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MINIMUM REPORTING LEVEL FOR CERTAIN SUBSTANCES KNOWN TO BE POTENTIAL MEAT CONTAMINANTS

1.0 Introduction

WADA wishes to draw the attention of the Laboratories and *Anti-Doping Organizations* in charge of *Results Management* (the *Results Management* Authority, or RMA) to the following observations and instructions on the reporting of certain *Prohibited Substances*, which seeks to address the fact that these substances may be used as growth promoters for livestock in some countries and therefore may be associated with findings resulting from the consumption of contaminated meat.

- **Clenbuterol** is used in China, Guatemala and Mexico, as a growth promoter for cattle, lamb, poultry, and swine;
- **Ractopamine** is used in certain countries as a growth promoter for cattle, swine, and large breed turkeys;
- **Zeranol** is used in many countries as a growth promoter for cattle;
- **Zilpaterol** is used in certain countries as a growth promoter for cattle.

2.0 Reporting Requirements

All of the scientific evidence indicates that it is highly unlikely that consumption of edible tissue from livestock treated with any of these growth promoters would lead to a urinary concentration of the *Prohibited Substance* (or, in the case of zeranol, of the parent compound or its *Metabolite*(s) – please see also TL04 [1]) greater than (>) 5 ng/mL.

Therefore:

- The presence in urine of clenbuterol or ractopamine or zilpaterol, or of zeranol or its *Metabolite*(s), at an estimated concentration greater than (>) 5 ng/mL shall be reported as an *Adverse Analytical Finding* (*AAF*).
- The presence in urine of clenbuterol or ractopamine or zilpaterol, or of zeranol or its *Metabolite*(s), at an estimated concentration at or below (≤) 5 ng/mL shall be reported as an *Atypical Finding* (*ATF*), triggering a mandatory investigation by the RMA to determine whether evidence exists that establishes that meat contamination is more likely than not the explanation for the *ATF*. If such evidence exists, the RMA will take no further action in respect of the *ATF.* If such evidence does not exist, the RMA will progress the finding as an *AAF.*

  [Comment: Depending on the circumstances, the consumption of meat containing clenbuterol or ractopamine or zeranol or zilpaterol may lead to very low concentrations of that substance in the urine of the consumer of the meat. Therefore, the presence in urine of clenbuterol or ractopamine or zilpaterol, or of zeranol or its

Metabolite(s), at a concentration of 5 ng/mL or less shall be reported as an ATF, even though the likelihood of meat contamination as the cause decreases materially the closer the urinary concentration gets to that limit. Upon receipt of the ATF, the RMA shall conduct a mandatory investigation to determine whether or not there is sufficient evidence to support meat contamination as the more likely than not explanation.[1]]

- In each case, when the specific gravity (SG) of the urine *Sample* in question (as measured in the Laboratory) is greater than (>) 1.018, the concentration of the substance estimated in the *Sample* shall be adjusted prior to reporting according to the following equation:

$$\text{(Eq. 2)} \qquad \text{Conc}_{\text{adj}} = \frac{(1.020 - 1)}{(\text{SG}_{\text{Sample\_Max}} - 1)} \cdot \text{Conc}_{\text{measured}}$$

Refer to the effective TD DL for instructions on calculating SG_{Sample_Max}].

3.0 References

[1] *WADA* Technical Letter TL04 – Analysis and Reporting of Zeranol.

[Current versions of WADA Technical Letters may be found at https://www.wada-ama.org/en/what-we-do/science-medical/laboratories]

[1] A Stakeholder Notice will be published, detailing the mandatory investigative process.