Appendix IV

PROPOSED DRAFT MAXIMUM RESIDUE LIMITS (MRLS) FOR VETERINARY DRUGS

(for adoption at Step 5/8)

AMOXICILLIN (antimicrobial agent)

Microbiological Acceptable Daily Intake (mADI)	0–0.002 mg/kg body weight (bw) based on the effects of amoxicillin on the intestinal microbiota.
Acute Reference Dose (ARfD):	0.005 mg/kg bw based on microbiological effects on the intestinal microbiota
Estimated Chronic Dietary Exposure (GECDE):	0.14 µg/kg bw per day (for the general population), which represents 7% of the upper bound of the mADI
Estimated Acute Dietary Exposure (GEADE):	1.4 µg/kg bw (for the general population), which represents 28% of the microbiological ARfD.
	1.6 µg/kg bw (for children), which represents 31% of the microbiological ARfD.
Residue Definition:	Amoxicillin

Species	Tissue	MRLs (µg/kg)	Step	JECFA
Finfish[a]	Fillet[b]	50	5/8	85
	Muscle	50	5/8	85

[a] The term “finfish” includes all fish species.
[b] Muscle plus skin in natural proportion.

AMPICILLIN (antimicrobial agent)

Microbiological Acceptable Daily Intake (mADI)	0–0.003 mg/kg bw based on a no-observed-adverse-effect level (NOAEL) equivalent to 0.025 mg/kg bw per day for increase in population(s) of ampicillin-resistant bacteria in the gastrointestinal tract in humans, and using a safety factor of 10 (for the variability in the composition of the intestinal microbiota within and between individuals).
Acute Reference Dose (ARfD):	0.012 mg/kg bw based on the microbiological end-point.
Estimated Chronic Dietary Exposure (GECDE):	0.29 µg/kg bw per day (for the general population), which represents 10% of the upper bound of the ADI.
Estimated Acute Dietary Exposure (GEADE):	1.9 µg/kg bw per day (for the general population), which represents 16% of the ARfD.
	1.7 µg/kg bw per day (for children), which represents 14% of the ARfD
Residue Definition:	Ampicillin.

Species	Tissue	MRLs (µg/kg)	Step	JECFA
Finfish[a]	Fillet[b]	50	5/8	85
	Muscle	50	5/8	85

[a] The term “finfish” includes all fish species.
[b] Muscle plus skin in natural proportion.
Note: The 85th JECFA recommended an MRL of 50 µg/kg for ampicillin in finfish muscle and in finfish muscle plus skin in natural proportion, the same as that recommended for amoxicillin, because the modes of action, the physicochemical properties and the toxicological and pharmacokinetic profiles of amoxicillin and ampicillin are very similar.

LUFENURON (insecticide)

Acceptable Daily Intake (ADI)	0–0.02 mg/kg bw based on the NOAEL of 1.93 mg/kg bw per day for tonic-clonic seizures and findings in lungs, gastrointestinal tract, liver and urinary tract in a 2-year dietary study in rats, and using a safety factor of 100 (10 for interspecies variability and 10 for intraspecies variability).
Acute Reference dose (ARfD):	Unnecessary, in view of lufenuron low acute oral toxicity and the absence of developmental toxicity and other toxicological effects likely to be elicited by a single dose.
Estimated chronic dietary exposure (GECDE):	1.1 µg/kg bw per day (for the general population), which represents 5.5% of the upper bound of the ADI. As lufenuron is also used as pesticide the overall dietary exposure was estimated. The assumptions and detailed results will be displayed in the JECFA 85 report. Results below are only for use as veterinary drug.
Residue Definition:	Lufenuron

Species	Tissue	MRLs (µg/kg)	Step	JECFA
Salmon	Fillet[a]	1 350	5/8	85
Trout	Fillet[a]	1 350	5/8	85

[a] Muscle plus skin in natural proportion.

MONEPANTEL (anthelminthic)

Acceptable Daily Intake (ADI)	0–0.02 mg/kg bw based on the NOAEL of 1.93 mg/kg bw per day for tonic-clonic seizures and findings in lungs, gastrointestinal tract, liver and urinary tract in a 2-year dietary study in rats, and using a safety factor of 100 (10 for interspecies variability and 10 for intraspecies variability).
Acute Reference dose (ARfD):	Unnecessary
Estimated chronic dietary exposure (GECDE):	13.7 µg per kg bw per day (for the general population), which represents 68% of the upper bound of the ADI. 5.0 µg per kg bw per day (for children), which represents 22% of the upper bound of the ADI. 4.4 µg per kg bw per day (for infants), which represents 25% of the upper bound of the ADI.
Residue Definition:	Monepantel sulfone, expressed as monepantel

Species	Tissue	MRLs (µg/kg)	Step	JECFA
Cattle	Fat	7 000	5/8	85
	Kidney	1 000	5/8	85
	Liver	2 000	5/8	85
	Muscle	300	5/8	85

PROPOSED DRAFT MAXIMUM RESIDUE LIMITS (MRLS) FOR VETERINARY DRUGS

(for adoption at Step 5)

FLUMETHRIN (insecticide)

Acceptable Daily Intake (ADI)	0–0.004 mg/kg bw based on the NOAEL of 0.37 mg/kg bw per day for skin lesions in parental animals and reduced survival and body-weight gain in pups in a two-generation toxicity study in rats, and using a safety factor of 100 (10 for interspecies variability and 10 for intraspecies variability).
Acute Reference dose (ARfD):	0.005 mg/kg bw based on the NOAEL of 0.5 mg/kg bw for salivation in dams in a developmental toxicity study in rats, and using a safety factor of 100 (10 for interspecies variability and 10 for intraspecies variability).
Estimated chronic dietary exposure (GECDE):	0.008 µg/kg bw per day (for the general population), which represents 0.2% of the upper bound of the ADI. 0.006 µg/kg bw per day (for children), which represents 0.2% of the upper bound of the ADI. Note: As flumethrin is also used as pesticide the overall dietary exposure was estimated. The assumptions and detailed results will be displayed in the JECFA 85 report. Results below are only for use as veterinary drug.
Estimated Acute Dietary Exposure (GEADE):	0.1 µg/kg bw per day (for the general population), which represents 2.2% of the ARfD. 0.1 µg/kg bw per day (for children), which represents 2.2% of the ARfD.
Residue Definition:	Flumethrin (trans-Z1 and trans Z2 diastereomers at a ratio of approximately 60:40).

Species	Tissue	MRLs (µg/kg)	Note	Step	JECFA
	Honey	unnecessary	Residues resulting from the use of this substances as an insecticide in accordance with good practice for veterinary drug are unlikely to pose a hazard to human health.	5	85