

**Appendix 1 to ANNEX "A"**  
**Chemical Residues of Interest to CFIA**

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Part A										
Veterinary drugs										
Antimicrobials										
Multi-class antibiotics	CFIA Saskatoon method: CVDR-M-3031.11	Target residues are extracted from tissue with water/ acetonitrile. Following centrifugation, the supernatant is defatted with hexane. The sample is centrifuged again, the hexane layer removed and the remaining extract evaporated to 0.5 mL under nitrogen. The extract is transferred into a microcentrifuge tube and made to 1.5 mL volume with water. The extract is microcentrifuged at high speed and an aliquot GHP filtered prior to analysis by LC-MS/MS.		Meat (muscle & kidney for all species except poultry; muscle and liver for poultry) Meat (Cooked & Processed Foods)	Amoxicillin	0.005	0.015	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications.  Note: The reference method indicate that the following compounds did not meet the criteria for quantitation for desethyleneciprofloxacin, desfuroylceftiofur cysteine disulfide, , , , , novobiocin, tildipirosin, tulathromycin. If the Offeror validation has similar findings, the quantitation and confirmation must be completed using an alternate quantitative method.	30	The “ANALYTE” are to be reported as “Multiclass Ab Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg
					Ampicillin	0.005	0.015			
					Cefazolin	0.005	0.015			
					Cephalexin	0.005	0.015			
					Chloramphenicol	0.0002	0.001			
					Chlortetracycline	0.005	0.015			
					Ciprofloxacin	0.005	0.015			
					Clindamycin	0.005	0.015			
					Cloxacillin	0.005	0.015			
					Danofloxacin	0.005	0.015			
					Desacetyl Cephapirin	0.005	0.015			
					Desethylene ciprofloxacin	0.005	0.015			
					Desfuroyl ceftiofur cysteine disulfide	0.005	0.05			
					Dicloxacillin	0.005	0.015			
					Doxycycline	0.005	0.015			
					Enrofloxacin	0.005	0.015			
					Erythromycin	0.005	0.05			
					Florfenicol	0.005	0.015			
					Gamithromycin	0.005	0.015			
					Josamycin	0.005	0.015			
					Lincomycin	0.005	0.015			
					Nafcillin	0.005	0.015			
					Neospiramycin	0.005	0.05			
					Norfloxacin	0.005	0.015			
					Novobiocin	0.005	0.015			
					Ofloxacin	0.005	0.015			
					Oleandomycin	0.005	0.05			
					Oxacillin	0.005	0.015			
	Oxytetracycline	0.005			0.015					
	Penicillin G	0.005			0.015					
	Pirlimycin	0.005			0.015					
	Sarafloxacin	0.005			0.015					
	Spiramycin	0.005			0.05					
	Sulfabenzamide	0.005			0.015					
	Sulfacetamide	0.005			0.015					
	USDA: Screening and confirmation of animal drug residues by UHPLC-MS-MS (http://www.fsis.usda.gov/wps/wcm/connect/b9d45c8b-74d4-4e99-8eda-5453812eb237/CLG-MRM1.pdf?MOD=AJPERES)	Animal drug residues are extracted from tissue using dispersive SPE for both extraction and sample clean up. The extracted residues are examined using UHPLC-MS-MS using a triple quadrupole mass spectrometer under electrospray ionization (ESI) conditions. Analytes are identified by comparison against matrix matched standards.						All positives for florfenicol must be confirmed using a method that determines florfenicol amine		
							Confirmations of all positives > 0.2 mg/kg for Doxycycline, Oxytetracycline, and Tetracycline and all positives for			

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					(mg/kg), unless otherwise specified					
					Sulfachloropyridazine	0.005	0.015	chlortetracycline > 0.05 mg/kg may be confirmed using the method submitted for TETRACYCLINES in this table, at the Offeror's discretion		
					Sulfadiazine	0.005	0.015	All positives above the values listed for LOD of macrolides may be confirmed using the method submitted for MACROLIDES/ LINCOSAMIDES in this table at the discretion of the Offeror		
					Sulfadimethoxine	0.005	0.015			
					Sulfadoxine	0.005	0.015			
					Sulfaethoxypyridazine	0.005	0.015			
					Sulfaguanidine	0.005	0.015			
					Sulfamerazine	0.005	0.015			
					Sulfamethazine	0.005	0.015			
					Sulfamethoxypyridazine	0.005	0.015	All positives of tiamulin must be confirmed using a method that determines 8-alpha-hydroxymutilin		
					Sulfanilamide	0.005	0.015			
					Sulfanitran	0.005	0.015			
					Sulfaquinoxaline	0.005	0.015			
					Sulfathiazole	0.005	0.015			
					Tetracycline	0.005	0.015	All positives of ceftiofur must be confirmed using a method that determines the desfuroylceftiofuracetamide (DCA).		
					Thiamphenicol	0.005	0.015			
					Tiamulin	0.005	0.015			
					Tildipirosin	0.05	0.1			
					Tilmicosin	0.005	0.05			
					Trimethoprim	0.005	0.015			
					Tulathromycin (parent)	0.005	0.015			
					Tylosin	0.005	0.05			
Multi-class antibiotics	Development and validation of a multiclass method for the analysis of antibiotic residues in eggs by liquid chromatography-tandem mass spectrometry; J Chromatogr A. 2011 Mar 18;1218(11):1443-51	Sample is mixed with diatomaceous earth containing EDTA, extracted into solvent and analyzed by LC-MS/MS		Egg Dairy	Sulfadimethoxine	0.01	0.03	Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	30	The "ANALYTE" are to be reported as "Multiclass Ab Screen" and the "AMOUNT" is to be "0" for a negative and a "1" for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
					Sulfapyridine	0.01	0.03			
					Sulfamethoxazole	0.01	0.03			
					Sulfaquinoxaline	0.01	0.03			
					Sulfathiazole	0.01	0.03			
					Sulfamerazine	0.01	0.03			
					Sulfadiazine	0.01	0.03			
					Sulfamethazine	0.01	0.03			
					Sulfisoxazole	0.01	0.03			
					Sulfamethizole	0.01	0.03			
					Sulfadoxine	0.01	0.03			
					sulfamonomethoxine	0.01	0.03			
					sulfamethoxipyridazine	0.01	0.03			
					sulfachloropyridazine	0.01	0.03			
					Trimethoprim	0.01	0.03			
					Amoxicillin	0.01	0.03			
					Ampicillin	0.01	0.03			
					Penicillin G	0.01	0.03			
					Penicillin V	0.01	0.03			
					Oxacillin	0.01	0.03			
					Cloxacillin	0.01	0.03			

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					(mg/kg), unless otherwise specified																																
					Dicloxacillin	0.01	0.03																														
					Sarafloxacin	0.01	0.03																														
					Norfloxacin	0.01	0.03																														
					Danofloxacin	0.01	0.03																														
					Marbofloxacin	0.01	0.03																														
					Difloxacin	0.01	0.03																														
					Flumequine	0.01	0.03																														
					Oxolinic acid	0.01	0.03																														
					Ciprofloxacin	0.01	0.03																														
					Enrofloxacin	0.01	0.03																														
					Oxytetracycline	0.01	0.03																														
					Tetracycline	0.01	0.03																														
					Chlortetracycline	0.01	0.03																														
					Doxycycline	0.01	0.03																														
					Tylosin	0.01	0.03																														
					Spiramycin	0.01	0.03																														
					Erythromycin	0.01	0.03																														
					Josamycin	0.01	0.03																														
					Tilmicosin	0.01	0.03																														
					Lincomycin	0.01	0.03																														
Sulfathiazole	0.0003	0.001																																			
Oxytetracycline	0.0006	0.002																																			
Tetracycline	0.0003	0.001																																			
chlortetracycline	0.0012	0.004																																			
Doxycycline	0.002	0.006																																			
Ciprofloxacin	0.0012	0.004																																			
danofloxacin	0.0006	0.002																																			
enrofloxacin	0.0006	0.002																																			
sarafloxacin	0.0006	0.002																																			
difloxacin	0.0006	0.002																																			
Tylosin	0.0012	0.004																																			
Desmycosin (Calculated as Tylosin)	0.0012	0.004																																			
Erythromycin	0.0006	0.002																																			
Lincomycin	0.0003	0.001																																			
Streptomycin	0.003	0.01																																			
Chloramphenicol	0.00003	0.0001																																			
Fumagillin	0.002	0.006																																			
Monensin	0.001	0.004																																			
Bacitracin	CFIA Saskatoon Method: BAC-SP01	Sample is homogenized in acidic methanol-water and centrifuged. The eluate is cleaned up by SPE. Instrumental analysis for bacitracin A is by LC/MS detection.																												The SOP must include the use of an acid and dithizone solution to prevent the chemical degradation of the bacitracin.	Dairy Egg Meat (liver, muscle)	Bacitracin A	0.05	0.1	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Bacitracin A” and the numerical value as the “AMOUNT” in mg/kg

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						(mg/kg), unless otherwise specified				
Carbadox	CFIA Saskatoon method: CVDR-M-3015.05	Samples are digested with formic acid to deactivate natural enzymes. Following overnight hydrolysis with protease the sample is acidified centrifuged and filtered	The SOP must include a step for digested with formic acid to deactivate natural enzymes and another for overnight enzymatic hydrolysis.	Meat (liver & muscle)	Desoxycarbadox	0.00005	0.00005	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	30	The “ANALYTE” is to be reported as “Carbadox Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg
					QCA MQCA	0.0005	0.0005			
Ceftiofur	CFIA Saskatoon method: CEF-SP07 CFIA Calgary Method: ACC-073v1.1	Sample is incubated in a solution where ceftiofur and metabolites convert to a common moiety. This is derivatized to DCA. Clean-up involves SPE Instrumental analysis is by gradient LC/UV detection.	The SOP must include a step for incubation in a solution of dithioerythritol (DTE) in order to cleave ceftiofur and its metabolites to a common moiety and derivatized to DCA.	Dairy Egg Meat (muscle & kidney for all species except poultry; muscle only for poultry)	desfuroylceftiofuracetamide (DCA) .	0.05	0.075	Confirmation using an LC/MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “desfuroylceftiofuracetamide and the numerical value as the “AMOUNT” in mg/kg
Fluoroquinolones	CFIA Saskatoon method: CVDR-M-3007	Samples are extracted with acidic solution and clean up with SPE. Drugs are eluted and concentrated. The extract is analyzed by LC/Fluorescence detection		Dairy Egg Honey Meat (liver & muscle)	Enrofloxacin Ciprofloxacin Sarafloxacin Danofloxacin Ofloxacin Norfloxacin Difloxacin Marbofloxacin Orbifloxacin Sparfloxacin Flumequine Oxolonic acid Nalidixic acid Pipemidic acid Enoxacin	0.002	0.010	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Fluoroquinolones Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg.
				Meat (liver & muscle)	Desethylene ciprofloxacin	0.002	0.01			

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						(mg/kg), unless otherwise specified				
Glycosides	http://www.fsis.usda.gov/wps/wcm/connect/c7d1fc07-6359-4d64-959b-1931596bef9a/CLG-AMG2.pdf?MOD=AJPERES CFIA Calgary Method: ACC-078v1.1	Aminoglycoside residues are extracted from tissue using buffer containing trichloroacetic acid as a protein precipitant. The extract is neutralized and cleanup accomplished by passage through a weak cation exchange solid-phase extraction cartridge followed by elution with acidic methanol. The methanol extract is evaporated and reconstituted in aqueous ion-pair reagent. It is analyzed by ion-pair reversed-phase LC/MS.		Dairy Egg Honey Meat (kidney & muscle for all species except poultry; muscle only for poultry)	Spectinomycin Hygromycin Streptomycin Dihydrostreptomycin Amikacin Kanamycin Apramycin Tobramycin Gentamicin Neomycin OPTIONAL: Kasugamycin	0.01	0.01	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Glycosides Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Macrolides / Lincosamides	CFIA Saskatoon method: CVDR-3029.04	Sample is made basic and extracted with ethyl acetate. Analytes are then partitioned into an acidic buffer and further cleaned up by extraction of the buffer solution with an organic solvent. The buffer is then made basic and analytes are re-extracted into ethyl acetate, evaporated to dryness, redissolved in mobile phase, and analyzed by HPLC/MS.		Dairy Egg Honey Meat (liver & muscle)	Clindamycin Erythromycin Josamycin Lincomycin Oleandomycin Pirlimycin Spiramycin Tylosin Tilmicosin. Desmycosin Neospiramycin CP-60,300 expressed as Tulathromycin equivalents	0.005	0.01	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Macrolides/Lincosamide Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
				Meat (liver & muscle); Optional for Dairy , Egg, Honey	Gamithromycin Tildipirosin Tylvalosin Optional for Dairy, Egg, honey	0.01	0.01			
Nitrofurans	CFIA Saskatoon method: CVDR-M-3014.13 CFIA Calgary method: ACC-070v1.4	Samples are pre-extracted with methanol and ethanol to remove interference. Side chains of protein bound metabolites are freed by acid hydrolysis followed by overnight derivatization. Extraction with ETOAc, evaporate, hexane wash of aqueous solution is followed by instrumental analysis by LC/MS/MS.	The SOP must include a step for acid hydrolysis and overnight incubation with 2-nitrobenzaldehyde in order to free the protein bound drug metabolites for derivatization, with the exception for the analysis in honey.	Dairy Egg Honey Meat (Liver & muscle)	Furaltadone Metabolite Furazolidone Metabolite Nitrofurantoin Metabolite Semicarbazide	0.0005		Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Nitrofurans Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
					Nifursol	0.0005				

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						(mg/kg), unless otherwise specified				
Nitroimidazoles	JOURNAL OF AOAC INTERNATIONAL VOL. 90, NO. 3, 2007 J. Chromatogr. A 882 (2000) 89 –98	The sample plus internal standard is extracted with ETOAc. The combined ETOAc layers are evaporated to dryness and partitioned between hexane:CCl4 and aqueous formic acid. Instrumental analysis is by HPLC/MS.	The SOP must include steps to demonstrate the solutions and extracts are protected from light, due to the light sensitive nature of the nitroimidazole s.	Dairy Egg Honey Meat (Liver & muscle)	Dimetridazole Hydroxy dimetridazole Metronidazole Ronidazole Tinidazole Ipronidazole Hydroxy metronidazole Hydroxy ipronidazole	0.001	0.003	Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Nitroimidazoles Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Penicillins	http://www.fsis.usda.gov/wps/wcm/connect/1c66a017-215e-4844-bfb1-29183b5af252/CLG_BLAC_03.pdf?MOD=AJPERES CFIA Calgary Method: ACC-063v2.	The internal standard is added to the sample followed by extraction with buffer and cleanup by SPE. Elute, evaporate, dissolve in ammonium acetate and analyze by LC/MS.		Dairy Egg Honey Meat (muscle and kidney for all species except poultry; muscle and liver for poultry)	Amoxicillin Ampicillin Penicillin G Oxacillin Cloxacillin Dicloxacillin Penicillin V Nafcillin	0.002	0.005	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	30	The “ANALYTE” is to be reported as “Penicillins Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg
Phenicol	CFIA Saskatoon Method: CVDR-M-3013.04 CFIA Calgary Method: ACC-062v2.3	Sample is extracted with ETOAc, dried and re-dissolved in water. Solution is washed, cleaned with SPE cartridge, eluted with methanol, dried then re-dissolved in acidic water for instrumental analysis by HPLC/MS.		Dairy Egg Honey	Chloramphenicol	0.0002		See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Phenicol Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg In the event that florfenicol amine is tested and reported, the “florfenicol” as determined by the original method will not be reported, and the “florfenicol amine” will be reported in its place.
					Florfenicol	0.001				
					Thiamphenicol	0.001				
				Meat (Liver & muscle)	Chloramphenicol	0.0002		Liver: all positives ≥ 0.1 mg/kg must be confirmed using a method that determines florfenicol amine. Muscle: all positives ≥ 0.05 mg/kg to be confirmed using a method for florfenicol amine.		
					Florfenicol	0.001				
					Thiamphenicol	0.001				
	Meat (liver) Meat (muscle)	Florfenicol amine	0.5	1.0						
			0.03	0.7						

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						(mg/kg), unless otherwise specified				
Sulfonamides	CFIA Calgary Method ACC-056v4.1	Sample, containing protein (egg and dairy), are cleaned up by protein precipitation, extraction with acetonitrile followed by SPE clean-up. Samples high in sugars are extracted with dilute acid and allowed to stand overnight to free sulfa drugs from sugar complexes. Instrumental analysis is by LC/MSD.	The SOP for the honey food group must include a step for extraction with dilute acid and standing overnight in order to free sulfa drugs from sugar complexes.	Dairy Egg Honey	Sulfabenzamide, Sulfacetamide, Sulfachloropyridazine Sulfadiazine Sulfadimethoxine Sulfadoxine Sulfaethoxypyridazine, Sulfaguanidine Sulfamerazine Sulfameter Sulfamethazine Sulfamethizole Sulfamethoxazole Sulfamethoxypyridazine Sulfamonomethoxine Sulfamoxole Sulfanilamide Sulfaphenazole Sulfapyridine Sulfaquinoxaline Sulfathiazole Sulfisoxazole Dapsone Ormetoprim Trimethoprim	See Appendix A of the reference method	See Appendix A of the reference method	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	60	The “ANALYTE” is to be reported as “Sulfa Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.

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						(mg/kg), unless otherwise specified				
Sulfonamides-M	CFIA Saskatoon Method: SULLC-SP03	Meat samples are partitioned into buffer and extracted into methylene chloride and analysed by LC with fluorescence detection.		Meat (muscle and kidney for all species except poultry; muscle and liver for poultry)	Sulfacetamide Sulfachloropyridazine Sulfadiazine Sulfadimethoxine Sulfadoxine Sulfaethoxypyridazine Sulfamerazine Sulfamethazine Sulfamethoxypyridazine Sulfapyridine Sulfaquinoxaline Sulfathiazole Dapsone Ormetoprim Sulfabenzamide Sulfameter Sulfamethizole Sulfamethoxazole Sulfamonomethoxine Sulfaphenazole Sulfisomidine Sulfisoxazole Trimethoprim <b>Optional:</b> Sulfaguanidine Sulfamoxole Sulfanilamide	0.01	0.05	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	60	The “ANALYTE” is to be reported as “Sulfa Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Tetracyclines	CFIA Saskatoon Method : CVDR-M-3011.15 CFIA Calgary Method: ACC-042	The sample is extracted with buffer and filtered. The filtrate is passed through a SPE column, which is rinsed with water prior to elution with methanolic oxalic acid. Honey samples are dissolved in an aqueous buffer. After filtration of the solution, the tetracyclines are extracted on a polymeric reversed-phase SPE column. The extracted tetracyclines are eluted with absolute methanol, concentrated, and reconstituted in water. The instrumental analysis is by HPLC/PDA detection or MS detection		Dairy Egg Honey Meat (muscle and kidney for all species except poultry; muscle and liver for poultry)	Chlortetracycline Doxycycline Epi-Chlortetracycline Epi-Oxytetracycline Epi-Tetracycline Oxytetracycline Tetracycline	0.005	0.015	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	30	The “ANALYTE” is to be reported as “Tetracyclines Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Tiamulin	Journal of AOAC International 1993; 76(2):451-8.	Alkaline hydrolysis of tiamulin metabolites in liver to yield a major metabolite,8-alpha-hydroxy-mutilin and cleaned up and analysed	The SOP must include a step to convert all residues of tiamulin to the marker residue 8- alpha-hydroxy-mutilin	Meat (liver and muscle)	8-alpha-hydroxy-mutilin	0.01	0.03	Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “8-alpha-hydroxy-mutilin” and the numerical value as the “AMOUNT”, in mg/kg.



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						(mg/kg), unless otherwise specified				
Virginiamycin	CFIA Saskatoon Method : CVDR-M-3026.03	The sample is homogenized in acetonitrile-methanol and centrifuged. The supernatant is passed through a SPE cartridge and eluted with buffer. The eluant is partitioned against chloroform and the aqueous upper layer is removed by aspiration. Chloroform is removed and residue is re-constituted in mobile phase solvent. Instrumental analysis is by LC/MS.		Dairy Egg Meat (muscle)	Virginiamycin M	0.005	0.015	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Viginiamycin M” and the numerical value as the “AMOUNT”, in mg/kg.
Antiparasitic										
Benzimidazoles	FSIS Method BNZ-6	The sample is extracted with ETOAc. Solution is evaporated to dryness, washed with solvent to remove fat, before residue is dissolved in mobile phase for instrumental HPLC/UV detection		Dairy Egg Meat (liver, muscle)	Thiabendazole 5-hydroxy-thiabendazole Albendazole-2-aminosulphone Albendazole sulfoxide Albendazole sulphone Oxfendazole Mebendazole Cambendazole Fenbendazole Carbendazim	0.005	0.005	Confirmation using an LC/MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Benzimidazoles Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg
					Fenbendazole sulfone (Meat) Levamisole Albendazole Flubendazole Oxibendazole	0.002	0.005			
Endectocides	CFIA Saskatoon method: CVDR-M-3005.10 CFIA Calgary Method: ACC-071v1.0	The sample is extracted with acetonitrile, centrifuged and supernatant is passed through alumina column. Further cleanup with SPE, derivatization precedes analysis by HPLC/Fluorescence detection.		Dairy Egg Meat (liver & muscle)	Abamectin Doramectin Ivermectin Eprinomectin Moxidectin	0.001	0.002	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Endectocides Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg.
					Emamectin	0.001	0.005			

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Morantel/ Pyrantel	http://www.fsis.usda.gov/wps/wcm/connect/dc705e46-a779-4d53-bfdd-77fac591fcfe/Morantel.pdf?MOD=AJPERES	Tissues that may contain morantel or pyrantel and their metabolites are hydrolyzed. The breakdown product is extracted, derivatized re-extracted and analyzed by GC/ECD.	The SOP must include a hydrolysis step to convert morantel, pyrantel and all the metabolites of both to N-methyl-1,3 propane diamine. Confirmation using a GC technique, preferably MS, on all positives	Dairy Egg Meat (liver and muscle)	N-methyl-1,3 propane diamine	0.5	0.5	Confirmation using a GC/MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “N-Methyl-1,3-propanediamine” and the numerical value as the “AMOUNT” in mg/kg
COCCIDIOSTATS										
Coccidiostats	Development and validation of a multi-residue liquid chromatography–tandem mass spectrometry confirmatory method for eleven coccidiostats in eggs Analytica Chimica Acta 700(2011) 167-176	The sample was extracted with acetonitrile, defatted with hexane and cleaned-up on a silica SPE cartridge. The analytes were identified and quantified by liquid chromatography–tandem mass spectrometry (LC–MS/MS).		Egg Dairy Meat (liver and muscle)	Lasalocid Monensin Maduramicin Narasin Salinomycin Decoquinat Diclazuril Halofuginone Nicarbazin Robenidine Amprolium, Clopidol Dinitolmide Buquinolate Toltrazuril sulfone	0.002	0.01	Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Coccidiostats Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Ionophores	CFIA Calgary method ACC-057v3.0	Sample is homogenized with water/methanol, sonicated and centrifuged. The supernatant is mixed with NaOH solution and extracted with hexane:toluene. Instrumental analysis is by LC/MS.		Honey	Lasalocid Monensin Narasin Salinomycin  Also desired: Maduramicin	0.005	0.005	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Ionophores Screen “ and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value in mg/kg
AntilInflammatory / Steroids / Hormones / Tranquilizer / Growth Promoter										

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
B-Agonists	CFIA Saskatoon method: CVDR-M-3033.02 USDA FSIS CLG-AGON1.05 <a href="http://www.fsis.usda.gov/wps/wcm/connect/c4a34027-7084-49c5-a16c-663b35ebab1e/CLG-AGON1.pdf?MOD=AJPERES">http://www.fsis.usda.gov/wps/wcm/connect/c4a34027-7084-49c5-a16c-663b35ebab1e/CLG-AGON1.pdf?MOD=AJPERES</a>	Free Residues of B-agonists are extracted with a mixture of acetonitrile and isopropanol. Salts are used to precipitate proteins and dehydrate the extract, which is evaporated, reconstituted, filtered and analysed by LC-MS/MS	SOP must include a step that does not allow the sample to evaporate to dryness	Dairy Egg Meat (liver and muscle)	Brombuterol Cimaterol Clenbuterol Clenpenterol Hydroxyclenbuterol Isoxsuprine, Mabuterol Ritodrine Salbutamol Terbutaline Tulobuterol	0.0005	0.002	All positive > 0.0025 mg/kg zilpaterol in bovine must be confirmed and quantitated using the method for free zilpaterol.  Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	90	The “ANALYTE” is to be reported as “B-Agonists Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg
					Free ractopamine Free zilpaterol	0.001 0.001	0.005 0.002			
					<b>OPTIONAL:</b> Clenproperol Fenoterol Formoterol Mapenterol Metaproterenol	0.001	0.003			
Dipyrrone	<a href="http://www.fsis.usda.gov/wps/wcm/connect/3143c51b-b16e-42f9-a24b-8ae138f31aad/CLG_DPN_1_00.pdf?MOD=AJPERES">http://www.fsis.usda.gov/wps/wcm/connect/3143c51b-b16e-42f9-a24b-8ae138f31aad/CLG_DPN_1_00.pdf?MOD=AJPERES</a>	An internal standard is added to the sample, which is then extracted with sodium sulfite buffer. The filtrate is passed through C18 column. Residues are eluted with methanol dried and prior to instrumental analysis with reverse phase HPLC/UV detection.	The SOP must include the use of a sodium sulfite extraction buffer and a step where the final drying step is taken to just dryness.	Dairy Meat (liver & muscle)	Dipyrrone 4-Aminoantipyrrine 4-Formylaminoantipyrrine 4-Methylaminoantipyrrine	0.02	0.05	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Dipyrrones Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg.
Gestagens	CFIA Saskatoon method: CVDR-M-3016.07	Sample is extracted with acetonitrile, which is washed with hexane and taken to dryness. Clean-up steps include, solvent partition, saponification, SPE, eluted, dried and analyzed with HPLC/UV detection.		Dairy Meat (fat)	Melengestrol acetate Megestrol acetate Chlormadinone acetate	0.005	0.010	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Gestagens Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg.
NSAID/HORMONE/ STEROID/TRANQUILIZER	CFIA Saskatoon Method: CVDR-M-3025.03	Sample is digested with protease solution overnight, washed with hexane, cleaned up with multiple SPE cartridges. Instrumental analysis is by HPLC-MS/MS	The SOP must provide for a protease digestion with overnight incubation to free any bound analytes and	Dairy Egg Meat (muscle, kidney optional)	Naproxen	0.0005	0.001	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	30	The “ANALYTE” is to be reported as “NSAID/Hormone/Steroid/Tranquilizer Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive
					Meloxicam	0.0001	0.001			
					Ketoprofen	0.0001	0.001			
					Flunixin	0.0001	0.002			
					Niflumic acid	0.0001	0.001			
					Carprofen	0.0005	0.001			
					Etodolac	0.0002	0.001			
					Diclofenac	0.0005	0.001			
Mefenamic acid	0.0002	0.001								

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
					(mg/kg), unless otherwise specified					
			not use PVDF filters		Tolfenamic acid	0.0005	0.001			is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
					Vedaprofen	0.0008	0.001			
					20-Dihydroprednisone	0.001	0.001			
					20-Dihydroprednisolone	0.0005	0.001			
					Prednisone	0.0005	0.002			
					Prednisolone	0.0005	0.002			
					Methylprednisolone	0.0002	0.001			
					Betamethasone	0.0004	0.001			
					Dexamethasone	0.0004	0.001			
					Flumethasone	0.001	0.002			
					Beclomethasone	0.001	0.002			
					Triamcinolone Acetonide	0.001	0.002			
					alpha-Trenbolone	0.001	0.001			
					beta Trenbolone	0.002	0.002			
					Boldenone	0.001	0.002			
					19-Nortestosterone	0.001	0.002			
					Epi-19-nortestosterone	0.001	0.002			
					Dianabol	0.001	0.002			
					Testosterone	0.001	0.002			
					Epi-testosterone	0.001	0.003			
					Phenylbutazone	0.001	0.003			
					Oxyphenbutazone	0.001	0.003			
					OPTIONAL:					
					Clostebol	0.001	0.003			
					Acepromazine	0.0006	0.002			
					Altrenogest	0.0006	0.002			
					Azaperol	0.0006	0.002			
					Azaperone	0.0006	0.002			
					Butorphanol	0.0006	0.002			
					Carazolol	0.0006	0.002			
					Chlorpromazine	0.0006	0.002			
					Detomidine	0.0006	0.002			
					Firocoxib	0.0006	0.002			
					Haloperidol	0.0006	0.002			
					Progesterone	0.0006	0.002			
					Propionylpromazine	0.0006	0.002			
					Xylazine	0.0006	0.002			

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Thyreostats	CFIA Saskatoon Method : CVDR-M-3003.03 <a href="http://www.fsis.usda.gov/wps/wcm/connect/762f930a-d0b8-4ef3-b8cc-b18e5bcbbdf8/CLG_TST_2_01.pdf?MOD=AJPERES">http://www.fsis.usda.gov/wps/wcm/connect/762f930a-d0b8-4ef3-b8cc-b18e5bcbbdf8/CLG_TST_2_01.pdf?MOD=AJPERES</a>	Thyreostats are extracted from samples with ETOAc and dichloromethane (4/1), in the presence of sodium bicarbonate, sodium sulfate and DL-dithiothritol. The extract is evaporated; residue is reconstituted in formic acid in methanol. The methanol is extracted with hexane and a portion of the de-fatted methanol is analyzed by LC/MS/MS detection. Dimethylthiouracil serves as internal standard.	The SOP must use DL-dithiothreitol, sodium bicarbonate and sodium sulfate during the extraction step in order to achieve efficient recovery of incurred residue	Dairy Egg Meat (liver & muscle)	Mercaptobenzimidazole Methylthiouracil Phenylthiouracil Propylthiouracil Tapazole Thiouracil	0.005	0.01	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Thyreostats Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Tranquillizer	CFIA Saskatoon Method : CVDR-M-3006.03	Various extraction procedures have been successfully used to extract this group of residues. Initial extractions with EtOAc, or acetonitrile or diethyl ether or tert-butyl methyl ether (TBME) followed by acid base partitioning cleanup or solvent wash for purification. SPE may be used to further remove interfering impurities if necessary prior to instrumental analysis using LC/MS detection sometimes in conjunction with an external standard		Dairy Egg Meat (liver & muscle)	Acepromazine Azaperol Azaperone Carazolol Chlorpromazine Haloperidol Propionylpromazine Xylazine	0.0005	0.001	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Tranquillizers Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Zeranol/ Stilbenes	CFIA Saskatoon Method : CVDR-M-3019.15	Sample is digested with beta-glucuronidase to free conjugates followed by extraction with acetonitrile. Addition of dichloromethane and hexane to the supernatant (acetonitrile) gives a three phase liquid-liquid extraction. The middle layer is removed and cleaned up with mixed bed extraction column. Instrumental analysis is by GC/MS/SIM detection following on column derivatization.	The SOP must provide for digestion with β(beta)-glucuronidase to free conjugates followed by extraction with acetonitrile.	Dairy Meat (liver & muscle)	alpha-zearalenol beta-zearalenol Dienestrol Diethylstilbesterol Hexestrol Taleranol Zearalanone Zearalenone Zeranol	0.0005	0.001	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Zeranol/Stilbenes Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Pesticides / Environmental Pollutants										
ALAR	Pest Management Regulatory Agency method: P-RE-057-97(1)-AMO	Daminozide is converted to UDMH, which is distilled from the sample. The UDMH is derivatized with salicylaldehyde and the resulting hydrazone is analyzed by GC/MS/SIM.	The SOP must include an alkaline hydrolysis step to convert daminozide and its metabolites to unsymmetrical dimethylhydrazine (UDMH).	Fresh F&V Honey	Daminozide	0.01	0.04	Further confirmation of the analytical result is not required for this test.	120	The “ANALYTE” is to be reported as “Daminozide” and the numerical value as the “AMOUNT” in mg/kg
	* Alternatively, the Offeror may opt to provide the method identified under “Polar Pesticides”									

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Amitraz	CFIA Calgary Method: CSP-006-v1.0	Amitraz and its metabolites are converted to 2,4-dimethylaniline, which is then extracted by iso-octane. The 2,4-dimethylaniline is derivatized with heptafluorobutyric anhydride and analyzed by GC/ECD detection	The SOP must include an acid hydrolysis step to convert amitraz and its metabolites to 2,4-dimethylaniline for quantitation as amitraz.	Fresh F&V Honey	Amitraz	0.01	0.1	See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Amitraz” and the numerical value as the “AMOUNT” in mg/kg
EBDC/DC(CS2)	Pesticide Management Regulatory Agency Method P-RE-053-95-EBDC	The sample is digested with HCl and the CS2 evolved is derivatized and quantitated by measurement of the absorbance at 435 nm. A calculation quantitates the CS2 as zineb. Note this method measures total dithiocarbamates and is not specific for EBDCs.	The SOP must use an HCl digestion to liberate CS2, followed by quantitation of the CS2 to determine zineb equivalence.	Fresh F&V Honey	CS <sub>2</sub> expressed as zineb equivalents	0.03 zineb equivalents	0.1 zineb equivalents	Not Required	120	The “ANALYTE” is to be reported as “Dithiocarbamate” and the numerical value as the “AMOUNT” in mg/kg
EBDC(EDA)	CFIA Calgary Method: SPR-002v2.9	The sample is hydrolyzed with HCl to liberate EDA, which is purified by ion exchange chromatography and derivatized for analysis by HPLC/Fluorescence detection.	The SOP must include a hydrolysis step to liberate ethylene diamine (EDA) prior to quantitation of the EDA.	Fresh F&V Honey	Ethylene Diamine	0.04	0.08	Not Required	120	The “ANALYTE” is to be reported as “EDA” and the numerical value as the “AMOUNT” in mg/kg
EDBC(ETU)	CFIA Calgary Method: SPR-008v1.2 or P-RE-060-97(1)-ETU The determination of ETU in Fruits and vegetables * Alternatively, the Offeror may opt to provide the method identified under “Polar Pesticides”	Sodium sulfite is added to the sample prior to the extraction with water. Further cleanup by extraction, partitioning, drying re-dissolving in preparation for HPLC/UV analysis	The SOP must provide for a step indicating the addition of sodium sulfite during the extraction to prevent loss of the ETU residue due to oxidation.	Fresh F&V Processed Foods Honey	Ethylene thiourea	0.02	0.05	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “ETU” and the numerical value as the “AMOUNT” in mg/kg

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Carbamates	None provided			Dairy Egg Meat (liver & muscle)	3-OH Carbofuran Aldicarb Aldicarb Sulfone Aldicarb sulfoxide Bendiocarb Bufencarb Carbaryl Carbofuran Dioxacarb Isoprocarb Methiocarb Methiocarb Sulfoxide Methomyl Oxamyl Promecarb Propoxur	0.005	0.01	Confirmation using an LC/MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Carbamates Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg
Pesticides-GCLC	CFIA Calgary Method: PMR-001v1.11 CFIA Calgary Method: PMR-005v1.7	A representative sample is blended with acetonitrile and sodium chloride (NaCl) and the layers are separated by centrifugation. An aliquot of the acetonitrile phase is evaporated for cleaned up on an Envi-Carb SPE cartridge which is connected in series with an aminopropyl sep-pak. The pesticides are eluted from the cleanup column with acetonitrile: toluene 3:1. The eluant is concentrated and solvent exchanged to hexane		Fresh F&V Processed Foods Honey	See Table 2 of Appendix 2 to Annex A	See Table 2 of Appendix 2 to Annex A	See Table 2 of Appendix 2 to Annex A	Confirmation using an acceptable MS technique, , is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Pesticide Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
	CFIA Calgary Method: PMR-016v1.0	A representative sample acidified acetonitrile, sodium acetate and magnesium sulphate are added. A portion is transferred to a centrifuge tube containing (PSA) and magnesium sulphate. An aliquot of which is evaporated, brought back to volume and analysed by LC-MS/MS.								
Pesticides-DEM	USDA: Screening for pesticides by LC/MS/MS AND GC/MS/MS <a href="http://www.fsis.usda.gov/wps/wcm/connect/499a8e9e-49bd-480a-b8b6-d1867f96c39d/CLG-PST5.pdf?MOD=AJPERES">http://www.fsis.usda.gov/wps/wcm/connect/499a8e9e-49bd-480a-b8b6-d1867f96c39d/CLG-PST5.pdf?MOD=AJPERES</a>			Dairy Egg Meat (liver, muscle)	See Table 3 of Appendix 2 to Annex A	See Table 3 of Appendix 2 to Annex A	See Table 3 of Appendix 2 to Annex A	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Synthetic Pyrethrins	CFIA Saskatoon Method : PYR-SP02	Sample is extracted with hexane, partitioned acetonitrile and hexane, sodium sulfate is added and back extraction with hexane leads to Florisil column cleanup. Eluant is dried, residue is dissolved in iso-octane for instrumental analysis by GC/ECD detection.		Dairy Egg Meat (Fat, muscle)	Cis-Permethrin Trans-Permethrin Cyfluthrin Cypermethrin Deltamethrin Fenvalerate Flucythrinate lambda-Cyhalothrin Tau-Fluvalinate	0.015	0.05	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Synthetic Pyrethrins Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Diquat/Paraquat	<a href="http://www.crl-pesticides.eu/library/docs/srm/meth_gup_pe.pdf">http://www.crl-pesticides.eu/library/docs/srm/meth_gup_pe.pdf</a> or EPA 549.2	A sample is extracted with acidified methanol, followed by thermal treatment and centrifugation. The extract is filtered and analysed by HPLC	The SOP must contain a thermal treatment of at least 15 minutes at 80 °C in a water bath	Fresh F&V Processed Foods	Diquat	0.01	0.02	Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Quat Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
	* Alternatively, the Offeror may opt to provide the method identified under “Polar Pesticides”				Paraquat					
Glyphosate	Canadian Grain Commission GS-2c: Determination of Glyphosate in Cereal and Oilseed Crops Using Pre-Column Derivatization and LC/MS/MS Detection  * Alternatively, the Offeror may opt to provide the method identified under “Polar Pesticides”	Ground samples are extracted using a biphasic extraction with dichloromethane and water. The sample is centrifuged and 0.5mL of the aqueous layer is derivatized with FMOC-Cl and subjected to further clean up with an Oasis HLB solid-phase extraction (SPE) cartridge. Analytes are eluted with methanol and the extract evaporated to dryness and reconstituted in HPLC water. Determinations are made by LC-ES/MS/MS in the negative ion mode using two precursor-product ion transitions. This method utilizes isotopic labeled surrogate standards to correct for method deficiencies in obtaining accurate results.	The SOP must include a derivatization step using FMOC-Cl and use isotopic labeled internal standards	Fresh F&V Honey Meat (muscle, liver or kidney) Processed Foods	Glyphosate AMPA (aminomethyl phosphonic acid) Glufosinate  Optional: N-acetyl AMPA N-acetylglyphosate N-acetyl-glufosinate	0.003 0.003  0.003 0.003 0.003 0.003	0.01 0.01  0.01 0.01 0.01 0.01	Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Glyphosate” and the numerical value as the “AMOUNT” in mg/kg.



Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Polar Pesticides	<a href="http://www.eurl-pesticides.eu/userfiles/file/EurlSRM/meth_QuPPE_PO_V10_1(1).pdf">http://www.eurl-pesticides.eu/userfiles/file/EurlSRM/meth_QuPPE_PO_V10_1(1).pdf</a>  <a href="http://www.eurl-pesticides.eu/userfiles/file/meth_QuPPE_AO_V3_2.pdf">http://www.eurl-pesticides.eu/userfiles/file/meth_QuPPE_AO_V3_2.pdf</a>	Residues are extracted from the test portion following water adjustment and addition of acidified methanol. In the case of pulses, nuts and oily seeds, EDTA is added for the complexation of metal ions, such as calcium and magnesium, which can affect the analysis of certain compounds (e.g. glyphosate and AMPA). The mixture is centrifuged, filtered and directly analyzed by LC-MS/MS. Various LC-MS/MS methods for the simultaneous analysis of different combinations of pesticides are provided.		Fresh F&V Honey Meat (muscle, liver or kidney) Processed Foods	Diquat	0.01	0.02	Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Polar Pesticides Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
					Paraquat	0.01	0.02			
					Glyphosate	0.003	0.01			
					AMPA (aminomethyl phosphonic acid)	0.003	0.01			
					Glufosinate	0.003	0.01			
					N-acetyl AMPA	0.003	0.01			
					N-acetyl-glyphosate	0.003	0.01			
					N-acetyl-glufosinate	0.003	0.01			
					ETU	0.02	0.05			
					Darninozide	0.01	0.04			
					<b>Optional:</b>					
					Amitrole	0.01	0.03			
					Phosphonic acid	0.01	0.03			
					Ethephon	0.01	0.03			
					HEPA	0.01	0.03			
					MPPA	0.01	0.03			
					Forsetyl-Al	0.01	0.03			
		Maleic hydrazide			0.01	0.03				
		Perchlorate			0.01	0.03				
		Chlorate			0.01	0.03				
		Bialaphos			0.01	0.03				
		Cyanuric acid			0.01	0.03				
		PTU			0.01	0.03				
		Cryomazine			0.01	0.03				
		Trimesium			0.01	0.03				
		Chlormequat			0.01	0.03				
		Mepiquat			0.01	0.03				
		Difenzoquat			0.01	0.03				
		Propamocarb			0.01	0.03				
		Melamine			0.01	0.03				
		N,N-Dimethylhydrazine			0.01	0.03				
		Nereistoxin			0.01	0.03				
		Aminocyclopyrachlor			0.01	0.03				
		Chloridazon-desphenyl			0.01	0.03				
		Mepiquat-4-hydroxy			0.01	0.03				
Propamocarb-N-desmethyl	0.01	0.03								
Propamocarb-N-oxide	0.01	0.03								
Maleic hydrazide	0.01	0.03								
Phenoxy Herbicides	No Reference Provided			Fresh F&V Processed Foods	2,4-D MCPA	0.005	0.02	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Phenoxy Herbicides Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the
					2,4-DB	0.005	0.02			
					Dichlorprop	0.01	0.02			
					Fenoprop	0.01	0.02			
					MCPA	0.01	0.02			
					MCPB	0.01	0.02			
					2,4,5-T	0.01	0.02			
					Mecoprop	0.01	0.02			

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
					(mg/kg), unless otherwise specified					
					Acifluorfen	0.01	0.02			
					Bentazon	0.01	0.02			
					Chloramben	0.01	0.02			
					Dicamba	0.01	0.02			
					Optional					
					Triclopyr	0.01	0.02			
					Picloram	0.01	0.02			
					Clopyralid	0.01	0.02			
					Bromoxynil	0.01	0.02			
					Dinoseb	0.01	0.02			
Chlorinated Phenols	CFIA Saskatoon method: PCP-SP08	Acidified sample is extracted with hexane:isopropanol. Chlorinated phenols are extracted with acidified methanol. Concentrated sulfuric acid wash removes impurities. Methylation precedes the analysis by GC/ECD.		Dairy Egg Meat (liver & muscle)	2,3,4,5-Tetrachlorophenol 2,3,4,6-Tetrachlorophenol 2,3,5,6-Tetrachlorophenol Pentachlorophenol	0.01	0.03	Confirmation using a GC/MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Chlorinated Phenols Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed in mg/kg
Metals	None provided.  Note: The provided detection limits are to be demonstrated in matrix and not instrument detection limits		Detection limits must be demonstrated in matrix for the following analytes to be considered having met the requirement. As, Be, Cd, Cr, Cu, Hg, Mo, Mn, Ni, Pb, Sb, Se, Sn, Zn	Dairy Egg Fresh F&V Processed Foods Honey Meat (muscle)	Al, As, B, Be, Cd, Cr, Cu, Fe, Hg, Mg, Mo, Mn, Ni, Pb, Sb, Se, Sn, Ti and Zn Optional: iodine (I)	As per Appendix 2 to Annex A, Table 1		See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as the individual metals and the numerical value as the “AMOUNT” in mg/kg.
Mycotoxin	CFIA Dartmouth method: SOM-DAR-CHE-041-06	A sample of liquid milk, powdered milk or cheese is thoroughly blended with 50 mL of DIW. Following centrifugation, the supernatant is cleaned up with SPE. Eluent is evaporated to 0.5 mL under nitrogen then reconstituted in DIW. Instrumental analysis is by LC/Fluorescence detection.		Dairy	Aflatoxin M1	0.01 µg/kg		Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	30	The “ANALYTE” is to be reported as “Aflatoxin M1” and the numerical value as the “AMOUNT” in µg/kg.
Part B										

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Melamine		A sample is extracted with acidic acetonitrile followed by centrifugation. The extract is defatted with hexane and subjected to cation exchange SPE. The melamine is eluted with an ammonia methanol solution, evaporated and reconstituted in acetonitrile:water. The extract is analysed by HPLC-MS/MS.	The SOP must include the cation exchange step to remove interferences prior to the instrumental step.	Dairy	Melamine	0.10		Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Melamine” and the numerical value as the “AMOUNT” in mg/kg.
3-MCPD	CFIA Burnaby method BFCL-026 “Determination of 3-monochloropropane diol in Food and Food Ingredients using GC/MS”			Processed Foods(Soy sauce, vegetable fats and oils, bread products)	3-monochloropropane-1,2-diol	0.01		Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “3-MCPD” and the numerical value as the “AMOUNT” in mg/kg.
Arsenic Species	CFIA Dartmouth method: SOM-CHE-053-04	Samples are enzyme digested, extracted and analyzed on ICP-MS	The SOP must provide for a protease digestion for all samples other than juices. The SOP must include a control sample or certified reference material for each batch analysed. The resolution of Standard 2 peaks of AsC and AsB as per the reference method (0.1 ng/mL AsC; 0.05 ng/mL AsB) must have a resolution of 0.9 or greater	Egg, Fresh F&V Processed Foods Meat (muscle)	Arsenocholine (AsC)		10 µg/kg	See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Arsenic Speciation Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in µg/kg, <b>as arsenic equivalents.</b>
					Arsenobetaine (AsB)		10 µg/kg			
					Disodium methyl arsonate hexahydrate (MMA)		10 µg/kg			
					Cacodylic acid (DMA)		10 µg/kg			
					As <sup>3+</sup>		10 µg/kg			
					As <sup>5+</sup>		10 µg/kg			

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
BPA		Sample is de-proteinated, cleaned up by SPE and derivatized with acetic anhydride. The extract is run on GC/MS. Alternatively, a non-derivatized sample is analysed by LC-MS/MS. The points for this test will not be counted towards a minimum test requirement to qualify for the food group.	The SOP must include a step that conditions any glassware used in sample preparation to eliminate any environmental BPA that may be present.	Processed Foods (canned foods and infant formula)	Bisphenol A (BPA) Bisphenol S (BPS) Biphenol F (BPF) Bisphenol A Diglycidyl ether (BADGE)	0.005	0.01	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Bisphenol A Screen” and and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
Food colours (Water)	CFIA Longueuil LCAQ 111-04 : DETERMINATION OF WATER-SOLUBLE COLOURS BY HPLC-UV-VISIBLE (DAD) IN FOODSTUFFS	Ion pair chromatography is performed by adding a counter ion to the mobile phase; thereby, forming a reversible complex with the water-soluble colours containing one or more functional groups, such as acidic or salt acidic moieties. The neutral complex thus formed is then separated by reverse-phase chromatography.	The submitted SOP must include an enzymatic digestion with alpha amylase for all samples containing one of the ingredients mentioned in the reference SOP (8.1) or if the information is not available.	Processed Foods(candy, beverages, etc)	Permitted Food Colours		0.025	See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Water Soluble colour Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
					Tartrazine					
					Amaranth					
					Indigo Carmine					
					Sunset Yellow FCF					
					Allura Red					
					Ponceau SX					
					Fast Green FCF					
					Brilliant Blue FCF					
					Erythrosin B					
					Chlorophyllin					
					Subsidiary dyes					
					Ponceau 4R (New Coccine)					
					Fast Red E					
					Bordeaux R					
					Erythrosin Yellowish (2,4,5-triiodo)					
					4,5-diiodofluorescein					
					Crocein Orange G					
					Orange II					
					2,4,7-triiodofluorescein					
					Non-permitted water-soluble dyes					
					Orange GGN					
					Azorubine (Carmoisine)					
					Lissamine Green					
					Quinoline Yellow1					
					Eosin Y					
					Patent Blue VF					
					Patent Blue Violet					
					Calcium					
					Chrysoidine G					
					Rhodamine B					
Food Colours (Fat)	CFIA Longueuil; LCAQ-107-06; DETERMINATION OF FAT-SOLUBLE	The fat-soluble dyes are extracted from the food samples by three (3) successive liquid-liquid extractions using tetrahydrofuran (THF). Following a manual Vortex mixing, sonication,		Processed Foods( beverages, sauces, etc)	Sudan I		0.025	See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Fat Soluble colour Screen” and the “AMOUNT” is to be “0” for a negative and a “1”
					Sudan II					
					Sudan III					
					Sudan IV					

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
	DYES IN FOODS BY HPLC	Vortex mixing by plates, centrifugation and filtration, the liquid extract is concentrated by evaporation under a stream of nitrogen, re-dissolved in a minimum of THF, filtered and analyzed by HPLC with a diode-array detector			Sudan Red B					for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in mg/kg.
					Sudan Red 7B					
					Sudan Red G					
					Sudan Orange G					
					Sudan Blue II					
					Solvent Blue 59					
					Toluidine Red					
					Para Red					
					Methyl Yellow					
					Metanil Yellow *					
					Orange II *					
					Rhodamine B *					
					Sudan Black B					
					Citrus Red 2					
					*Water-soluble dyes					
Ethyl carbamate	CFIA Calgary method: PMR-012			Processed Foods (alcoholic beverages)	Ethyl carbamate	4 µg/kg		Confirmation using an acceptable MS technique is required See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Ethyl carbamate” and the numerical value as the “AMOUNT” in µg/kg.
Alternaria	Alternaria mycotoxins CFIA Burnaby method : BFCL-048 <a href="http://www.ingentac onnect.com/content/aoac/jaoac/2001/0000084/00000006/art00022">http://www.ingentac onnect.com/content/aoac/jaoac/2001/0000084/00000006/art00022</a>	Sample, with or without SPE cleanup, is diluted with water-acetonitrile acetic acid solution. The clear supernatant after centrifugation is analysed by high performance liquid chromatography with tandem mass spectrometric detection (HPLCMS/MS).		Processed Foods (Juice, wine, grains) Honey	Alternariol	1.0 µg/kg	5.0 µg/kg	Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Alternaria Screen” and the “AMOUNT” is to be “0” for a negative and a “1” for a positive for one or more of the analytes. In the event of a positive, the analyte(s) found to be positive is/are to be reported as a separate entry and the amount as the actual value confirmed, in µg/kg.
					alternariol methyl ether	1.0 µg/kg	5.0 µg/kg			
Ochratoxin A		The sample is extracted with acetonitrile-methanol-water. The extract is diluted with phosphate buffered saline (PBS) and cleaned up by immunoaffinity column (IAC). OTA is eluted with methanol and the eluate is evaporated to dryness. The residue is dissolved in the LC injection solution and analysed by high performance liquid chromatography (HPLC) with tandem mass spectrometric detection (MS/MS) or with fluorescence detection (FLD).	This SOP must include a clean-up step using an immunoaffinty column.	Processed Foods (cereals)	Ochratoxin A	1 µg/kg		Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Ochratoxin A” and the numerical value as the “AMOUNT” in µg/kg.
Deoxynivalenol		Deoxynivalenol is extracted from a sample by blending with water and polyethylene glycol (PEG). The aqueous extract is cleaned up via an immunoaffinity column specific for DON. The eluate is analysed by high performance liquid chromatography (HPLC) with tandem mass spectrometric detection (MS/MS).	This SOP must include a clean-up step using an immunoaffinty column.	Processed Foods (cereals)	Deoxynivalenol	20 µg/kg		Confirmation using an acceptable MS technique is required. See Tasks/Technical Specifications	120	The “ANALYTE” is to be reported as “Deoxynivalenol” and the numerical value as the “AMOUNT” in µg/kg.

Chemical Residue of Interest	Reference	Basis	Mandatory	Eligible Food Group <sup>a</sup>	Analytes	Required LOD <sup>b</sup>	Required LOQ <sup>b</sup>	Confirmation Procedure <sup>c</sup>	Turn Around Time (days)	Reporting
						(mg/kg), unless otherwise specified				
Polycyclic Aromatic Hydrocarbons (PAHs)	No method reference provided. Extension to additional matrices			Dairy (including cheese) Egg Honey Meat Fresh F&V Processed Foods (high fat Processed Foods, alcoholic beverages)	Acenaphthene	0.15 µg/kg		Confirmation is not required since only high-resolution MS methods will be considered.	120	All Analytes are to be reported in (units) using the MS Excel template provided in µg/kg as illustrated in Appendix 3 to Annex A
					Acenaphthylene	0.24 µg/kg				
					Anthracene	0.24 µg/kg				
					Benz(a)anthracene	0.36 µg/kg				
					Benzo(a)pyrene	0.30 µg/kg				
					Benzo(b)fluoranthene	0.30 µg/kg				
					Benzo(k)fluoranthene	0.20 µg/kg				
					Benzo(ghi)perylene	0.40 µg/kg				
					Chrysene	0.20 µg/kg				
					Dibenz(a,h)anthracene	0.20 µg/kg				
					Fluoranthene	0.20 µg/kg				
					Fluorene	0.16 µg/kg				
					Indeno(1,2,3-cd)pyrene	0.50 µg/kg				
					Naphthalene	0.16 µg/kg				
					Phenanthrene	0.20 µg/kg				
					Pyrene	0.16 µg/kg				
Dioxins PCB	None Provided			Dairy Egg Meat Processed Products	See Appendix 4c to Annex A	See Appendix 4a, 4b to Annex A		Confirmation is not required since only high-resolution MS methods will be considered.	120	All Analytes are to be reported in (units) using the MS Excel template provided in ng/kg as illustrated in Appendix 4c to Annex A
Dioxin and Dioxin-Like Congeners	None Provided			Dairy Egg Meat Processed Products	See Appendix 4d to Annex A	See Appendix 4a, 4b to Annex A		Confirmation is not required since only high-resolution MS methods will be considered.	120	All Analytes are to be reported in (units) using the MS Excel template provided in ng/kg as illustrated in Appendix 4d to Annex A

Chemical Residues of Interest to CFIA

a: SOP provided must clearly indicate the method has been validated in the specified food group

b: The SOP provided must clearly indicate the stated level of detection/quantification , otherwise it will be rejected

c: Any stated confirmation procedures must provide for a minimum of 4 identification points as described in the Official Journal of the European Communities, "COMMISSION DECISION of 12 August 2002 implementing Council Directive 96/23/EC concerning the performance of analytical methods and the interpretation of results" <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:221:0008:0036:EN:PDF>

d: Pesticides that consist of two or more isomers shall be reported as the total, as opposed to the individual isomers, according the residue definitions provided by Health Canada at: <http://www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/food-nourriture/mrl-definitions-lmr/index-eng.php> unless requested otherwise by the Technical Authority or designate.

## Appendix 2 to Annex A

**Table 1**  
**Detection limits required for metals and elements in various food types (mg/kg)**

<b>Residue</b>	<b>Dairy</b>	<b>Egg</b>	<b>Honey</b>	<b>Meat</b>	<b>Fresh</b>	<b>Processed</b>
AL	0.02	0.5	0.5	0.2	0.2	0.2
AS	0.005	0.04	0.05	0.005	0.005	0.005
B	0.05	0.05	0.05	0.05	0.05	0.05
BE	0.05	0.05	0.05	0.05	0.05	0.05
CD	0.005	0.01	0.05	0.005	0.005	0.005
CR	0.02	0.02	0.02	0.02	0.02	0.02
CU	0.05	0.5	0.5	0.5	0.5	0.5
FE	0.5	0.5	0.5	0.5	0.5	0.5
HG	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
I (optional)	0.05	0.05	0.05	0.05	0.05	0.05
MG	0.05	0.05	0.05	0.05	0.05	0.05
MO	0.05	0.05	0.05	0.05	0.05	0.05
MN	0.05	0.05	0.05	0.05	0.05	0.05
NI	0.02	0.02	0.02	0.02	0.02	0.02
PB	0.005	0.04	0.05	0.005	0.005	0.005
SB	0.05	0.05	0.05	0.05	0.05	0.05
SE	0.02	0.02	0.05	0.02	0.02	0.02
SN	0.2	0.2	0.2	0.2	0.2	0.2
TI	0.05	0.05	0.05	0.05	0.05	0.05
ZN	0.2	0.5	0.2	0.2	0.2	0.2

## Appendix 2 to Annex A

**Table 2**  
**Residues and Required LODs for Pesticides-GCLC**

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
1	3-hydroxyCarbofuran	0.01	0.03	0.01	0.04
2	ABAMECTIN	0.01	0.01	0.01	0.01
3	Acephate	0.01	0.03	0.01	0.03
4	Acetochlor	0.01	0.03	0.01	0.04
5	Acibenzolar-s-methyl	0.003	0.01	0.03	0.09
6	Aclonifen	0.01	0.03	0.01	0.04
7	Alachlor	0.002	0.01	0.01	0.03
8	Aldicarb	0.01	0.03	0.01	0.04
9	Aldicarb Sulfone	0.01	0.03	0.01	0.04
10	Aldicarb sulfoxide	0.01	0.03	0.01	0.04
11	Aldrin	0.003	0.01	0.01	0.03
12	Allidochlor	0.003	0.01	0.01	0.03
13	Ametryn	0.003	0.01	0.01	0.03
14	Anilofos	0.01	0.03	0.01	0.04
15	Aramite	0.005	0.01	0.01	0.03
16	Aspon	0.006	0.01	0.01	0.03
17	Atrazine	0.003	0.01	0.01	0.03
18	Azaconazole	0.01	0.03	0.01	0.04
19	Azinphos-ethyl	0.007	0.01	0.05	0.08
20	Azinphos-methyl	0.006	0.02	0.05	0.08
21	Azoxystrobin	0.003	0.01	0.01	0.04
22	Benalaxyl	0.003	0.01	0.01	0.04
23	Benfluralin	0.004	0.01	0.01	0.04
24	Benodanil	0.004	0.01	0.005	0.03
25	Benomyl	0.01	0.03	0.01	0.04
26	Benoxacor	0.01	0.03	0.05	0.1
27	Benzoylprop-ethyl	0.004	0.01	0.01	0.04
28	BHC Alpha	0.003	0.01	0.01	0.04
29	BHC beta	0.003	0.01	0.01	0.04
30	Bifenox	0.003	0.01	0.01	0.04
31	Bifenthrin	0.003	0.01	0.01	0.04
32	Biphenyl	0.003	0.01	0.01	0.04
33	Bitertanol	0.01	0.03	0.01	0.04
34	Bromacil	0.005	0.03	0.01	0.04
35	Bromophos	0.003	0.01	0.03	0.06
36	Bromophos-ethyl	0.005	0.015	0.03	0.06
37	Bromopropylate	0.003	0.015	0.01	0.04



No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
38	Bromuconazole	0.01	0.03	0.01	0.04
39	Bupirimate	0.003	0.015	0.01	0.04
40	Buprofezin	0.002	0.01	0.01	0.04
41	Butachlor	0.003	0.01	0.01	0.04
42	Butafenacil	0.01	0.03	0.01	0.04
43	Butocarboxim	0.01	0.03	0.01	0.04
44	Butocarboxim sulfoxide	0.01	0.03	0.01	0.04
45	Butralin	0.003	0.02	0.01	0.04
46	Butylate	0.003	0.01	0.01	0.04
47	Cadusafos	0.01	0.03	0.01	0.04
48	Captafol	0.008	0.05	0.05	0.08
49	Captan	0.004	0.02	0.05	0.08
50	CARBARYL	0.01	0.03	0.01	0.04
51	Carbendazim	0.01	0.03	0.01	0.04
52	Carbetamide	0.015	0.04	0.02	0.05
53	Carbofenthion	0.004	0.01	0.01	0.04
54	Carbofuran	0.01	0.03	0.01	0.04
55	Carbosulfan	0.01	0.03	0.01	0.04
56	Carboxin	0.003	0.01	0.01	0.04
57	Carfentrazone-ethyl	0.01	0.03	0.01	0.04
58	Chlorantraniliprole	0.01	0.03	0.01	0.04
59	Chlorbenside	0.003	0.01	0.01	0.04
60	Chlorbromuron	0.01	0.05	0.01	0.04
61	Chlorbufam	0.003	0.02	0.03	0.06
62	Chlordane	0.003	0.01	0.01	0.04
63	Chlordimeform	0.004	0.01	0.01	0.04
64	Chlorfenson	0.003	0.01	0.03	0.06
65	Chlorfenvinphos (e+z)	0.006	0.01	0.03	0.06
66	Chlorflurenol-methyl	0.005	0.01	0.01	0.04
67	Chloridazon	0.01	0.02	0.01	0.04
68	Chlorimuron-ethyl	0.01	0.03	0.01	0.04
69	Chlormephos	0.004	0.01	0.03	0.06
70	Chlorobenzilate	0.005	0.01	0.01	0.04
71	Chloroneb	0.003	0.01	0.01	0.04
72	Chloropropylate	0.003	0.01	0.02	0.08
73	Chlorothalonil	0.01	0.04	0.01	0.04
74	Chloroxuron	0.01	0.03	0.01	0.04
75	Chlorpropham	0.003	0.01	0.01	0.04
76	Chlorpyrifos	0.003	0.01	0.01	0.04
77	Chlorpyriphos-methyl	0.003	0.01	0.01	0.04
78	Chlorthiamid	0.01	0.04	0.01	0.04
79	Chlorthion	0.005	0.03	0.01	0.04

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
80	Chlorthiophos	0.003	0.01	0.01	0.04
81	Chlortoluron	0.01	0.03	0.01	0.04
82	Chlozolinate	0.003	0.01	0.01	0.04
83	Clodinafop-propargyl	0.01	0.03	0.01	0.04
84	Clomazone	0.003	0.01	0.01	0.04
85	Cloquintocet-mexyl	0.01	0.03	0.01	0.04
86	Clothianidin	0.01	0.03	0.01	0.04
87	Coumaphos	0.006	0.015	0.01	0.04
88	Crotoxyphos	0.006	0.02	0.01	0.04
89	Crufomate	0.006	0.015	0.01	0.04
90	Cyanazine	0.017	0.01	0.01	0.04
91	Cyanofenphos	0.01	0.03	0.01	0.04
92	Cyanophos	0.002	0.02	0.01	0.04
93	Cycloate	0.005	0.02	0.03	0.06
94	Cycloxydim	0.01	0.03	0.01	0.04
95	Cycluron	0.01	0.03	0.01	0.04
96	Cyfluthrin (I,II,III,IV)	0.008	0.02	0.06	0.18
97	Cyhalothrin-lambda	0.003	0.01	0.01	0.04
98	Cypermethrin	0.005	0.02	0.01	0.04
99	Cyprazine	0.003	0.01	0.01	0.04
100	Cyproconazole	0.006	0.02	0.01	0.04
101	Cyprodinil	0.003	0.01	0.01	0.04
102	Cyromazine	0.01	0.03	0.01	0.04
103	Dacthal (chlorthal-dimethyl)	0.003	0.01	0.01	0.04
104	delta-HCH (delta-lindane)	0.003	0.01	0.01	0.04
105	Deltamethrin	0.005	0.02	0.01	0.04
106	delta-trans-allevrin	0.003	0.01	0.01	0.04
107	Demeton-O	0.005	0.02	0.01	0.04
108	Demeton-S	0.005	0.02	0.01	0.04
109	Demeton-S-methyl	0.005	0.02	0.01	0.04
110	Demeton-s-methyl sulfone	0.01	0.03	0.01	0.04
111	Demeton-s-methyl sulfoxide	0.01	0.03	0.01	0.04
112	Des-ethyl Atrazine	0.003	0.01	0.01	0.04
113	Desmedipham	0.01	0.03	0.01	0.04
114	Desmetryn	0.005	0.02	0.01	0.04
115	Di-allate	0.003	0.01	0.01	0.04
116	Dialofos	0.01	0.015	0.01	0.04
117	Diazinon	0.003	0.01	0.01	0.04
118	Diazinon o analogue	0.003	0.01	0.01	0.04
119	Dichlobenil	0.003	0.01	0.01	0.04
120	Dichlofluanid	0.007	0.03	0.01	0.04
121	Dichloran	0.006	0.02	0.01	0.04

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
122	Dichlormid	0.004	0.02	0.01	0.04
123	Dichlorvos	0.004	0.02	0.01	0.04
124	Diclobutrazole	0.003	0.01	0.01	0.04
125	Diclocymet	0.01	0.03	0.01	0.04
126	Diclofenthion	0.003	0.01	0.01	0.04
127	Diclofop-methyl	0.002	0.01	0.01	0.04
128	Dicofol	0.007	0.02	0.01	0.04
129	Dicrotophos	0.007	0.02	0.01	0.04
130	Dieldrin	0.007	0.02	0.01	0.04
131	Diethatyl-ethyl	0.002	0.01	0.01	0.04
132	Diethofencarb	0.01	0.03	0.01	0.04
133	Difenoconazole	0.01	0.03	0.01	0.04
134	Dimethachlor	0.002	0.01	0.01	0.04
135	Dimethametryn	0.01	0.03	0.01	0.04
136	Dimethoate	0.003	0.02	0.01	0.04
137	Dimethomorph	0.01	0.03	0.01	0.04
138	Dimetilan	0.01	0.03	0.01	0.04
139	Dimoxystrobin	0.01	0.03	0.01	0.04
140	Diniconazole	0.01	0.03	0.01	0.04
141	Dinitramine	0.003	0.015	0.01	0.04
142	Dioxacarb	0.01	0.03	0.01	0.04
143	Dioxathion	0.003	0.04	0.01	0.04
144	Diphenamid	0.008	0.01	0.01	0.04
145	Diphenylamine	0.004	0.01	0.01	0.04
146	Dipropetryn	0.01	0.03	0.01	0.04
147	Disulfoton	0.003	0.01	0.01	0.04
148	Disulfoton sulfone	0.003	0.01	0.01	0.04
149	Diuron	0.01	0.01	0.01	0.04
150	Dodemorph	0.01	0.01	0.01	0.04
151	Edifenphos	0.003	0.01	0.01	0.04
152	Emamectin	0.01	0.01	0.01	0.04
153	Endosulfan alpha	0.004	0.02	0.01	0.04
154	Endosulfan beta	0.004	0.02	0.01	0.04
155	Endosulfan sulfate	0.003	0.01	0.01	0.04
156	Endrin	0.004	0.01	0.01	0.04
157	EPN	0.007	0.02	0.01	0.04
158	Epoxiconazole	0.01	0.01	0.01	0.04
159	EPTC	0.006	0.02	0.01	0.04
160	Erbon	0.003	0.02	0.01	0.04
161	Esfenvalerate	0.003	0.01	0.01	0.04
162	Etaconazole	0.003	0.01	0.01	0.04
163	Ethalfuralin	0.004	0.02	0.01	0.04

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
164	Ethiofencarb	0.01	0.01	0.01	0.04
165	Ethiofencarb sulfone	0.01	0.01	0.01	0.04
166	Ethiofencarb sulfoxide	0.01	0.01	0.01	0.04
167	Ethion	0.003	0.01	0.01	0.04
168	Ethiprole	0.01	0.01	0.01	0.04
169	Ethirimol	0.01	0.01	0.01	0.04
170	Ethofumsate	0.003	0.01	0.01	0.04
171	Ethoprop	0.01	0.01	0.01	0.04
172	Ethoprophos	0.01	0.01	0.01	0.04
173	Ethylan	0.003	0.01	0.01	0.04
174	Etofenprox	0.01	0.01	0.01	0.04
175	Etoxazole	0.01	0.01	0.01	0.04
176	Etridiazole	0.003	0.01	0.01	0.04
177	Etrimfos	0.003	0.01	0.01	0.04
178	Fenamidone	0.01	0.01	0.01	0.04
179	Fenamiphos	0.006	0.02	0.01	0.04
180	Fenamiphos sulfone	0.006	0.02	0.01	0.04
181	Fenamiphos sulfoxide	0.006	0.02	0.01	0.04
182	Fenarimol	0.004	0.015	0.01	0.04
183	Fenazaquin	0.01	0.01	0.01	0.04
184	Fenbuconazole	0.003	0.01	0.01	0.04
185	Fenchlorophos (Ronnell)	0.003	0.01	0.01	0.04
186	Fenfuram	0.003	0.01	0.01	0.04
187	Fenhexamid	0.01	0.01	0.01	0.04
188	Fenitrothion	0.003	0.01	0.01	0.04
189	Fenoxanil	0.01	0.01	0.01	0.04
190	Fenpropathrin	0.003	0.01	0.01	0.04
191	Fenpropidin	0.01	0.01	0.01	0.04
192	Fenpropimorph	0.01	0.01	0.01	0.04
193	Fenpyroximate	0.01	0.01	0.01	0.04
194	Fenson	0.003	0.01	0.01	0.04
195	Fensulfothion	0.005	0.02	0.01	0.04
196	Fenthion	0.006	0.02	0.01	0.04
197	Fentrazamide	0.01	0.01	0.01	0.04
198	Fenvalerate	0.005	0.02	0.01	0.04
199	Flamprop-isopropyl	0.003	0.01	0.01	0.04
200	Flamprop-methyl	0.006	0.02	0.01	0.04
201	Fluazifop-butyl	0.01	0.01	0.01	0.04
202	Flucarbazone-sodium	0.01	0.01	0.01	0.04
203	Fluchloralin	0.003	0.01	0.01	0.04
204	Flucythrinate	0.006	0.02	0.01	0.04
205	Fludioxonil	0.003	0.01	0.01	0.04

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
206	Flumetralin	0.003	0.01	0.01	0.04
207	Fluorochloridone	0.003	0.01	0.01	0.04
208	Fluorodifen	0.008	0.02	0.01	0.04
209	Fluoxastrobin	0.01	0.01	0.01	0.04
210	Flusilazole	0.003	0.01	0.01	0.04
211	Flutolanil	0.01	0.01	0.01	0.04
212	Flutriafol	0.01	0.01	0.01	0.04
213	Fluvalinate	0.007	0.02	0.01	0.04
214	Folpet	0.02	0.04	0.01	0.04
215	Fonofos	0.003	0.01	0.01	0.04
216	Forchlorfenuron	0.01	0.01	0.01	0.04
217	Formetanate	0.01	0.01	0.01	0.04
218	Fosthiazate	0.01	0.01	0.01	0.04
219	Fuberidazole	0.01	0.01	0.01	0.04
220	Furathiocarb	0.01	0.01	0.01	0.04
221	Griseofulvin	0.01	0.01	0.01	0.04
222	Haloxypop	0.01	0.01	0.01	0.04
223	Heptachlor	0.003	0.01	0.01	0.04
224	Heptachlor epoxide endo	0.007	0.02	0.01	0.04
225	Heptanophos	0.007	0.02	0.01	0.04
226	Hexachlorobenzene	0.007	0.02	0.01	0.04
227	Hexaconazole	0.003	0.01	0.01	0.04
228	Hexazinone	0.003	0.01	0.01	0.04
229	Imazalil	0.015	0.04	0.01	0.04
230	Imazamethabenz-methyl	0.01	0.01	0.01	0.04
231	Imidacloprid	0.01	0.01	0.01	0.04
232	Indoxacarb	0.01	0.01	0.01	0.04
233	Iodofenphos	0.003	0.01	0.01	0.04
234	Iproconazole	0.01	0.01	0.01	0.04
235	Iprobenfos	0.003	0.01	0.01	0.04
236	Iprodione	0.009	0.03	0.01	0.04
237	Iprovalicarb	0.01	0.01	0.01	0.04
238	Isazophos	0.003	0.01	0.01	0.04
239	Isocarbamide	0.01	0.01	0.01	0.04
240	Isofenphos	0.003	0.01	0.01	0.04
241	Isoprocarb	0.01	0.01	0.01	0.04
242	Isopropalin	0.003	0.01	0.01	0.04
243	Isoprothiolane	0.004	0.01	0.01	0.04
244	Isoxadifen-ethyl	0.01	0.01	0.01	0.04
245	Isoxathion	0.01	0.01	0.01	0.04
246	Kresoxim-methyl	0.003	0.01	0.01	0.04
247	Leptophos	0.003	0.01	0.01	0.04

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
248	Lindane (gamma-BHC)	0.003	0.01	0.01	0.04
249	Linuron	0.01	0.04	0.01	0.04
250	Malaoxon	0.003	0.01	0.01	0.04
251	Malathion	0.003	0.01	0.01	0.04
252	Mandipropamid	0.01	0.01	0.01	0.04
253	Mebendazole	0.01	0.01	0.01	0.04
254	Mecarbam	0.003	0.01	0.01	0.04
255	Mepanipyrim	0.01	0.01	0.01	0.04
256	Mephosfolan	0.01	0.01	0.01	0.04
257	Metalaxyl	0.003	0.01	0.01	0.04
258	Metazachlor	0.003	0.01	0.01	0.04
259	Methabenzthiazuron	0.01	0.01	0.01	0.04
260	Methamidophos	0.005	0.02	0.01	0.04
261	Methidathion	0.01	0.015	0.01	0.04
262	Methiocarb	0.01	0.01	0.01	0.04
263	Methiocarb sulfone	0.01	0.01	0.01	0.04
264	Methiocarb Sulfoxide	0.01	0.01	0.01	0.04
265	Methomyl	0.01	0.01	0.01	0.04
266	Methoprotryne	0.004	0.01	0.01	0.04
267	Methoxychlor	0.004	0.01	0.01	0.04
268	Methoxyfenozide	0.01	0.01	0.01	0.04
269	Methyl - trithion	0.005	0.015	0.01	0.04
270	Methyl Pentachlorophenyl sulphide	0.005	0.015	0.01	0.04
271	Metobromuron	0.004	0.02	0.01	0.04
272	Metolachlor	0.003	0.01	0.01	0.04
273	Metolcarb	0.01	0.01	0.01	0.04
274	Metosulam	0.01	0.01	0.01	0.04
275	Metoxuron	0.01	0.01	0.01	0.04
276	Metribuzin	0.006	0.02	0.01	0.04
277	Mevinphos-cis	0.003	0.01	0.01	0.04
278	Mevinphos-trans	0.006	0.02	0.01	0.04
279	Mexacarbate	0.01	0.01	0.01	0.04
280	Mirex	0.003	0.01	0.01	0.04
281	Molinate	0.01	0.01	0.01	0.04
282	Monocrotophos	0.01	0.02	0.01	0.04
283	Monolinuron	0.01	0.04	0.01	0.04
284	Myclobutanil	0.003	0.01	0.01	0.04
285	Naled	0.004	0.01	0.01	0.04
286	Napropamide	0.01	0.01	0.01	0.04
287	Naptalam	0.01	0.01	0.01	0.04
288	Neburon	0.01	0.01	0.01	0.04
289	Nitralin	0.003	0.01	0.01	0.04

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
290	Nitrapyrin	0.003	0.01	0.01	0.04
291	Nitrofen	0.003	0.01	0.01	0.04
292	Nitrothal-isopropyl	0.003	0.01	0.01	0.04
293	Norflurazon	0.003	0.01	0.01	0.04
294	Nuarimol	0.003	0.01	0.01	0.04
295	o,p'-DDD (o,p'-TDE)	0.003	0.01	0.01	0.04
296	o,p'-DDT	0.003	0.01	0.01	0.04
297	Octhilnone	0.007	0.02	0.01	0.04
298	Ofurace	0.01	0.01	0.01	0.04
299	Omethoate	0.01	0.04	0.01	0.04
300	O-PHENYLPHENOL	0.003	0.01	0.01	0.04
301	Oxadiazon	0.004	0.015	0.01	0.04
302	Oxadixyl	0.01	0.015	0.01	0.04
303	Oxamyl	0.01	0.01	0.01	0.04
304	Oxamyl oxime	0.01	0.01	0.01	0.04
305	Oxycarboxin	0.02	0.04	0.01	0.04
306	Oxychlordane	0.025	0.04	0.01	0.04
307	Oxyfluorfen	0.003	0.01	0.01	0.04
308	p,p'-DDD (p,p'-TDE)	0.003	0.01	0.01	0.04
309	p,p'-DDE	0.003	0.01	0.01	0.04
310	p,p'-DDT	0.003	0.01	0.01	0.04
311	Paclobutrazol	0.01	0.01	0.01	0.04
312	Paraoxon	0.015	0.04	0.01	0.04
313	Parathion	0.01	0.01	0.01	0.04
314	Parathion-methyl	0.01	0.01	0.01	0.04
315	Pebulate	0.003	0.01	0.01	0.04
316	Penconazole	0.003	0.01	0.01	0.04
317	Pencycuron	0.01	0.01	0.01	0.04
318	Pendimethalin	0.003	0.01	0.01	0.04
319	Penoxsulam	0.01	0.01	0.01	0.04
320	Permethrin	0.003	0.01	0.01	0.04
321	Phenthoate	0.003	0.01	0.01	0.04
322	Phorate	0.003	0.01	0.01	0.04
323	Phorate sulfone	0.003	0.01	0.01	0.04
324	Phosalone	0.003	0.01	0.01	0.04
325	Phosmet	0.003	0.01	0.01	0.04
326	Phosphamidon	0.003	0.01	0.01	0.04
327	Picolinafen	0.01	0.01	0.01	0.04
328	Picoxystrobin	0.01	0.01	0.01	0.04
329	Piperonyl butoxide	0.003	0.01	0.01	0.04
330	Piperophos	0.01	0.01	0.01	0.04
331	Pirimicarb	0.003	0.01	0.01	0.04

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
332	Pirimiphos-ethyl	0.003	0.01	0.01	0.04
333	Pirimiphos-methyl	0.003	0.01	0.01	0.04
334	Pretilachlor	0.01	0.01	0.01	0.04
335	Primisulfuron-methyl	0.01	0.01	0.01	0.04
336	Prochloraz	0.005	0.015	0.01	0.04
337	Procymidone	0.003	0.01	0.01	0.04
338	Prodiamine	0.01	0.01	0.01	0.04
339	Profenofos	0.003	0.01	0.01	0.04
340	Profluralin	0.003	0.01	0.01	0.04
341	Prometon	0.003	0.01	0.01	0.04
342	Prometryne	0.003	0.01	0.01	0.04
343	Pronamide	0.003	0.01	0.01	0.04
344	Propachlor	0.003	0.02	0.01	0.04
345	Propamocarb	0.01	0.01	0.01	0.04
346	Propanil	0.003	0.01	0.01	0.04
347	Propargite	0.008	0.02	0.01	0.04
348	Propazine	0.003	0.01	0.01	0.04
349	Propetamphos	0.007	0.03	0.01	0.04
350	Propham	0.006	0.02	0.01	0.04
351	Propiconazole	0.007	0.02	0.01	0.04
352	Propoxur	0.01	0.01	0.01	0.04
353	Prothiophos	0.003	0.01	0.01	0.04
354	Pymetrozine	0.01	0.01	0.01	0.04
355	Pyracarbolid	0.003	0.01	0.01	0.04
356	Pyraclostrobin	0.01	0.01	0.01	0.04
357	Pyraflufen-ethyl	0.01	0.01	0.01	0.04
358	Pyrazophos	0.003	0.01	0.01	0.04
359	Pyridaben	0.003	0.01	0.01	0.04
360	Pyridalyl	0.01	0.01	0.01	0.04
361	Pyridaphenthion	0.01	0.01	0.01	0.04
362	Pyridate	0.01	0.01	0.01	0.04
363	Pyrifenoxy	0.01	0.01	0.01	0.04
364	Pyrimethanil	0.01	0.01	0.01	0.04
365	Pyriproxyfen	0.01	0.01	0.01	0.04
366	Pyroquilon	0.01	0.01	0.01	0.04
367	Pyroxsulam	0.01	0.01	0.01	0.04
368	Quinalphos	0.003	0.01	0.01	0.04
369	Quinomethionate	0.02	0.06	0.01	0.04
370	Quinoxifen	0.01	0.01	0.01	0.04
371	Quintozene	0.003	0.01	0.01	0.04
372	Quizalofop	0.01	0.01	0.01	0.04
373	Quizalofop-ethyl	0.01	0.01	0.01	0.04



No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
374	Schradan	0.01	0.015	0.01	0.04
375	Secbumeton	0.003	0.01	0.01	0.04
376	Simazine	0.003	0.01	0.01	0.04
377	Simeconazole	0.01	0.01	0.01	0.04
378	Simetryn	0.003	0.01	0.01	0.04
379	Spinosyn A	0.01	0.01	0.01	0.04
380	Spinosyn D	0.01	0.01	0.01	0.04
381	Spirodiclofen	0.01	0.01	0.01	0.04
382	Spiromesifen	0.01	0.01	0.01	0.04
383	SPIROTETRAMAT	0.01	0.01	0.01	0.04
384	Spiroxamine	0.01	0.01	0.01	0.04
385	Sulfallate	0.003	0.01	0.01	0.04
386	Sulfentrazone	0.01	0.01	0.01	0.04
387	Sulfotep	0.003	0.01	0.01	0.04
388	Sulprophos	0.003	0.01	0.01	0.04
389	TCMTB	0.006	0.02	0.01	0.04
390	Tebuconazole	0.003	0.01	0.01	0.04
391	Tebufoenozide	0.01	0.01	0.01	0.04
392	Tebufoenpyrad	0.01	0.01	0.01	0.04
393	Tebupirimfos	0.01	0.01	0.01	0.04
394	Tecnazene	0.003	0.01	0.01	0.04
395	Tepraloxymdim	0.01	0.01	0.01	0.04
396	Terbacil	0.003	0.01	0.01	0.04
397	Terbufos	0.008	0.02	0.01	0.04
398	Terbumeton	0.003	0.01	0.01	0.04
399	Terbutryne	0.003	0.01	0.01	0.04
400	Terbutylazine	0.003	0.01	0.01	0.04
401	Tetrachlorvinphos	0.003	0.01	0.01	0.04
402	Tetraconazole	0.01	0.01	0.01	0.04
403	Tetradifon	0.008	0.02	0.01	0.04
404	Tetraiodoethylene	0.027	0.1	0.01	0.04
405	Tetramethrin	0.003	0.01	0.01	0.04
406	Tetrasul	0.006	0.02	0.01	0.04
407	Thiabendazole	0.01	0.01	0.01	0.04
408	Thiacloprid	0.01	0.01	0.01	0.04
409	Thiamethoxam	0.01	0.01	0.01	0.04
410	Thiazopyr	0.01	0.01	0.01	0.04
411	Thiobencarb	0.003	0.01	0.01	0.04
412	Thiodicarb	0.01	0.01	0.01	0.04
413	Thiofanox	0.01	0.01	0.01	0.04
414	Thiofanox sulfone	0.01	0.01	0.01	0.04
415	Thiofanox sulfoxide	0.01	0.01	0.01	0.04

No	Analyte	Fresh		Processed / Honey	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
416	Thiophanate methyl	0.01	0.01	0.01	0.04
417	Tolclofos-methyl	0.003	0.01	0.01	0.04
418	Tolfenpyrad	0.01	0.01	0.01	0.04
419	Tolyfluanid	0.01	0.01	0.01	0.04
420	Tralkoxydim	0.01	0.01	0.01	0.04
421	Triadimefon	0.003	0.01	0.01	0.04
422	Triadimenol	0.005	0.015	0.01	0.04
423	Tri-allate	0.003	0.01	0.01	0.04
424	Triazophos	0.005	0.015	0.01	0.04
425	Tribufos	0.003	0.01	0.01	0.04
426	Trichlorfon	0.01	0.01	0.01	0.04
427	Tricyclazole	0.01	0.02	0.01	0.04
428	Trietazine	0.01	0.01	0.01	0.04
429	Trifloxystrobin	0.003	0.01	0.01	0.04
430	Trifloxysulfuron	0.01	0.01	0.01	0.04
431	Triflumizole	0.01	0.03	0.01	0.04
432	Trifluralin	0.003	0.01	0.01	0.04
433	Triforine	0.01	0.01	0.01	0.04
434	Trimethacarb	0.01	0.01	0.01	0.04
435	Vernolate	0.006	0.02	0.01	0.04
436	Vinclozolin	0.003	0.01	0.01	0.04
437	Zinophos	0.01	0.01	0.01	0.04
438	Zoxamide	0.01	0.01	0.01	0.04

**Appendix 2 to Annex A**

**Table 3**

**Pesticide Residues and Required LODs for PESTICIDES-DEM**

Compound #	Analyte	Meat		Dairy		Egg	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
1	Alachlor	0.0002	0.0005	0.0003	0.001	0.003	0.01
2	Alachlor metabolite (2-chloro-2',6'-diethylanilide)	0.0002	0.0005	0.008	0.03	0.008	0.03
3	Aldrin	0.025	0.08	0.003	0.01	0.003	0.01
4	Benoxacor	0.005	0.02	0.003	0.01	0.003	0.01
5	BHC Alpha	0.003	0.01	0.003	0.01	0.003	0.01
6	BHC beta	0.003	0.01	0.003	0.01	0.003	0.01
7	Bifenthrin	0.002	0.005	0.0006	0.002	0.0003	0.001
8	Boscalid	0.003	0.01	0.003	0.01	0.0006	0.002
9	Buprofezin	0.025	0.08	0.003	0.01	0.003	0.01
10	Carfentrazone ethyl	0.005	0.02	0.002	0.005	0.003	0.01
11	Chlordane cis	0.005	0.02	0.003	0.01	0.003	0.01
12	Chlordane trans	0.005	0.02	0.003	0.01	0.003	0.01
13	Chloroneb	0.01	0.04	0.003	0.01	0.003	0.01
14	Chlorpropham	0.03	0.10	0.003	0.01	0.003	0.01
15	Chlorpyrifos	0.0075	0.03	0.003	0.01	0.003	0.01
16	Chlorpyrifos methyl	0.005	0.02	0.003	0.01	0.003	0.01
17	Cyfluthrin (I,II,III,IV)	0.005	0.02	0.01	0.05	0.003	0.01
18	L-Cyhalothrin	0.002	0.005	0.015	0.05	0.0003	0.001
19	Cypermethrin	0.003	0.01	0.002	0.005	0.001	0.003
20	DDD-op (TDE-op)	0.03	0.10	0.008	0.02	0.003	0.01
21	DDD-pp (TDE-pp)	0.03	0.10	0.003	0.01	0.003	0.01
22	DDE-op	0.03	0.10	0.003	0.01	0.003	0.01
23	DDE-pp	0.03	0.10	0.003	0.01	0.003	0.01
24	DDT-op	0.03	0.10	0.008	0.02	0.003	0.01
25	DDT-pp	0.03	0.10	0.003	0.01	0.003	0.01
26	Deltamethrin	0.001	0.004	0.002	0.005	0.0006	0.002
27	Dichlorvos (DDVP)	0.001	0.004	0.0006	0.002	0.003	0.01
28	Dicofol	0.003	0.01	0.01	0.05	0.003	0.01
29	Dieldrin	0.025	0.08	0.003	0.01	0.003	0.01
30	Difenoconazole	0.002	0.005	0.0003	0.001	0.002	0.005
31	Endosulfan alpha	0.003	0.01	0.003	0.01	0.003	0.01
32	Endosulfan beta	0.003	0.01	0.003	0.01	0.003	0.01
33	Endosulfan sulfate	0.003	0.01	0.003	0.01	0.003	0.01
34	Endrin	0.003	0.01	0.003	0.01	0.003	0.01
35	Fenchlorophos (Ronnel)	0.003	0.01	0.003	0.01	0.003	0.01
36	Fenoxaprop-ethyl	0.01	0.04	0.0006	0.002	0.003	0.01
37	Fenpropathrin	0.025	0.08	0.003	0.01	0.003	0.01
38	Fenvalerate	0.01	0.04	0.003	0.01	0.003	0.01
39	Fipronil	0.005	0.02	0.003	0.01	0.003	0.01

Compound #	Analyte	Meat		Dairy		Egg	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
40	Fipronil desulfinyl	0.01	0.04	0.003	0.01	0.003	0.01
41	Fipronil sulfide	0.01	0.04	0.003	0.01	0.003	0.01
42	Fluridone	0.025	0.08	0.003	0.01	0.003	0.01
43	Fluvalinate	0.01	0.04	0.003	0.01	0.003	0.01
44	Heptachlor	0.006	0.02	0.003	0.01	0.003	0.01
45	Heptachlor epoxide endo	0.006	0.02	0.003	0.01	0.003	0.01
46	Hexachlorobenzene	0.003	0.01	0.003	0.01	0.003	0.01
47	Hexazinone	0.003	0.01	0.003	0.01	0.003	0.01
48	Lindane (gamma-BHC)	0.003	0.01	0.003	0.01	0.003	0.01
49	Malathion	0.04	0.15	0.003	0.01	0.003	0.01
50	Methoxychlor	0.003	0.01	0.009	0.05	0.003	0.01
51	Metolachlor	0.01	0.04	0.003	0.01	0.003	0.01
52	Metribuzin	0.05	0.15	0.003	0.01	0.003	0.01
53	Mirex	0.01	0.04	0.009	0.05	0.003	0.01
54	Nonachlor trans	0.005	0.02	0.003	0.01	0.003	0.01
55	Oxychlordane	0.01	0.04	0.003	0.01	0.003	0.01
56	Permethrin (cis & trans)	0.003	0.01	0.009	0.05	0.003	0.01
57	Piperonyl butoxide	0.03	0.01	0.003	0.01	0.003	0.01
58	Pronamide	0.005	0.02	0.003	0.01	0.003	0.01
59	Propachlor	0.01	0.04	0.003	0.01	0.003	0.01
60	Propanil	0.025	0.08	0.003	0.01	0.003	0.01
61	Propetamphos	0.01	0.04	0.003	0.01	0.003	0.01
62	Propiconazole	0.003	0.01	0.001	0.003	0.002	0.005
63	Pyriproxyfen	0.02	0.06	0.003	0.01	0.003	0.01
64	Quizalofop-ethyl	0.001	0.003	0.003	0.01	0.008	0.02
65	Resmethrin (cis & trans)	0.05	0.15	0.003	0.01	0.003	0.01
66	Tefluthrin	0.005	0.02	0.0003	0.001	0.003	0.01
67	3-Hydroxycarbofuran	0.02	0.06	0.003	0.01	0.003	0.01
68	Acephate	0.01	0.04	0.002	0.005	0.003	0.01
69	Acetamiprid	0.01	0.04	0.003	0.01	0.0003	0.001
70	Atrazine	0.002	0.005	0.001	0.004	0.001	0.004
71	Azoxystrobin	0.001	0.003	0.0003	0.001	0.0003	0.001
72	Carbaryl	0.01	0.03	0.003	0.01	0.003	0.01
73	Carbofuran	0.01	0.04	0.003	0.01	0.003	0.01
74	Carboxin	0.01	0.04	0.003	0.01	0.003	0.01
75	Clofentezine	0.003	0.01	0.0003	0.001	0.003	0.01
76	Clothianidin	0.002	0.005	0.0003	0.001	0.003	0.01
77	Coumaphos O	0.01	0.04	0.003	0.01	0.003	0.01
78	Coumaphos S	0.01	0.04	0.003	0.01	0.003	0.01
79	De-Ethyl Atrazine	0.01	0.04	0.003	0.01	0.003	0.01
80	Diflubenzuron	0.025	0.08	0.003	0.01	0.003	0.01
81	Diuron	0.03	0.1	0.003	0.01	0.003	0.01
82	Ethofumesate	0.01	0.03	0.003	0.01	0.003	0.01

Compound #	Analyte	Meat		Dairy		Egg	
		MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)	MDL (mg/kg)	LOQ (mg/kg)
83	Fluroxypyr-1-Methylheptyl-Ester	0.01	0.03	0.003	0.01	0.003	0.01
84	Imazalil	0.01	0.03	0.003	0.01	0.003	0.01
85	Imidacloprid	0.001	0.003	0.001	0.003	0.0006	0.002
86	Indoxacarb	0.01	0.03	0.003	0.01	0.003	0.01
87	Linuron	0.025	0.08	0.003	0.01	0.003	0.01
88	Metalaxyl	0.003	0.01	0.0003	0.001	0.002	0.005
89	Methomyl	0.03	0.10	0.003	0.01	0.003	0.01
90	Methoxyfenozide	0.003	0.01	0.0003	0.001	0.0006	0.002
91	Myclobutanil	0.003	0.01	0.009	0.05	0.008	0.02
92	Norflurazon	0.01	0.03	0.003	0.01	0.003	0.01
93	Profenofos	0.01	0.03	0.003	0.01	0.003	0.01
94	Pyraclostrobin	0.003	0.01	0.003	0.01	0.003	0.01
95	Pyridaben	0.003	0.01	0.0003	0.001	0.003	0.01
96	Simazine	0.01	0.03	0.003	0.01	0.003	0.01
97	Tebufenozide	0.01	0.03	0.003	0.01	0.003	0.01
98	Thiabendazole	0.015	0.05	0.003	0.01	0.003	0.01
99	Thiamethoxam	0.002	0.005	0.0003	0.001	0.0006	0.002
100	Thiobencarb	0.05	0.15	0.003	0.01	0.003	0.01
101	Trifloxystrobin	0.003	0.01	0.0006	0.002	0.001	0.004
Optional Analytes							
102	Azamethiphos	0.003	0.01	0.003	0.01	0.003	0.01
103	Azinphos-methyl	0.003	0.01	0.003	0.01	0.003	0.01
104	Diazinon	0.003	0.01	0.003	0.01	0.003	0.01
105	Fenitrothion	0.003	0.01	0.003	0.01	0.003	0.01
106	Methyl parathion	0.003	0.01	0.003	0.01	0.003	0.01
107	Parathion	0.003	0.01	0.003	0.01	0.003	0.01
108	Phosmet	0.003	0.01	0.003	0.01	0.003	0.01
109	Terbufos	0.003	0.01	0.003	0.01	0.003	0.01
110	Tetrachlorvinphos	0.001	0.003	0.001	0.003	0.006	0.02

SAMPLE_NO	Commodity	Program	Analyte	Amount	DateAnalyze	DateRept	% Recovery d13 Surrogate	MDL	Tissue
Sample001	FRESH	BENZOPYRENE (PAH)	Acenaphthene	0	2019-05-12	2019-05-31		0.16	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Acenaphthylene	0	2019-05-12	2019-05-31	58	0.14	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Anthracene	0	2019-05-12	2019-05-31	74	0.13	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Benzo(a)anthracene	0	2019-05-12	2019-05-31	73	0.054	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Benzo(a)pyrene	0	2019-05-12	2019-05-31	57	0.088	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Benzo(b)fluoranthene	0	2019-05-12	2019-05-31	78	0.061	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Benzo(g,h,i)perylene	0	2019-05-12	2019-05-31	67	0.049	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Benzo(k)fluoranthene	0	2019-05-12	2019-05-31	76	0.053	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Chrysene	0	2019-05-12	2019-05-31	75	0.053	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Dibenzo(a,h)anthracene	0	2019-05-12	2019-05-31	57	0.044	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Fluoranthene	0	2019-05-12	2019-05-31	73	0.11	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Fluorene	0	2019-05-12	2019-05-31		0.11	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Indeno(1,2,3-cd)pyrene	0	2019-05-12	2019-05-31	65	0.046	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Naphthalene	0	2019-05-12	2019-05-31	66	0.61	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Phenanthrene	0.14	2019-05-12	2019-05-31	71	0.13	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	Pyrene	0	2019-05-12	2019-05-31		0.1	N/A
Sample001	FRESH	BENZOPYRENE (PAH)	PAH Total	0.144	2019-05-12	2019-05-31			N/A

## Appendix 4a to Annex A

### Toxic Equivalency Factors and sensitivity for dioxins and dioxin like compounds

<b>CHLORINATED DIBENZODIOXINS</b>	<b>Detection Limit Required (g/kg)</b>	<b>TEF</b>
2,3,7,8-TCDD	0.1	1.0
1,2,3,7,8-PeCDD	0.1	1.0
1,2,3,4,7,8-HxCDD	0.2	0.1
1,2,3,6,7,8-HxCDD	0.2	0.1
1,2,3,7,8,9-HxCDD	0.2	0.1
1,2,3,4,6,7,8-HpCDD	0.2	0.01
1,2,3,4,6,7,8,9-OCDD	0.5	0.0003
<b>CHLORINATED DIBENZOFURANS</b>		
2,3,7,8-TCDF	0.1	0.1
1,2,3,7,8-PeCDF	0.2	0.03
2,3,4,7,8-PeCDF	0.1	0.3
1,2,3,4,7,8-HxCDF	0.1	0.1
1,2,3,6,7,8-HxCDF	0.2	0.1
1,2,3,7,8,9-HxCDF	0.2	0.1
2,3,4,6,7,8-HxCDF	0.2	0.1
1,2,3,4,6,7,8-HpCDF	0.2	0.01
1,2,3,4,7,8,9-HpCDF	0.2	0.01
1,2,3,4,6,7,8,9-OCDF	0.2	0.0003
<b>PCBs with assigned toxic equivalency factors</b>		
3,3',4,4'-TeCB (PCB 77)	0.5	0.0001
3,4, 4',5'-TeCB (PCB 81)	0.5	0.0003
2,3,3',4,4'-PeCB (PCB 105)	0.5	0.00003
2,3,4,4',5'-PeCB (PCB 114)	0.5	0.00003
2,3',4,4',5'-PeCB (PCB 118)	0.5	0.00003
2',3,4,4',5'-PeCB (PCB 123)	0.5	0.00003
3,3',4,4',5'-PeCB (PCB 126)	0.5	0.1
2,3,3',4,4',5'-HxCB (PCB 156)	0.5	0.00003
2,3,3',4,4',5'-HxCB (PCB 157)	0.5	0.00003
2,3',4,4',5,5'-HxCB (PCB 167)	0.5	0.00003
3,3',4,4',5,5'-HxCB (PCB 169)	0.5	0.03
2,3,3',4,4',5,5'-HpCB (PCB 189)	0.5	0.00003

\* Toxic Equivalence Factor are based upon WHO/2005 estimates except for the congener PCB 170 and PCB 180 which are based upon WHO/94 estimated toxicity factors.

The CFIA does not provide a reference method for dioxins, furans and dioxin like PCBs in fatty foods. The acceptable method will be a third party accredited SOP based upon MS detection and confirmation of residues in foods.

Environmental methods will not be an acceptable alternative for a food method.

The sensitivity and scope of the method SOP provided must meet or surpass the criteria detailed in the above table.

## Appendix 4b to Annex A

### Sensitivity and scope required for PCB congeners

Number	Congener	Det. Lmt. (ng/kg)	Number	Congener	Det. Lmt. (ng/kg)
PCB #001	2-Chlorobiphenyl	1.0	PCB #128	2,2',3,3',4,4'-Hexachlorobiphenyl	0.5
PCB #003	4-Chlorobiphenyl	1.0	PCB #129	2,2',3,3',4,5-Hexachlorobiphenyl	0.5
PCB #004	2,2'-Dichlorobiphenyl	1.0	PCB #137	2,2',3,4,4',5-Hexachlorobiphenyl	0.5
PCB #008	2,4'-Dichlorobiphenyl	1.0	PCB #138	2,2',3,4,4',5'-Hexachlorobiphenyl	0.5
PCB #010	2,6-Dichlorobiphenyl	1.0	PCB #141	2,2',3,4,5,5'-Hexachlorobiphenyl	0.5
PCB #015	4,4'-Dichlorobiphenyl	1.0	PCB #149	2,2',3,4,5',6-Hexachlorobiphenyl	0.5
PCB #018	2,2',5-Trichlorobiphenyl	0.5	PCB #151	2,2',3,5,5',6-Hexachlorobiphenyl	0.5
PCB #019	2,2',6-Trichlorobiphenyl	0.5	PCB #153	2,2',4,4',5,5'-Hexachlorobiphenyl	0.5
PCB #022	2,3,4'-Trichlorobiphenyl	0.5	PCB #155	2,2',4,4',6,6'-Hexachlorobiphenyl	0.5
PCB #028	2,4,4'-Trichlorobiphenyl	0.5	PCB #156	2,3,3',4,4',5-Hexachlorobiphenyl	0.5
PCB #033	2',3,4'-Trichlorobiphenyl	0.5	PCB #157	2,3,3',4,4',5'-Hexachlorobiphenyl	0.5
PCB #037	3,4,4'-Trichlorobiphenyl	0.5	PCB #158	2,3,3',4,4',6-Hexachlorobiphenyl	0.5
PCB #040	2,2',3,3'-Tetrachlorobiphenyl	0.5	PCB #167	2,3',4,4',5,5'-Hexachlorobiphenyl	0.5
PCB #041	2,2',3,4-Tetrachlorobiphenyl	0.5	PCB #168	2,3',4,4',5',6-Hexachlorobiphenyl	0.5
PCB #044	2,2',3,5-Tetrachlorobiphenyl	0.5	PCB #169	3,3',4,4',5,5'-Hexachlorobiphenyl	0.5
PCB #049	2,2',4,5'-Tetrachlorobiphenyl	0.5	PCB #170	2,2',3,3',4,4',5-Heptchlorobiphenyl	0.5
PCB #052	2,2',5,5'-Tetrachlorobiphenyl	0.5	PCB #171	2,2',3,3',4,4',6-Heptchlorobiphenyl	0.5
PCB #054	2,2',6,6''-Tetrachlorobiphenyl	0.5	PCB #177	2,2',3,3',4',5,6-Heptchlorobiphenyl	0.5
PCB #060	2,3',4,4'-Tetrachlorobiphenyl	0.5	PCB #178	2,2',3,3',5,5',6-Heptchlorobiphenyl	0.5
PCB #066	2,3',4,4'-Tetrachlorobiphenyl	0.5	PCB #180	2,2',3,4,4',5,5'-Heptchlorobiphenyl	0.5
PCB #070	2,3',4',5-Tetrachlorobiphenyl	0.5	PCB #183	2,2',3,4,4',5',6-Heptchlorobiphenyl	0.5
PCB #074	2,4,4',5-Tetrachlorobiphenyl	0.5	PCB #187	2,2',3,4',5,5',6-Heptchlorobiphenyl	0.5
PCB #077	3,3',4',4'-Tetrachlorobiphenyl	0.5	PCB #188	2,2',3,4',5,6,6'-Heptchlorobiphenyl	0.5
PCB #081	3,4,4',5-Tetrachlorobiphenyl	0.5	PCB #189	2,3,3',4,4',5,5'-Heptchlorobiphenyl	0.5
PCB	2,2',3,4,5'-Pentachlorobi	0.5	PCB	2,3,3',4,4',5',6-Heptchlorobiphen	0.5



#087	phenyl		#191	yl	
PCB #095	2,2',3,5',6-Pentachlorobi phenyl	0.5	PCB #193	2,3,3',4',5,5',6-Heptchlorobiphen yl	0.5
PCB #099	2,2',4,4',5-Pentachlorobi phenyl	0.5	PCB #194	2,2',3,3',4,4',5,5'-Octachlorobiph enyl	0.5
PCB #104	2,2',4,6,6'-Pentachlorobi phenyl	0.5	PCB #199	2,2',3,3',4,5,6,6'-Octachlorobiph enyl	0.5
PCB #105	2,3,3',4,4'-Pentachlorobi phenyl	0.5	PCB #201	2,2',3,3',4,5,5',6'-Octachlorobiph enyl	0.5
PCB #110	2,3,3',4',6'-Pentachlorobi phenyl	0.5	PCB #202	2,2',3,3',5,5',6,6'-Octachlorobiph enyl	0.5
PCB #114	2,3,4,4',5-Pentachlorobip henyl	0.5	PCB #203	2,2',3,4,4',5,5',6-Octachlorobiph enyl	0.5
PCB #118	2,3',4,4',5-Pentachlorobi phenyl	0.5	PCB #205	2,3,3',4,4',5,5',6-Octachlorobiph enyl	0.5
PCB #119	2,3',4,4',6-Pentachlorobi phenyl	0.5	PCB #206	2,2',3,3',4,4',5,5',6-Nonachlorobi phenyl	0.5
PCB #123	2',3,4,4',5-Pentachlorobi phenyl	0.5	PCB #208	2,2',3,3',4,5,5',6,6'-Nonachlorobi phenyl	0.5
PCB #126	3,3',4,4',5-Pentachlorobi phenyl	0.5	PCB #209	Decachlorobiphenyl	0.5

The CFIA does not provide a reference method for trace PCBs in fatty foods. The acceptable method will be a third party accredited SOP based upon MS detection and confirmation of residues in foods.

Environmental methods will not be an acceptable alternative for a food method.

The sensitivity and scope of the method SOP provided must meet or surpass (ie more congeners or reduced sensitivities) the criteria identified in the above table.

**Appendix 4c to Annex A****Dioxins/Polychlorinated biphenyls (PCB) Reporting Template**

CFIA Sample Number	
Product Type	
Sample Description	
Country of Origin	
Lab ID Number	
Date Sampled	
Date Received	
Region	
EST No	
Fat Content (%)	

<b>Analyte</b>	<b>CONC</b>	<b>MDL</b>	<b>TEF</b>	<b>% RECOVERY C13 SURROGATES</b>	<b>LBL</b>	<b>UBL</b>
2378-TCDD	0.000	0.1	1.00000	44	0	0.1
12378-PeCDD	0.000	0.1	1.00000	51	0	0.1
123478-HxCDD	0.000	0.2	0.10000	46	0	0.02
123678-HxCDD	0.000	0.2	0.10000	40	0	0.02
123789-HxCDD	0.000	0.2	0.10000	-	0	0.02
1234678-HpCDD	0.000	0.2	0.01000	69	0	0.002
OCDD	0.813	0.5	0.00030	60	0.000244	0.000244
2378-TCDF	0.000	0.1	0.10000	41	0	0.01
12378-PeCDF	0.000	0.2	0.03000	44	0	0.006
23478-PeCDF	0.132	0.1	0.30000	47	0.03948	0.03948
123478-HxCDF	0.000	0.1	0.10000	47	0	0.01
123678-HxCDF	0.000	0.2	0.10000	41	0	0.02
123789-HxCDF	0.000	0.2	0.10000	59	0	0.02
234678-HxCDF	0.000	0.2	0.10000	56	0	0.02
1234678-HpCDF	0.000	0.2	0.01000	75	0	0.002
1234789-HpCDF	0.000	0.2	0.01000	80	0	0.002
OCDF	0.000	0.2	0.00030	-	0	0.00006
PCB #001 2-chloro	0.0000	10		0		
PCB #003 4-chlorobiphenyl	0.0000	10		0		
PCB #004 2,2'-Dichloro	0.0000	10		6		
PCB #008 2,4'-Dichlorobiphenyl	0.0000	10				
PCB #010	0.0000	10				
PCB #015	0.0000	10		113		
PCB #018 2,2',5-Trichloro	0.0000	10				
PCB #019 2,2',6-Trichloro	0.0000	10		68		
PCB #022 2,3,4'-Trichloro	0.0000	10				
PCB #028 2,4,4'-Trichloro	0.0000	26				
PCB #033 2,3',4'-Trichloro	0.0000	13				
PCB #037	0.0000	13		118		
PCB #040 2,2',3,3'-Tetra	0.0000	3				
PCB #041 2,2',3,4'-Tetra	0.0000	14				
PCB #044 2,2',3,5'-Tetra	0.0000	10				
PCB #049 2,2',4,5'-Tetra	0.0000	10				
PCB #052 2,2',5,5'-Tetra	0.0000	12				
PCB #054 2,2',6,6''-Tetra	0.0000	10		50		

PCB #060 23'44'-Tetrachlor	0.0000	25				
PCB #066 23'44'-Tetrachlor	0.0000	24				
PCB #070 23'4'5-Tetrachlor	0.0000	10				
PCB #074 244'5-Tetrachloro	0.0000	14				
PCB #077 33'4'4'-Tetrachlo	0.0000	0.5	0.0001	87	0	0.00005
PCB #081 344'5-Tetrachloro	0.0000	0.5	0.0003	100	0	0.00015
PCB #087 22'345'-Pentachl	0.0000	13				
PCB #095 22'35'6-Pentachl	0.0000	10				
PCB #099 22'44'5-Pentachl	54.7903	11				
PCB #104 22'466'-Pentachl	0.0000	10		61		
PCB #105 233'44'-Pentachl	6.1490	0.5	0.00003	88	0.000184	0.000184
PCB #110 233'4'6'-Pentach	0.0000	63				
PCB #114 2344'5-Pentachlo	0.0000	0.5	0.00003	85	0	0.000015
PCB #118 23'44'5-Pentachl	29.3237	0.5	0.00003	86	0.00088	0.00088
PCB #119 23'44'6-Pentachl	0.0000	10				
PCB #123 2'344'5-Pentachl	0.0000	0.5	0.00003	88	0	0.000015
PCB #126 33'44'5-Pentachlo	0.0000	0.1	0.1	87	0	0.01
PCB #128 22'33'44'-Hexac	31.0509	3				
PCB #129 22'33'45-Hexach	0.0000	5				
PCB #137 22'344'5-Hexach	15.8307	10				
PCB #138 22'344'5'-Hexac	163.3775	13				
PCB #141 22'3455'-Hexach	0.0000	2				
PCB #149 22'345'6-Hexach	0.0000	10				
PCB #151 22'355'6-Hexach	0.0000	6				
PCB #153 22'44'55'-Hexach	198.3235	11				
PCB #155	0.0000	10		60		
PCB #156 233'44'5-Hexachl	20.3432	0.5	0.00003	90	0.00061	0.00061
PCB #157 233'44'5'-Hexach	0.0000	0.5	0.00003	86	0	0.000015
PCB #158 233'44'6-Hexachl	25.3172	10				
PCB #167 23'44'55'-Hexach	0.0000	10	0.00003	88	0	0.0003
PCB #168 23'44'5'6-Hexach	0.0000	10				
PCB #169 33'44'55'-Hexach	0.0000	0.1	0.03	89	0	0.003
PCB #170 22'33'44'5-Hept	0.0000	1	0		0	0
PCB #171 22'33'44'6-Hept	0.0000	10	0		0	0
PCB #177 22'33'4'56-Hept	12.7972	10				
PCB #178 22'33'55'6-Hept	0.0000	10				
PCB #180 22'344'55'-Hept	83.1442	3				
PCB #183 22'344'5'6-Hept	16.3742	2				
PCB #187 22'34'55'6-Hept	28.6966	2				
PCB #188	0.0000	10		53		
PCB #189 233'44'55'-Hept	0.0000	5	0.00003	92	0	0.00015
PCB #191 233'44'5'6-Hept	0.0000	1				
PCB #193 233'4'55'6-Hept	0.0000	2				
PCB #194 22'33'44'55'-Octa	16.4734	0.3				
PCB #199 22'33'4566'-Octa	16.0555	10				
PCB #201	0.0000	1				
PCB #202	0.0000	10		63		
PCB #203 22'344'55'6-	9.7444	0.4				

Octa						
PCB #205 233'44'55'6-Octa	0.0000	10		79		
PCB #206 22'33'44'55'6-Non	0.0000	0.1		74		
PCB #208	0.0000	10		61		
PCB #209	0.0000	0.1		70		
<b>Total PCB</b>	<b>727.7915</b>					

Lower Bound Dioxins TEQ 0.00024393

Lower Bound Furans TEQ 0.03948

Lower Bound PCB TEQ 0.001674477

Total Lower Bound TEQ 0.041398407

Upper Bound Dioxins TEQ 0.26224393

Upper Bound Furans TEQ 0.12954

Upper Bound PCB TEQ 0.015369477

Total Upper Bound TEQ 0.407153407

MDL = METHOD DETECTION LIMIT

CONC. UNITS = ppt = ng/kg

MDL Units = ppt = ng/kg

## Attachment 4d

## Dioxin and Dioxin-Like Congeners Reporting template

CFIA Sample Number					
ProductType					
Sample Description					
Country of Origin					
Lab ID Number					
Date Sampled					
Date Received					
Region					
Lipid content (%)					
Compound	Conc	MDL	TEF	LBL	UBL
2378-TCDD			1	0	0
12378-PeCDD			1	0	0
123478-HxCDD			0.1	0	0
123678-HxCDD			0.1	0	0
123789-HxCDD			0.1	0	0
1234678-HpCDD			0.01	0	0
OCDD			0.0003	0	0
2378-TCDF			0.1	0	0
12378-PeCDF			0.03	0	0
23478-PeCDF			0.3	0	0
123478-HxCDF			0.1	0	0
123678-HxCDF			0.1	0	0
123789-HxCDF			0.1	0	0
234678-HxCDF			0.1	0	0
1234678-HpCDF			0.01	0	0
1234789-HpCDF			0.01	0	0
OCDF			0.0003	0	0
PCB #028 244'-Trichloro				0	0
PCB #052 22'55'-Tetra				0	0
PCB #077 33'44'-Tetrachlo			0.0001	0	0
PCB #081 344'5-Tetrachloro			0.0003	0	0
PCB #101				0	0
PCB #105 233'44'-Pentachl			0.00003	0	0
PCB #114 2344'5-Pentachlo			0.00003	0	0
PCB #118 23'44'5-Pentachl			0.00003	0	0
PCB #123 2'344'5-Pentachl			0.00003	0	0
PCB #126 33'44'5-Pentachlo			0.1	0	0
PCB #138 22'344'5'-Hexac					
PCB #153 22'44'55'-Hexach				0	0
PCB #156 233'44'5-Hexachl			0.00003	0	0
PCB #157 233'44'5'-Hexach			0.00003	0	0
PCB #167 23'44'55'-Hexach			0.00003	0	0
PCB #169 33'44'55'-Hexach			0.03	0	0
PCB #180 22'344'55'-Hept				0	0
PCB #189 233'44'55'-Hept			0.00003	0	0
Total PCB (ng/kg)					
Lower Bound Dioxins TEQ	0				
Lower Bound Furans TEQ	0				
Lower Bound PCB TEQ	0				
Total Lower Bound TEQ	0				
Upper Bound Dioxins TEQ	0				

Upper Bound Furans TEQ	0
Upper Bound PCB TEQ	0
Total Upper Bound TEQ	0

MDL = METHOD DETECTION LIMIT

CONC. UNITS = ppt = ng/kg

MDL Units = ppt = ng/kg

LBL (TEQ) Units = ng/kg TEQ in fat

LBL (TEQ) Units = ng/kg TEQ in fat