**Powered Respiratory Protective Equipment (RPE) for High Containment use**

**INTRODUCTION**

The National Institute of Biological Standards and Control (NIBSC) is a world leader in assuring the quality of biological medicines through product testing, developing standards and reference materials and carrying out applied research. The Biological Services Division within NIBSC are looking to replace the current powered Respiratory Protective Equipment used in High Containment areas, including Containment Level 3 laboratories and SAPO4 facilities. We are currently using Martindale PVC Half suits with Magnum 8500 powered respirators, which conform to Standard Class: EN12941 TH3. Any RPE supplied must comply with HSE regulations set out in the following publications:

HSE RPE at work guide:

<https://www.hse.gov.uk/pubns/priced/hsg53.pdf>

Biological agents - The principles, design and operation of Containment Level 4 facilities:

<https://www.hse.gov.uk/pubns/web09.pdf>

**Functional Specification for new products;**

* Must have powered air flow – positive pressure
* Must have P3 filtration
* Must conform to standard: EN12941 TH3
* Must have Assigned Protection Factor (APF) 40+
* Must be non-disposable but with replaceable components such as, but not limited to, filters, batteries, charger and breathing hose
* Must be waterproof and chemically resistant to disinfectants such as Anistel, Virkon and Microsol 4
* Must have minimum 4 hours battery life
* Must be durable, tear resistant and flexible (due to working with animals)
* Must have guaranteed comfort for a minimum of 4 hours. Please provide validation reports.
* 360◦ viewing hood preferable (pictured below)
* Half suits are preferable (pictured below). If not available, please provide details for suitable workwear which is waterproof and chemically resistant to cover upper body or full body.
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* Please state the estimated lead time for supply and also for replacement spares.
* Equipment should be covered by a warranty. Please provide details of what is included and duration.