant to UK)

Forms

1. Tanker cleaning logbook (Cleaning verification)
2. Vehicle security form
3. Route collection summary
4. Reload/transhipment summary
5. Traceability
6. Incident report/rejection forms
7. Animal by Product (ABP) Paperwork
8. HACCP poster for producers referring to antibiotics (revised and reissued March 2014)
9. BCVA on farm antibiotic bulk tank investigation form

Appendix B – HACCP review

A HACCP review should be conducted annually to review the need to revise the HACCP plan. This review ensures a critical evaluation of any changes that may affect overall product safety.

The following items are assessed to determine if a review of the HACCP plan is required.

1. Actions arising from audits, nonconformities or complaints.
2. Changes to raw material suppliers.
3. Changes to customer or consumer use.
4. Changes to storage, collection or distribution systems (Farm and haulage).
5. Changes to current testing schedules
6. New or emerging hazards (Microbiological, Physical. Chemical)
7. Developments in scientific information associated with raw milk
8. Changes to legislation or relevant guidelines

Data arising from HACCP reviews should be documented and forms part of the HACCP record keeping system.

2024 REVIEW

No:	Raw Milk HACCP Review Agenda	Changes	
		Yes	No
1	Number of non-conformances raised in last DTAS audit	103	
2	Of the above NCs, how many were related to Food Safety?	54	
3	Changes to raw material suppliers significant to HACCP.		N
4	Changes to customer or consumer use.		N
5	Changes to storage, collection or distribution systems (Farm and haulage).		N
6	Changes to current testing schedules.		N
7	New or emerging hazards (Microbiological, Physical. Chemical).		N
8	Developments in scientific information associated with raw milk.		N
9	Changes to legislation or relevant guidelines.	N	
10	Have you verified the DTAS HACCP ensuring it meets the specific activities of the local operation to which the HACCP applies?	Y	
11	HACCP Team Leader to complete	Date: 14.03.24	

Comments/Considerations

Points considered during the review meeting included

- Actions arising from audits identified in the questionnaires.
- Recommendation of implementing a TACCP/VACCP study to support the HACCP, that would include malicious contamination and fraud hazards as considerations – not progressed but remains as a recommendation.
- Current auditing process has been reviewed in detail. The HACCP Team is proposing a review of audit grading to reflect severity. Throughout 2024, the HACCP team will review the standards to make recommendations on risk-assessed scoring ahead of the 2025 review. The topic is to be discussed during the next Governance meeting.
- 2024 review highlighted a challenge in relation to repeated non-conformances. This is of particular importance if Food Safety NC's are reoccurring. The process of NC's is to be reviewed during the next Governance meeting. Key points for discussions are: possibility of increased audit frequency and audits being unannounced.
- Despite best efforts and clear communication, there are a number of Hauliers that have not provided a response to the annual questionnaire – escalation and possible penalty to be introduced. Pending discussion with Governance Team.
- The Assured Integrated Milk Supplier Scheme (AIMS) was operating on a pilot basis during 2023. The scheme has gone live from January 2024. It is important to acknowledge that any haulier participating in AIMS is required to be DTAS certified.
- A trained, and competent, individual should be responsible for the HACCP in line with DTAS Standard requirements A5.1 and A5.2 to enable verification and acceptance of the DTAS HACCP.
- Consistency of DTAS auditors – agreed to progress with annual re-calibration to discuss HACCP requirements delivering continuous improvements.
- The DTAS standards have been amended to clarify Food Safety clauses. This should enhance functionality and easiness of use.
- DTAS HACCP questionnaire in place with guidance for completion to ensure consistency.
- HACCP Awareness training was introduced from 2024, and is delivered through an online platform provided by Techni-K
- Submissions from individual hauliers in response to the HACCP questionnaire have been considered and registered below.
- Updated legislation references are in line with the UK exit from the European Union.

HACCP Review Meeting Date	14.03.2024
Team members present at meeting	**DTAS members reviewed by questionnaire**
Rowena Marshall (Arla Foods) John Whitelaw (TP Niven) Jen Shelton (Organic Herd) Gosia Johnstone (Saputo Dairy UK)	• Alvis Contracting • Arla Foods Aylesbury • Arla Foods Burton upon Trent • Arla Foods Chester • Arla Foods Four Crosses • Arla Foods Lockerbie • Arla Foods Stourton • Arla Foods Westbury • Wm Armstrong (Longtown) Ltd • S J Bargh • Berkeley Farm Dairy • R & EJ Bowker • Buckley Farm Dairy • Carron Transport Ltd • Chew Valley Dairy • CJS Transport Services Ltd • S Connolly & Son • Cotteswold Dairy Ltd • Dale Farm Cooperative • Dales Dairies

	• Dalton Livestock • Dennis Distribution • J&E Dickinson • Edwards Haulage (Ruabon) Ltd • Edwards Transport (Shropshire) Ltd • Embleton Hall Dairies • Frazer Haulage • Freightage Ltd • P Gallagher & Son Ltd • Graham's The Family Dairy Ltd • Gregory Distribution • Isle of Man Creamery • John Mackirdy Ltd • Lancashire Farm Dairies • Llaeth Cymreig cyf • Long Clawson Dairy • Lowcock Transport • R W Loxton • Mark Hunter Ltd • MDS Distribution Ltd • M Keys Transport • MilkTrans • M J Refrigeration Transport Ltd • Mona Island Dairy Ltd • Montgomery Tank Services • Müller Milk & Ingredients Distribution Amesbury • Müller Milk & Ingredients Distribution Bellshill • Müller Milk & Ingredients Distribution Bridgwater • Müller Milk & Ingredients Distribution Manchester • Müller Milk & Ingredients Distribution Market Drayton • Müller Milk & Ingredients Distribution Stonehouse • TP Niven Charlton Adam • TP Niven Lockerbie • TP Niven Mauchline • TP Niven Stranraer • North Down Grain Ltd • Parkham Farms • Pattemores Transport Ltd • Paynes Dairies • Richard Thomas Transport Ltd • Rivermead Dairy Ltd • Seaways Services (UK) Ltd • G&J Shuttleworth Ltd • South Caernarfon Creameries • South Lakes Organic Milk • TG Trans Ltd

	• Trewithen Dairy • Turners (Soham) Ltd • Valley Transport Services Ltd • H Walker & Son • J H Willis • Wilsons of Kendal Ltd (formerly JS & KM Wilson & Son) • Wincanton

Name	Company, job title & HACCP qualifications	Dairy Experience
Jen Shelton	Organic Herd Ltd. – Head of Product Management, Technical and Supply Chain Level 4 HACCP, Level 4 Food Safety Management. 30 years' experience in food industry.	14 years
Gosia Bycio	Saputo Dairy UK - Group Technical Support Manager HACCP Level 4, MSc in Food Industry Management	14 Years
John Whitelaw	TP Niven – Milk Contract Manager DTAS Auditor / Assessor	34 Years
Rowena Marshall	Arla Foods - UK Senior QEHS Business Partner HND Food Science, MBA (Strategy), Lead Assessor, HACCP level 2	39 Years