

LAS SCHEDULE of TESTS for Laboratory Signatories, Recognised Persons

LAS SCHEDULE of TESTS for Laboratory Signatories, Recognised Persons, amendment 11, May 2009 is a list of the tests recognised persons may be approved for as signatories under the Laboratory Approval Scheme (LAS), amendment 11, June 2009.

All the tests listed in this Schedule are Official tests specified in *Appendices 1 and 2* of LAS.

Numerical reference	Official Test	Application
POTABLE WATER MICROBIOLOGY		
1.1	Total coliforms	Potable water
1.1.1	Total coliforms (coliform bacteria), E. coli	
1.2	Faecal coliforms	
1.3	SPC 22°C/72 hour	
1.4	SPC 37°C/48 hour	
1.5.1	Enterococci	
1.6.1	Clostridium perfringens (including spores)	
1.8	<i>Escherichia coli</i>	
MEAT & MEAT PRODUCT & POULTRY MICROBIOLOGY/PARASITOLOGY		
2.1.1	APC	Minced meat and mechanically separated meat
2.1.2	APC spread plate	NMD with sampling
2.1.3	APC Petrifilm	NMD with sampling
2.1.4	APC spiral plater	NMD with sampling
2.2.1	<i>Escherichia coli</i> , direct plate or Petrifilm	Minced meat, meat preparations and mechanically separated meat
2.2.2	<i>Escherichia coli</i> , Petrifilm	NMD with sampling

2.3	<i>Staphylococcus aureus</i>	Minced meat, meat preparations and mechanically separated meat
2.4.1	<i>Salmonella</i>	Minced meat, meat preparations and mechanically separated meat, ready to eat products containing raw egg, meat products intended to be eaten raw. Blood products for use in feed. Rendered meals. Rendered fats and fish oils not for human food. Processed petfood and flavouring innards. Processed animal proteins for feedingstuffs. Gelatine and collagen for human food, shelf life. Gelatine and collagen not for human food. Hydrolysed protein, dicalcium phosphate, tricalcium phosphate not for human food. Egg products not for human food. Dried dietary foods for special medicinal purposes for infants below 6 months of age – excluding infant formula.
2.4.2	<i>Salmonella</i>	Beef, veal and pig meat.
2.4.3	<i>Salmonella</i>	NMD with sampling
2.6	<i>Listeria monocytogenes</i>	Cooked, ready to eat meat products and environmental samples. Ready to eat foods including ready to eat foods for infants and special medicinal purposes – excluding infant formula. Environmental samples. Gelatine and collagen for human food.
2.8	<i>Clostridium perfringens</i>	Rendered fats and fish oils not for human food. Processed animal proteins for feedingstuffs.
2.8.1	<i>Clostridium perfringens</i>	Pet food
2.9	<i>Enterobacteriaceae</i>	Blood products for use in feeds. Rendered fats and fish oils not for human food. Processed petfood or flavoured innards. Processed animal proteins for feedingstuffs. Gelatine and collagen for human food. Hydrolysed protein, dicalcium phosphate, tricalcium phosphate not for human food. Egg products not for human food. Dried infant formula processing areas and equipment.

2.9.1	<i>Enterobacter sakazakii</i>	Dried dietary foods for special medicinal purposes for infants below 6 months of age - excluding infant formula.
2.10	Faecal coliforms	Muslin/vegetable fibre used as wrapping material.
2.11	<i>Bacillus anthracis</i>	Inedible meals, or other product as identified by NZFSA
2.12	<i>Trichinella</i> spp	Meat and meat products conforming to label requirements or standards.
22.1	<i>Campylobacter</i>	Poultry broilers, NMD with sampling.
23.1	<i>Escherichia coli</i> O157:H7	Bulk manufacturing beef and bobby veal.

MEAT CHEMISTRY

3.1.1	Proximate analysis - Ash	Processed meat products
3.1.2	Proximate analysis - Fat	
3.1.3	Proximate analysis - Moisture	
3.1.4	Proximate analysis - Protein	
3.4	Collagen	

TALLOW AND FATS

4.01	Insoluble impurities	Rendered fats from ruminant materials and rendered fats for human food.
4.02	FFA (m/m % oleic acid)	Rendered fats for human food
4.03	Peroxide	Rendered fats for human food
4.04	Moisture	Rendered fats for human food

Numerical reference	Official Test	Application
POTABLE WATER PHYSICO-CHEMICAL PARAMETERS		
5.01	Colour	Potable water
5.02	Conductivity	
5.03	pH	

5.04	Turbidity (NTU)	
5.05	Total hardness	
5.06	Free CO ₂	
5.07	Alkalinity as CO ₃	
5.08	Total alkalinity as HCO ₃	
5.09	Chemical oxidation demand	
5.10	Ammoniacal nitrogen	
5.11	Chloride	
5.12	Flouride	
5.13	Nitrate	
5.14	Nitrite	
5.15	Reactive phosphorus	
5.16	Sulphate	
5.17	Aluminium	
5.18	Arsenic	
5.19	Boron	
5.20	Cadmium	
5.21	Calcium	
5.22	Chromium	
5.23	Copper	
5.24	Cyanide	
5.25	Iron	
5.26	Lead	
5.27	Magnesium	
5.28	Manganese	
5.29	Mercury	
5.30	Potassium	
5.31	Sodium	
5.32	Selenium	
5.33	Zinc	
5.34	Chlorinated alkanes	
5.35	Polynuclear aromatic hydrocarbons (PAH)	
5.36	Pesticides:	
	5.36.1 acid herbicides	
	2,4,5-T	
	2,4-D	
	2,4-DB	
	Bentazone	
	Dichlorprop	

	<p>Fenoprop</p> <p>MCPA</p> <p>Mecoprop</p> <p>Pentachlorophenol</p> <p>Picloram</p> <p>Triclopyr</p> <p>5.36.2 chlortoluron, diuron, thiabendazole</p> <p>5.36.3 Semi Volatile Organic Compounds (SVOC):</p> <p>Benzo(a)pyrene</p> <p>Alachlor</p> <p>Aldrin + dieldrin</p> <p>Atrazine</p> <p>Azinphos methyl</p> <p>Bromacil</p> <p>Carbofuran</p> <p>Chlordane</p> <p>Chlorpyrifos</p> <p>Cyanazine</p> <p>DDT + isomers</p> <p>Diazinon</p> <p>Dimethoate</p> <p>Endrin</p> <p>Heptachlor and heptachlor epoxide</p> <p>Hexachlorobenzene</p> <p>Hexazinone</p> <p>Lindane</p> <p>Metalaxyl</p> <p>Methoxychlor</p> <p>Metolachlor</p> <p>Metribuzin</p> <p>Oryzalin</p> <p>Oxadiazon</p> <p>Pendimethalin</p> <p>Permethrin</p> <p>Pirimiphos methyl</p> <p>Procymidone</p>	
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	<p>Simazine</p> <p>Terbuthylazine</p> <p>Trifluralin</p> <p>5.36.4 1080</p> <p>5.36.5 Diquat</p> <p>5.36.6 Paraquat</p>	
5.39	<p>Volatile Organic Compounds (VOC):-</p> <p>Benzene</p> <p>1,2-dichloroethane</p> <p>Tetrachloroethane and trichloroethane</p> <p>Tetrachloroethene and trichloroethene</p> <p>Vinyl chloride</p> <p>Epichlorhydrin</p> <p>1,2-dibromo-3-chloropropane</p> <p>1,2-dibromoethane</p> <p>1,2-dichloropropane</p> <p>1,3-dichloropropene, cis</p> <p>1,3-dichloropropene, trans</p>	
5.40	Trihalomethanes	
5.41	Oxidisability	
5.42	Total Organic Carbon (TOC)	
5.43	Acrylamide	
5.44	Antimony	
5.45	Bromate	
5.46	Nickel	
FOOD COMPOSITION (includes vitamins, minerals and other nutrients)		
6.01	Vitamin A, retinol	Meat and meat products conforming to label requirements or standards of composition.
6.02	Vitamin B1, thiamine	
6.03	Vitamin B2, riboflavin	
6.04	Vitamin B3, niacin or nicotinic acid	
6.05	Vitamin B5, pantothenic acid	
6.06	Vitamin B6, pyridoxin	
6.07	Folic acid or folate (a B vitamin)	
6.08	Biotin (a B complex vitamin)	

6.09	Vitamin B12, cyanocobalamin or hydroxocobalamin	
6.10	Vitamin C, ascorbic acid	
6.11	Vitamin D3, cholecalciferol	
6.12	Vitamin E, D1-α-tocopherol	
6.13	Vitamin K, menaquinone	
6.14	Calcium, mineral	
6.15	Chloride or chlorine, mineral	
6.16	Copper, mineral	
6.17	Fluoride or fluorine, mineral	
6.18	Iodide or iodine, mineral	
6.19	Iron, mineral	
6.20	Magnesium, mineral	
6.21	Manganese, mineral	
6.22	Phosphorus, mineral	
6.23	Potassium, mineral	
6.24	Sodium, mineral	
6.25	Zinc, mineral	
6.26	Choline, amino acid	
6.27	Taurine, amino acid	
6.28	Cholesterol	
6.29	Dietary fibre, total and insoluble	
6.30	Fatty acid profile	
6.31	pH	
6.32	Sulphated ash	
6.33	Total sugar	
FOOD ADDITIVES and INGREDIENTS		
7.01	Benzoic acid or benzoates	Meat and meat products conforming to label requirements or standards of composition.
7.02	Sorbic acid or sorbates	
7.03	Nitrate	
7.04	Nitrite	
7.05	Salt NaCl	
7.06	Sucrose	
7.07	Reducing sugars	
7.08	Invert sugar	
7.09	Sugar profile	
7.10	Sulphur dioxide or sulphites	

CHEMICAL RESIDUE TESTING		
Numerical reference	Chemical residue test	Application
8.1	Stilbenes	Mammals, birds and fish
8.2	Oestrogenic substances	Mammals, birds and fish
8.3	Androgenic substances	Mammals, birds and fish
8.4	Aminoglycosides	Mammals, birds, fish and honey
8.5	Beta-lactams	Mammals, birds, fish and honey
8.6	Cephalosporins	Mammals, birds, fish and honey
8.7	Tetracyclines	Mammals, birds, fish and honey
8.8	Chloramphenicol	Mammals, birds, fish and honey
8.9	Macrolides	Mammals, birds, fish and honey
8.10	Sulphonamides	Mammals, birds, fish and honey
8.11	Dimetridazole	Mammals, birds and fish
8.12	Carbadox	Mammals, birds and fish
8.13	Benzamidazoles	Mammals, birds and fish
8.14	Imidazothiazoles	Mammals, birds and fish
8.15	Polyether coccidiostats	Mammals, birds and fish
8.16	Milbemycin group	Mammals, birds and fish
8.17	Synthetic pyrethroids and carbamate pesticides	Mammals, birds, fish and honey
8.18	Organophosphates	Mammals, birds, fish and honey
8.19	Beta-Agonists	Mammals, birds and fish
8.20	Heavy metals	Mammals, birds and fish
8.21	Organochlorines and total PCBs	Mammals, birds, fish and honey
8.22	Species verification	Ovine, cervine, bovine, equine, caprine & porcine
8.23	Fluoroacetate/1080	Mammals, birds and fish
8.24	Sedatives	Mammals, birds and fish
8.25.1	Nitrofurans (furazolidone, furaltadone, nitrofurazone , nitrofurantoin)	Mammals, birds, fish and honey
8.25.2	Nitrofuran metabolites eg semicarbazide (SEM) , aminooxizolidone (AOZ) , aminomorpholino-oxizolidone (AMOZ) , aminohydantoin (AH)	Mammals, birds, fish and honey
8.26	Anticoagulants	Mammals, birds and fish
8.27	Dioxins, coplanar PCBs , polybromodiphenyl ethers (PBrDPE) .	Mammals, birds, fish and honey
8.28	Quinolone antibiotics	Mammals, birds, fish and honey
8.29	Non-steroidal anti-inflammatory substances (NZAIDS)	Mammals, birds and fish

8.30	Amprolium	Mammals, birds and fish
8.31	Hormonal growth promotants	Mammals, birds and fish
8.32	Thyrostatic agents	Mammals, birds and fish
8.33	Prostagentic substances	Mammals birds and fish
8.34	Corticosteriods	Mammals, birds and fish
8.35	Halofuginone	Mammals, birds and fish
8.36	Robenidene	Mammals, birds and fish
8.37	Malachite green	Fish
8.38	Chlorpromazine	Mammals, birds and fish
8.39	Nicarbazin (anticoccidial)	Birds
8.40	Paradichlorobenzene (PDB); a pesticide	Honey
8.41	Salicylaninides (anthelminthic)	Mammals, birds
8.42	Tutin	Honey

Numerical reference	Official test	Application
GELATINE FOR HUMAN FOOD		
9.08	As	Residues parameter
9.09	Pb	Residues parameter
9.10	Hg	Residues parameter
9.11	Cr	Residues parameter
9.12	Cu	Residues parameter
9.13	Zn	Residues parameter
9.16	SO ₂	Residues parameter
9.17	H ₂ O ₂	Residues parameter
9.18	Cd	Residues parameter

TESTING OF ANIMAL FEED FOR ANIMAL PROTEIN		
	No tests listed	

Numerical reference	Official test	Application
BOVINE SPONGIFORM ENCEPHALOPATHY/TSE		
10.1.1	Rapid BSE Tests; Prionics Western Immunoblot	As defined by MAF BSE Programme
10.2.1	Confirmatory Histopathology	
10.2.2	Confirmatory Immunohistochemistry	

10.2.3	Confirmatory Prionics Western immunoblot	
10.2.4	Confirmatory Scrapie associated Fibrils	

Numerical reference	Official test	Application
SEAFOOD TESTING METHODS AND MATRICES		
11.1.1	Faecal coliforms	Potable water
11.1.2	Total coliforms	Potable water
11.2.1	Faecal coliforms	Process water
11.2.2	<i>E. coli</i>	Process water
11.2.3	Total coliforms	Process water
11.2.4	Heavy metals	Process water
11.3.1	Faecal coliforms	Depuration water
11.3.2	<i>E. coli</i>	Depuration water
11.4.1	<i>E. coli</i>	Seawater
11.4.2	Total coliforms	Seawater
11.5.3	SPC, also known as Total Viable Count (TVC)	All fish
11.5.4	Staphylococcus aureus	All fish
11.5.6	Vibrio parahaemolyticus	All fish
11.5.7	Heavy metals including mercury.	All fish
11.5.8	Histamine	All fish
11.5.9	Total Volatile Basic Nitrogen (TVB-N)	All fish
11.5.10	<i>Escherichia coli</i>	All fish
11.5.11	<i>Salmonella</i>	All fish
11.5.12	<i>Vibrio cholerae</i>	All fish
11.6.1	Faecal coliforms	All fish
11.6.2	<i>E. coli</i>	All fish
11.6.3	<i>Salmonella</i>	All fish
11.6.4	<i>Vibrio parahaemolyticus</i>	Bivalve molluscan shellfish (uncooked)
11.6.6	Heavy metals	Bivalve molluscan shellfish (uncooked)
11.7.1	PSP	Bivalve molluscan shellfish (uncooked)
11.7.2	DSP	Bivalve molluscan shellfish (uncooked)
11.7.3	NSP	Bivalve molluscan shellfish (uncooked)
11.7.4	ASP	Shellfish Biotoxins
11.7.5	PTX	Shellfish Biotoxins
11.7.6	YTX	Shellfish Biotoxins
11.7.7	AZP	Shellfish Biotoxins
11.7.8	DSP/NSP screen bioassay	Shellfish Biotoxins
11.8.1	<i>E. coli</i>	Shellfish Biotoxins

11.8.2	<i>Salmonella</i>	Shellfish Biotoxins
11.8.3	<i>Staphylococcus aureus</i>	Shellfish Biotoxins
11.8.4	SPC, also known as Total Viable Count (TVC)	Cooked seafood product
11.8.5	<i>Listeria monocytogenes</i>	Cooked seafood product Cooked seafood product Cooked seafood product Cooked seafood product

Amendment	Date	Description of revision
0	August 2002	This Schedule of Tests replaces the List of Approved Laboratories dated 20 June 2002. For the names of laboratory signatories, accredited persons and tests they are approved to sign please refer to the laboratory Signatories – Accredited Persons List.
1	May 2004	This Schedule of Tests Corresponds with the Appendices of official Tests in the Laboratory Approval Scheme, amendment 0, April 2004. References to MILAB replaced with Laboratory Approval Scheme LAS. Escherichia coli O157:H7 numerical reference number 23.1 has been relocated from the discretionary test section to the Official Test section. Appendix 2 Chemical residue testing numerical references (8.1 – 8.33) have been simplified and expanded.
2	December 2004	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 1, December 2004. Potable water microbiology and potable water physico chemical parameters have been amended to correspond with the EU OMAR and special official tests 5.37 chlorobenzenes and 5.38 chlorinated phenols are now included under 5.36.1 and 5.36.3 respectively.
3	June 2005	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 2, June 2005. Reference to accredited persons changed to recognised. The potable water microbiology and potable water physico chemical parameters have been amended to correspond with current OMAR requirements. Residues: spelling error corrections and the removal of test 8.33 Official tests for Tallow and Fats numbered 4.01 – 4.04 and official tests for Gelatine for human food numbered 9.01 – 9.17 have been included to comply with the EU OMAR. Seafood official tests 11.1.1 – 11.8.5 have been included.

Amendment	Date	Description of revision
4	February 2006	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 3, February 2006. Amendments to correspond with current OMAR requirements re matrices. Spelling error corrections in Potable water physico chemical parameters 5.36, and 8.0 Residues. Format corrections in 9.0 Gelatine. Removal of official tests: Carbohydrate 3.2 and Energy 3.3, Gelatine; microbiology parameters 9.01 -9.07, 9.14 moisture and 9.15 ash and Bivalve molluscan shellfish 11.6.5 viruses. Addition of official tests: 2.9.2 <i>Enterobacter sakazakii</i> , Residues official tests 8.34 – 8.38, Gelatine 9.18 Cd
5	September 2006	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 4, September 2006. Remove further information regarding market access requirements link. 5.39 Include tetrachloroethene and trichloroethene and correct spelling of Epichlorhydrin. 6.06 correct spelling of Pyridoxin. Include 8.40 Paradichlorobenzene for honey.
6	December 2006	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 5, November 2006. Two new official tests added: 22.1 <i>Campylobacter</i> and 11.7.8 DNP/NSP screen bioassay
7	July 2007	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 6, July 2007. One new official test added: 8.39 Nicarbazin, anticoccidial for birds.
8	August 2007	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 7, August 2007. Three new official tests added: 11.5.10 <i>Escherichia coli</i> , 11.5.11 <i>Salmonella</i> , 11.5.12 <i>Vibrio cholerae</i> for All fish.
9	November 2008	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 9, November 2008. Correction to official test 7.10; sulphates changed to sulphites. Honey matrix added to official tests 8.4, 8.5, 8.6 and 8.9. Corrected official test 8.31 “including zearalone metabolites”. New official tests 8.41 Salicylanilides applying to mammals and birds.
10	December 2008	This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 10, December 2008. Remove official tests 11.5.1, 11.5.2 and 11.5.5

Amendment	Date	Description of revision
11	June 2009	<p>This Schedule of Tests corresponds with the Appendices of Official Tests in the Laboratory Approval Scheme, amendment 11, June 2009.</p> <p>Change official tests in section 2 Meat and Meat Product and Poultry Microorganisms/Parasitology and section 8 Chemical Residue testing. Add an official test 8.42 Tutin, honey to section 8 Chemical residue testing.</p>