Proposal P1022 CFS2
Primary Production & Processing Requirements for Raw Milk Products

Major Procedure

Summary
NSW supports Option 1 - prepare a draft variation to Standard 4.2.4 to permit the sale of raw milk products where it can be demonstrated that the intrinsic physio-chemical characteristics of the finished product do not support the growth of pathogens and there is no net increase in pathogen levels during processing.

NSW notes that some of the requirements for raw milk quality are set very high and this will limit significantly farms that may intend to supply milk for this sector.

Specific Issues
Call for submissions: the draft standard:
Subclause 25 (5) would seem to prohibit the use of a silo of milk being used to manufacture both raw milk cheese and pasteurised cheese. The objective is to separate milk that does not meet the standards required for unpasteurised dairy products from milk that does, rather than limit where the higher sanitary quality milk may be used. As written the subclause possibly favours boutique cheese manufacturers or small specialty operators over larger businesses.

Subclauses 33 (3) and (4) and 34 (1) and (2) do not work well together. Subclause 33 (3) sets a high standard. It effectively excludes the use of milk from skip-a-day farms and imposes tight logistics on farms with daily milk pick up. Subclause (4) allows for a documented work-around that overturns subclause (3). Subclauses 34 (1) and (2) require testing, which must include microbiological testing. Microbiological testing adds at least 18 hours to the time before milk can be released for use. This means that the requirements of 33 (3) can never be met. While the New Zealand clauses are slightly more prescriptive they are clearer and that could assist businesses of a size likely to pursue this market.

Supporting document 2; guide to the requirements for raw milk products.
The recommended acceptable limits for somatic cell counts (200,000) and total plate count (25,000) for bovine milk represent high quality milk. Even herds with exceptional udder health will not meet the BMCC standard every month. Recent data demonstrates that very few NSW farms would meet the proposed BMCC standard at every pickup. Intuitively high sanitary standards may seem to be appropriate, but is there any evidence that those standards are absolutely necessary for the production and safety of raw milk cheese? New Zealand has established limits of 400,000 and 100,000 respectively. Sheeps milk for Roquefort cheese production has a plate count limit of 1,000,000. The *E. coli* limits also differ between Australia (<10) and New

Zealand (100). Questions arise as to why Australia would seek differing standards if processes and desired outcomes are similar.

The requirements for pathogen testing on bulk farm milk are vague and require clarification to provide certainty: what frequency of testing is implied by 'routinely'? New Zealand requires a weekly test of bulk milk for *Listeria monocytogenes* but allows the operator of the risk management plan to set the limit. It seems that French farmers are expected to test their own bulk milk while processors test each silo of milk for Roquefort cheese for *L. monocytogenes.*

Australia and New Zealand also refer to testing milk silos prior to use but limits differ for total plate count (100,000 Australia; 300,000 New Zealand).

Supporting document 3 remains a useful document, but it is clear that many raw milk cheeses will require a challenge study to separate category 2 products from category 3 products. In particular:

- The Augustin model has a significant grey zone where the physio-chemical parameters of the cheese do not reliably separate cheeses that will allow pathogen growth from those that do not. Many cheeses shown not to support pathogen growth fall into that zone. Use of the Augustin model will lead to a requirement to undertake challenge testing. A moderately complex challenge test, such as that undertaken by Institute Pasteur on Roquefort cheese, could cost $30-40,000.
- There is no effective tool to gauge 'no net growth of pathogens' during manufacture and maturation and challenge testing will be required.

A clear 'go – no go' on pathogen growth in the final product would be useful for product developers and regulators. A series of Food Safety Objectives (e.g. rapid acidification to pH X within Y hours…) that if met provide some confidence that a challenge trial is likely to demonstrate 'no net growth' would also be welcome. Repeated challenge tests can become very expensive.

ENDS

The views expressed in this submission may or may not accord with those of other NSW Government agencies. The NSW Food Authority has a policy which encourages the full range of NSW agency views to be submitted during the standards development stages before final assessment. Other relevant NSW Government agencies are aware of and agree with this policy.