INTERNATIONAL SCREENING LIMITS

(PROHIBITED SUBSTANCES WHICH FORM PART OF THERAPEUTIC DRUG PREPARATIONS)

The National Horseracing Authority wishes to advise that the International Federation of Horseracing Authorities (IFHA) has approved International Screening Limits (ISLs) to be applied in the control of therapeutic substances and International Residue Limits (IRLs) to control certain contaminants and environmental substances. This guidance forms part of the International Agreement on Breeding, Racing and Wagering (Article 6). The NHA, as the South African member of the IFHA, has adopted selected ISLs and IRLs. In accordance with this, the NHA is currently applying these in its prohibited substance screening program within the IFHA's definition, shown below:

"The International Screening Limit (ISL) is the urine or plasma concentration adopted for the screening of a specified therapeutic prohibited substance; it is derived from administration studies followed by a risk analysis consisting of two components: a risk assessment (evaluation of the effect of the substance and factors related to its control) and a risk management (decision step for harmonisation). ISLs are harmonised detection limits agreed following input by international consensus and are conveyed by instruction from racing authorities to their laboratories. These limits are simply the detection limits to be used by the laboratories when screening for certain therapeutic substances as instructed by the authorities; they are not international thresholds. When the screening procedure indicates the ISL, in either urine or plasma, has been exceeded, all that is required is qualitative confirmatory analysis (usually by mass spectrometry) to confirm the presence or absence of the prohibited substance. Quantification is not required."

Therapeutic Substance	***International Screening Limit***	
	(ng/ml) in hydrolysed urine	***(ng/ml) in plasma***
Acepromazine	10 [e]	0.02
Betamethasone	0.2	-
Bromhexine	200 [d]	-
Butorphanol	1	0.01
Carprofen	100	100
Clenbuterol	0.1	0.05
Dantrolene	3 [g]	0.1 [j]
Dembrexine	100	5
Detomidine	2 [f]	0.02 [f]

Dexamethasone	0.2	-
Diclofenac	50	-
Dipyrone	1000 [a]	-
Eltenac	50	-
Flunixin	100	-
Furosemide	50	0.1
Ipratropium	0.25	-
Ketoprofen	100	-
Lidocaine	10 [b]	0.05
Meclofenamic Acid	250	5.0
Medetomidine	5 [h]	0.02 [h]
Meloxicam	10	1
Mepivacaine	10 [c]	0.05
Naproxen	250	-
N-Butylscopolammonium	25	0.05
Procaine	-	0.02
Romifidine	1	-
Salbutamol	0.5	-
Triamcinolone Acetonide	0.5	-
Vedaprofen	50	5
Xylazine	10 [i]	0.05

ng/ml = nanograms per millilitre

[a] Controlled by 4-methylaminoantipyrine

[b] Controlled by 3'-hydroxylidocaine

[c] Controlled by 3'-hydroxymepivacaine

[d] Controlled by ambroxol

[e] Controlled by 2-(1-hydroxyethyl)promazine sulphoxide

[f] Controlled by 3'-hydroxydetomidine

[g] Controlled by 5-hydroxydantrolene ***in unhydrolysed Urine***

[h] Controlled by 3'-hydroxymedetomidine

[i] Controlled by 4'-hydroxyxylazine

[j] Controlled by 5-hydroxydantrolene