### RSPCA Statement on the Use of Rabbits for CSF Vaccine Production

英國防止虐待動物協會(RSPCA)有關使用兔子生產豬瘟疫苗之聲明

## Animal use for vaccine production

生產疫苗使用活體動物

The use of live rabbits for classical swine fever vaccine production is simply not acceptable when cell-based alternative production methods are available.

當以細胞為基礎的替代生產方法已經問世,生產豬瘟(CSF)疫苗仍然使用活體兔子,即屬不該。

#### Use of air embolism to kill conscious rabbits

以空氣注射法(Air Embolism)殺死意識清醒的兔子

This technique is simply not acceptable in non-anaesthetised animals; the level of pain and suffering involved is almost unimaginable. Animals would experience intense pain and convulsions which could be prolonged if the procedure were not performed properly.

此法毫無疑問不該施加於未在麻醉狀態下的動物,其所造成的動物痛苦,幾乎難以想像。動物將經歷無與倫比的疼痛與抽搐,如過程中還有任何不當,動物痛苦的歷程還會加長。

#### Use of CO<sub>2</sub> to kill conscious rabbits

以二氧化碳法(CO2)殺死意識清醒的兔子

The RSPCA has deep concerns about the use of carbon dioxide to kill any species, as exposure to the gas has been widely reported to be painful at higher concentrations and cause very distressing sensations of dyspnoea (air hunger) at lower levels<sup>2</sup>. This technique is no longer allowed to be used for rabbits in the UK as these animals are likely to be resistant to hypercapnia (CO<sub>2</sub>-suffocation) which would prolong the killing process and cause avoidable suffering.

RSPCA 深切關注使用二氧化碳殺死任何物種動物,因大量文獻已經說明,動物如果暴露在高濃度中,會非常緊迫,而在低濃度中,又會導致呼吸困難(dyspnoea, air hunger)。英國已不允許使用此法於兔子,因為牠們相當能耐高碳酸血症(二氧化碳窒息,hypercapnia /CO2-suffocation),這表示整個致死過程會加長,並造成原本可以避免的痛苦。

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http://english.ebvhz.com/products/detail/classical-swine-fever-vaccine-live-tissue-culture-origin

<sup>&</sup>lt;sup>2</sup> For example, see the report of the Newcastle Consensus Meeting on Carbon Dioxide Euthanasia of Laboratory Animals: <a href="https://www.ncgrs.org.uk/sites/default/files/documents/Events/First%20Newcastle%20consensus%20meeting%20report.pdf">https://www.ncgrs.org.uk/sites/default/files/documents/Events/First%20Newcastle%20consensus%20meeting%20report.pdf</a>