

Summary of Submissions on Proposal to Amend Prescribed Food Standard and Import Requirements for Bivalve Molluscan Shellfish

June 2007

The New Zealand Food Safety Authority (NZFSA) released a discussion paper *Proposal to Amend Prescribed Food Standard and Import Requirements for Bivalve Molluscan Shellfish: NZFSA Public Discussion Document No 05/06 November 2006* on 10 November 2006. Submissions closed on 10 January 2007.

Eight submissions were received. This document summarises the comments made in these submissions.

List of submitters

Seafood Industry Council
Aroma New Zealand Ltd
Sealord New Zealand Marketing Ltd
Shore Mariner Ltd
United Fisheries Ltd
Regional Public Health, Hutt Valley District Health Board
AqriQuality
Cawthron Institute

Summary of Submissions

Submissions have been summarised under headings that correspond to the discussion document. A summary of the main comments is captured under the 'general comments' section. More detailed comments are summarised in the subsequent headings with NZFSA's response following in italics where relevant.

1. GENERAL COMMENTS:

Seafood Industry Council supports the overall content of the proposal.

Aroma New Zealand Ltd supports the proposal in general terms. A brief history of the company's operation was included noting that in ten years of operation, noncompliant product was never an issue. The company recommended consideration of a 'case-by-case' option based on the end use of the products.

Sealord NZ Marketing Ltd supports the proposal but has concerns about the potential effect on cost of imports and the time allowed for other countries to meet the new standard.

Shore Mariner Ltd strongly disagrees with the proposal and considers it is based on incorrect import data. It considers there has not been enough consultation, time, diligence and accuracy in the preparation of this proposal. Shore Mariner is of the opinion that all change to current standards should be considered with the Australia New Zealand Food Agency (ANZFA)¹ joint standards in mind. It does not consider all BMS's to be in the same risk category and suggests different rules should apply.

United Fisheries agrees that a change to the import standard is required but raised concerns about some of the issues outlined in the proposal.

Regional Public Health supports the proposal.

AgriQuality commented that the laboratory costs for biotoxins do not include the LC-MS method.

Cawthron Institute recommended that the LC-MS method should be applied to all BMS rather than being restricted to "smoked product only".

2. CONSULTATION PROCESS:

¹ Now Food Standards Australia New Zealand (FSANZ)

Shore Mariner Ltd expressed dissatisfaction with the consultation process. It commented that NZFSA should have consulted with industry, particularly the two companies responsible for importing most BMS. Shore Mariner stated that import data provided by NZFSA to support the proposal is incorrect and provided its own statistics.

NZFSA: The principles underpinning the proposed import standard for BMS have been extensively consulted upon over the last few years as part of the Imported Food Review. The discussion document is the mechanism NZFSA used to engage with stakeholders on changes to specific technical standards.

NZFSA acknowledges that the import data contained in the discussion document may not be correct. Import data was sourced from New Zealand Customs and, as noted by Shore Mariner in its submission, wrongly coded Customs entries can result in incorrect data. The import data was included in the discussion document to give a 'snapshot' of the type of products that have been imported and in what sort of quantities. It was not used to justify the proposed amendments although NZFSA notes that with the exception of the 2006 figures, the import data in the discussion document underestimates the quantities of BMS imported from 2003 to 2005. The summary of implications for industry in the document (section 4.2.3) would still apply using the statistics provided by Shore Mariner.

United Fisheries commented that the proposal appeared to be written for the Minister not for knowledgeable importers that were involved in the Norovirus issue.

NZFSA: The discussion document is written in a style that all stakeholders (including consumers) might understand the issues being addressed, the options NZFSA considered to address these issues, and NZFSA's proposed solution.

Regional Public Health commented that the consultation process appeared to be robust with all relevant stakeholders included.

3. THE NEED FOR SPECIFIC CHANGE

Seafood Industry Council supports NZFSA's view that a recognised management system for production and processing of BMS is the most effective way of managing food safety. Concerns were raised around the management of freshwater BMS. Given there is little information on the biotoxin hazards associated with freshwater BMS, the Council would like a full hazard analysis for freshwater toxins (e.g.cyanotoxins) to ensure the risks associated with these products are

managed effectively. The Council would also like assurances that any imported product produced in the marine environment is not affected by freshwater toxins (above regulatory levels), as is required by the New Zealand (NZ) standard.

NZFSA: Importers wanting to import and sell freshwater BMS will only be able to do so if the product is sourced from a recognised exporting country programme. As for marine BMS, consignments of freshwater BMS will only be cleared when NZFSA has confirmed that they are derived from a programme in the exporting country that manages the hazards associated with BMS and has been recognised as meeting NZ import requirements for BMS. NZFSA has not approved any programmes for the production of freshwater BMS to date. Should there be interest in importing freshwater BMS from importers or exporting countries then any necessary science work, such as hazard analysis, will be completed prior to recognition of any freshwater BMS programmes. This is consistent with the new imported food regime, which is currently being implemented.

Sealord NZ Marketing Ltd supports the proposal that imports only be allowed from recognised BMS management programmes. The company emphasised the need for a transitional period that will allow for China's BMS programme to be assessed and recognised.

NZFSA: A one-year transition period from implementation has been proposed.

Shore Mariner Ltd did not support this section and commented that it was only aware of viral foodborne illness outbreaks attributed to imported oysters occurring in NZ. The proposal is misleading as it implies all BMS have had problems and suggests all such products should be treated in the same way. It considers the argument against stand-alone border testing is flawed as shipments of BMS have never been tested for Norovirus as part of the current border testing programme.

NZFSA: Recent viral foodborne illness outbreaks have only been associated with imported oysters. However, the new standard and import requirements have been proposed for several reasons, not just to address viral food borne illness outbreaks. Other reasons why the current standard needs to be amended are:

- *It has not been reviewed since 1996 and does not reflect current scientific knowledge;*
- *The Imported Food Review recommended that the current imported food programme should change its emphasis from relying on stand-alone border testing to recognising exporting country programmes. Import standards for particular foods should also be consistent with the standards applying to domestic production of that food;*

- *Imported countries are treated inconsistently under the current regime.*

United Fisheries Limited supports that a change to the current standard is required. However, it commented that the Norovirus outbreak at Eden Park was noted as a careless act from a catering perspective but that resulting action from District Health Boards (DHB) caused significant financial impact on importers and Korean exporters. United Fisheries commented on the need to compare testing results on imported BMS data from DHBs over the past four years with the existing import standard as it considers the sampling and testing may not always have been suitable. The company recommended a full urgent review of the operation / training / structure / response of DHBs.

NZFSA: Public Health Units (PHU) in the DHBs were acting on instruction from NZFSA when they responded to the Norovirus outbreak attributed to Korean oysters. The presence of Norovirus in the shellfish means that the shellfish have been exposed to human faecal contamination, most likely from sewage. NZFSA has no knowledge of other pathogens that may be present and it is unacceptable to grow BMS for human consumption in areas where they are exposed to human sewage.

As part of the implementation of the Imported Food Review recommendations, NZFSA is currently reviewing the roles, responsibilities, tasks and functions of the various border control agencies, including PHUs. The Review highlighted the need to make the best use of the resources at the border.

Regional Public Health supports the need for change and agrees that the current regulations for BMS do not provide sufficient consumer health protection given the Norovirus outbreaks.

4. OPTIONS FOR FUTURE MANAGEMENT

a) Take no action

b) Officially assess and, if appropriate, recognised exporting country programmes that comply with, or are equivalent to, the NZ BMS standard

c) Enhanced border testing in the absence of recognition of exporting country programmes

Seafood Industry Council supports NZFSA's preferred option to amend the Prescribed Food Standard to include pathogenic viruses and amend the import requirements to only allow

imported BMS to be sourced from officially assessed and recognised exporting country programmes.

Sealord NZ Marketing Ltd emphasises that the supply of certain BMS products that it imports are limited and that it does not want to be forced into the situation of not being able to import an otherwise 'safe' food product due to non-recognition of some countries BMS programmes. Sealord comments on the need to allow time for exporting countries' programmes to be recognised, and recommends an extension to the proposed one-year transition period which will apply from implementation of the proposed standard. This should allow for continued testing at the border.

NZFSA: A one-year transition period from implementation has been proposed, where BMS imported without certification will be able to be imported if sampled and tested at the border. The border testing requirements are outlined in the draft Standard Management Rule: BMS (Appendix 2 of discussion document). The transition period has been proposed to allow time for exporting countries competent authorities to apply to NZFSA for recognition of their BMS programmes and for NZFSA to assess and, if appropriate, recognise such programmes. Extending the transition period beyond a year is not acceptable as the transition period requirements do not provide as much protection as the proposed new standard.

Shore Mariner Ltd disagrees with the proposal as there is only justification for altering the current standard in relation to oysters given they are the only product associated with the recent viral outbreaks. It recommends that all management options be considered with the 1995 ANZFA Food Standards Treaty in mind and consultation with AQIS should occur before any changes are made.

NZFSA: It should be noted that the Australian authorities banned the importation of BMS into Australia from Korea when concerns were raised about contamination of the product. New Zealand took a more lenient approach in comparison and allowed product to be continue to be imported and sold as long as it was labelled as requiring cooking.

See comments under point 3 for Shore Mariner. The proposed standard and associated import requirements were developed with the Joint Food Standards Setting Treaty between Australia and NZ and the resulting Trans Tasman Mutual Recognition Arrangement (TTMRA) in mind. NZFSA is currently working with Australian authorities (FSANZ (Food Standards Australia and NZ) and Australian Quarantine and Inspection Service (AQIS)) on removing the current exemption of high risk foods (including BMS) from the TTMRA in order that these products can be

freely traded. Australia has been included in consultation on the proposed standard along with NZ's other major trading partners.

Shore Mariner Ltd considers the best option is to substantially increase border testing using the Experimental Method for testing Norovirus which was responsible for isolating the problem. While it sometimes gives false negatives it seems to be very accurate when sampling is stepped up to every 1000kg.

NZFSA: While the testing method for Norovirus has been greatly improved, it is still not accurate enough to include as part of a border testing programme or border verification programme. Introducing substantial border testing would be inconsistent with the Imported Food Review recommendation that the current imported food programme should move away from stand-alone border testing to recognition of exporting country programmes. It is agreed internationally that the best practice for managing food safety hazards associated with BMS is recognition of systems that manage growing, harvesting, transporting, processing and labelling of BMS.

Shore Mariner Ltd recommends that there be different rules for roe-off scallops and crumbed oysters/scallops where the cooking process will destroy most of the problem. The company noted that the EU and US only buy roe-on product so approved programmes will not exist for roe-off product.

NZFSA: It is agreed that allowances can be made for roe-on scallops, roe-off scallops and product that has received post-harvest treatment such as heat treatment. NZFSA has amended the standard to allow roe-off scallops (raw or heat treated) to be excluded from the scope of this standard. This decision recognises that the hazards associated with growing scallops (viruses, biotoxins, metal contaminants) are concentrated in the gut and roe and effective removal of these parts ensures the product is safe for human consumption. NZFSA has also amended the standard to allow for roe-on scallops and BMS that has been subjected to post harvest treatment to be imported and sold in NZ under the following conditions:

- *Roe-on scallops (eviscerated with the roe left on the product) and BMS that has received post-harvest treatment must be produced under recognised exporting country programmes that manage biotoxin contamination during growing. For roe-on scallops, which are cooked prior to consumption, while removing the gut resolves bacterial and viral hazards it does not address hazards associated with heavy metals and biotoxins. Post harvest treatment of BMS only resolves microbiological hazards not those associated with viruses, biotoxins and heavy metals. As a result, NZFSA will still need to officially assess and, if appropriate, recognise exporting country programmes to ensure biotoxin contamination is managed and the programme complies with or is equivalent to the NZ standard applying to biotoxins, and that the BMS has been processed in a recognised processing environment.*

- *For roe-on scallops and BMS that has received post-harvest treatment that is sourced from EU or US registered growing areas/processing environments the following conditions will apply:*
 - *Product must not be rotten; and*
 - *Product must be sourced from EC registered class A, B or C growing areas that are open for harvesting and transported/processed in EU registered facilities; and/or*
 - *Product must be sourced from USFDA restricted or approved growing areas that are open for harvesting and transported/processed in US registered facilities; and*
 - *Product must be processed in a registered EU or US processing facility; and*
 - *Product must be subjected to post-harvest treatment that has been approved by NZFSA.*

This decision is consistent with the NZ standard applying to BMS produced in NZ.

Shore Mariner raised concerns about the shortness of the transition period. It considers it would take at least two years to get some arrangements in place, particularly in areas such as China where the oyster and scallop seasons are very short. This point was raised by Sealord NZ Marketing Ltd – refer to the company’s comments and NZFSA’s response under point 4 above.

United Fisheries notes that option b) would restrict many developing countries from achieving compliance level and would exclude most of the countries that NZ companies look to import BMS from. It commented that the proposed standard will require many developing countries to achieve a level of compliance that took NZ many years to achieve. The proposal will damage both NZ importers and exporting countries. Questions were raised as to who is responsible for initiating the process i.e. NZ importers, NZFSA or Government. United Fisheries commented that the argument against option c) is flawed as sampling and testing under the current standard is not reliable enough.

NZFSA: Developing countries wishing to trade with any developed country are expected to meet the developed country’s import requirements to the extent where they must either comply or demonstrate equivalence with domestic requirements. There should be a level playing field for domestic product and imported product on matters affecting food safety. The process for recognising exporting country programmes can be initiated by either NZFSA or the competent

authority of the exporting country. Importers can also request that NZFSA initiates such a process.

Regional Public Health supports option b) as the most effective way of managing the risks associated with BMS and agrees that there should be consistent application of food safety regulations for imported and NZ produced BMS. Regional Public Health does not support option a) or option c) as neither will protect consumer health. Specifically, option c) does not address the issue of contamination by pathogenic viruses as shown by the Norovirus outbreaks despite BMS products being subjected to 100% testing, and would allow for inconsistent application of food safety regulations for imported and NZ produced BMS as NZ producers of BMS do not have the option of replacing their current BMS programme with a sampling and testing regime.

5. PROPOSAL TO AMEND THE NZ (PRESCRIBED FOODS) FOOD STANDARDS 2002 AND ASSOCIATED IMPORT REQUIREMENTS

Seafood Industry Council supports the proposal; however, further explanation was requested on how NZFSA would decide which of the three options to assess overseas countries compliance with the new import standard would be selected. It raised concerns that recent Norovirus outbreaks have been attributed to Korean oysters that were produced to comply with US requirements. The Council supports the requirement for some form of monitoring to confirm ongoing compliance to the NZ standard.

NZFSA: The decision on which of the three options to assess overseas country compliance should apply to a country that wishes to export products to NZ will be made on the basis of what is proposed by the exporting country, the relationship NZ has with that country i.e. its understanding of its standards and systems, and the practicalities of applying a particular option to a particular country e.g. resourcing requirements. Where there is enough information to complete an equivalency assessment this would be NZFSA's favoured option. Where there is difficulty in completing such an assessment and the exporting country complies with another exporting country programme then NZFSA will then consider recognising that other programme. Direct assessment of an exporting country's programme to ensure it complies with NZ's BMS standard would only occur if the other two options are not feasible. While the Korean oysters that were linked to recent Norovirus outbreaks did appear to be from approved US growing areas, it is not clear from investigations whether they were product that met the US standard.

Aroma New Zealand Ltd has no objection to the proposal, though it requested more information on how NZFSA would decide which of the three options to assess overseas countries compliance

with the new import standard would be selected to apply to a particular country. Aroma is concerned about the business implications of the proposal. It mentions recent Norovirus outbreaks caused by BMS imported from Korea, yet Korea currently complies with US and EU requirements.

The submission requests NZFSA consider the addition of a fourth option to provide dispensation allowing specific products to be imported on a case-by-case basis from specified countries where a company can demonstrate that subsequent processing (heat treatment or other pathogenic elimination steps) in NZ will eliminate any hazards associated with the product. Aroma commented that industry experience is that where such applications have been made in the past, NZFSA's requirements have been of such a high standard that they have been unable to be met.

NZFSA: See response to Seafood Industry Council's comments above regarding options to assess overseas countries compliance with the new import standard.

While the Korean oysters that were linked to recent Norovirus outbreaks did appear to be from approved US growing areas, it is not clear from investigations whether they were product that met the US standard. The previous NZ 'labelling arrangement' for Korean oysters (which has been suspended due to the recent outbreaks of Norovirus) allowed for product that was unsafe to eat raw or lightly cooked to be imported into NZ as long as it was labelled as requiring it to be cooked thoroughly prior to consumption. As a result, such product may not have met the US standard despite being from an approved US growing area. The proposed new standard intends to make it very clear to exporting countries that product that is exported here must be as safe as NZ BMS sold in this country. NZFSA will also be negotiating certification arrangements with countries to ensure that we have confidence that the products exported here are produced under the programmes NZFSA has recognised.

On considering Aroma's submission, NZFSA has amended the standard to allow BMS that doesn't meet the standard import requirements to be imported where it is destined to be subjected to further treatment that will eliminate any hazards present before being sold. Subsequent processing such as heat treatment will not address the food safety issues associated with biotoxin contamination so BMS product must still be sourced from a programme that manages these hazards. NZFSA will still need to officially assess and, if appropriate, recognise exporting country programmes to ensure biotoxin contamination is managed and the programme complies with or is equivalent to the NZ standard applying to biotoxins. Imports of contaminated product that are to be rendered safe due to subsequent processing will be approved by NZFSA on a case-by-case basis. For BMS that comes from EU or US registered growing areas/processing environments the following conditions will apply:

- *Product must not be rotten; and*

- *Product must be sourced from EC registered class A, B or C growing areas that are open for harvesting and transported/processed in EU registered facilities; and/or*
- *Product must be sourced from USFDA unrestricted or restricted growing areas that are open for harvesting and transported/processed in US registered facilities.*

This decision is consistent with the NZ standard applying to BMS produced in NZ. It should be noted that this arrangement does not take account of importing countries market access requirements. Should a company wish to export product derived from ingredients imported under this arrangement, then it should check that the product meets the market access requirements of the importing country.

Sealord NZ Marketing Ltd recommended a year transition period – refer to the company's comments and NZFSA's response under point 4 above.

Shore Mariner Ltd does not support the proposal - refer to the company's comments and NZFSA's response under point 4 above.

Regional Public Health supports the proposal as it will provide the consumer with increased protection from pathogenic viruses. It supports the proposed 12 month transition period for implementation.

6. IMPLICATIONS FOR INDUSTRY

Aroma New Zealand Ltd is concerned about the negative affects of the proposed amendment on its export sales. It notes that the current suspension of imports of Korean oysters resulted from foodborne illness outbreaks attributed to Norovirus contamination in oysters that were eaten raw. Aroma commented that such outbreaks would not occur in product containing imported oysters that are further heat treated during processing, and in the past ten years no reports of foodborne either illness or complaints have been received in relation to its products. This supports its request that NZFSA review the import requirements for BMS and consider allowing imports on a 'case by case' basis – refer to the company's comments and NZFSA's response under point 5 above.

Sealord NZ Marketing Ltd commented that limited supply and high prices require product to be sourced from overseas and that it will not be easy to source from countries with approved BMS programmes.

Shore Mariner Ltd does not support the proposal and stated that it would have massive implications for industry and would lead to unnecessary restrictions on trade. It commented that although current overseas packers will comply with proposed changes given promises of higher prices, the nature of our market size is such that getting overseas regulators to police these standards will be impossible.

NZFSA: NZFSA proposes to only enter into arrangements with exporting countries when it is confident that the systems are in place to ensure BMS exported to NZ meets our import standards.

The company noted that the imported oysters associated with a recent viral outbreak were from suppliers that were HACCP accredited and approved by the USFDA as compliant with NSSP standards, yet the proposed standard would still see this product as acceptable.

NZFSA: Aroma New Zealand raised the same concern as Shore Mariner - see NZFSA's response to Aroma under point 5.

Shore Mariner raised concerns that direct assessment of each exporting country's BMS programme with specific audits to confirm effective implementation would take years to get to a level where NZFSA would be comfortable enough to allow importation and would be costly. This will probably result in a restriction in trade. It also raised concerns about the logistics of assessing and auditing a country such as China where there are multiple BMS species exported from many parts of the country that spread across two provinces.

NZFSA: Direct assessment of an exporting country's BMS programme is one of three options and is only likely be utilised where the other two options are not feasible. The decision on which of the three options to assess overseas country compliance should apply to a country that wishes to export products to NZ will be made on the basis of what is proposed by the exporting country, the relationship NZ has with that country i.e. its understanding of its standards and systems, and the practicalities of applying a particular option to a particular country e.g. resourcing requirements.

United Fisheries commented that the cost of switching to approved certification would not be offset by removal of stand-alone border testing. It questioned whether the proposed new standard would infringe on free trade agreements as NZ importers will no longer be able to import from many developing countries.

NZFSA: Free trade agreements (FTAs) are about market access (e.g. quota and tariffs) and establishing a relationship between competent authorities for verification and certification (or something similar). They allow for each party to have confidence that hazards are being managed to an appropriate level of protection, as agreed between the parties. For goods subject to the World Trade Organisation's Sanitary and Phyto Sanitary Agreement (SPS) measures, FTAs identify the goods of significance for the parties and any required measures and allow the importing country to accept the competent authority's assurance that these requirements have been met. They also allow for each party to preferentially prioritise completion of work required to allow for products covered under the agreements to be imported. FTAs do not remove the right of parties to take measures necessary to protect human, animal or plant life or health. Countries still have the ability to complete necessary risk assessment work, set requirements based on this work, and assess whether countries meet these requirements. The proposed new standard for BMS does not exclude any countries from trading as it allows for all countries wishing to export BMS to NZ to apply to have their programmes recognised by NZFSA. As a result it meets NZ's SPS obligations.

Regional Public Health noted that current testing regime can be expensive for importers depending on the quantity of product imported.

7. BORDER INSPECTION REQUIREMENTS INCLUDING DRAFT STANDARD MANAGEMENT

Seafood Industry Council noted that as NSP is only a known hazard in the East Coast of USA and AZP only known as a hazard in Europe, under the proposed new standard other countries do not need to be subjected to confirmatory testing. However, as NZ seafood industry is required to include AZP and NSP monitoring as part of the NZ programme, the Council considers either other countries should be subjected to the same testing requirements or such testing should be removed from the requirements of the NZ programme. The Council also commented on the sampling and inspection costs detailed in the proposal and compared these to the rates paid by the seafood industry. It suggested that the rates should be consistent.

NZFSA: The regulated control scheme for BMS came into force in June 2006 and was developed in consultation with NZ industry. NSP is a known hazard in NZ hence its inclusion in the NZ scheme. Although AZP is not a known hazard in NZ, it is included in the scheme as it is a market access requirement for product being exported to the EU; most shellfish produced in NZ is

exported. Concerns about NZ's regulatory control scheme should be raised with Phil Busby in NZFSA.

Sealord NZ Marketing Ltd supports moving to requiring imported product to be sourced from recognised BMS programmes but recommends continuing the current border inspection regime until this is in place. This point was covered earlier in this summary – see the company's comments and NZFSA's response under point 4 above.

Shore Mariner Ltd commented that Norovirus will be missed out at border detection, as it will not be tested for under the proposed new standard. Refer to point 4 for the company's comments and NZFSA's response.

United Fisheries Ltd noted that the current test for Norovirus is not indicative of a potentially viable virus and questioned whether testing for other organisms that would indicate sewage contamination was possible.

NZFSA: E. coli is presently the internationally accepted indicator organism. While it is agreed that using E. coli is not ideal, no acceptable alternative is currently available. NZFSA is aware of international research that is investigating using virus indicators. It will continue to monitor this work and should such a method become viable, will consider introducing it to the verification testing for the BMS standard.

Regional Public Health supports the proposal that for the transitional period imported product not accompanied with the required certification must be subjected to border testing. It commented that the draft standard management rule excludes 'uncooked and canned BMS' from ready-to-eat product, yet these products may still be consumed as ready-to-eat.

NZFSA: The definition of ready-to-eat has been revised in the standard.

AgriQuality comments that the laboratory testing costs outlined in the draft standard management rule do not include the biotoxin LC-MS testing prices; the pricing is for the cost of Domoic acid by HPLC method for NSP and DSP, and mouse bioassay for PSP.

NZFSA: These costs have been updated to include LC-MS testing prices. It should be noted that the testing costs are indicative only.

Cawthron Institute recommended that the LC-MS method should be applied to all BMS rather than being restricted to "smoked product only". It noted that the LC-MS method is the method of choice for any other seafood as no other available method provides the same level of safety for human health in relation to the detection of NSP toxins.

NZFSA: The intention was not to restrict the LC-MS method to "smoked product only" rather that the only method that can be used for smoked product is the LC-MS method while the Recommended Procedures for the Extraction of Sea Water and Shellfish, 4th edition APHA 1970, can be used for other BMS. This is because the APHA method is not accurate for smoked product. The wording of the standard has been amended to make this clearer.