# CleanSpace®

R E S P I R A T O R S

### **PROTECTING** WASTEWATER TREATMENT WORKERS

The hazards associated with working in sewage treatment plants are well known, with sewage treatment workers exposed to airborne biological and chemical agents.

Only recently, have studies around the world started to reveal the higher mortality rates, incidences of certain cancers, various infections and cardiopulmonary diseases of this specialised workforce.

#### HEALTH PROBLEMS AMONGST WASTEWATER TREATMENT WORKERS

Several studies in the US, Denmark, Sweden and Kuwait, returned similar findings when studying the health and mortality rates of wastewater workers against control groups.

#### FINDINGS INCLUDE:

- Gastrointestinal tract symptoms such as abdominal pain and stomach cancer
- Respiratory symptoms such as chronic bronchitis, toxic pneumonitis, asthma and wheezing
- Central nervous system symptoms such as headache, unusual tiredness, and difficulty concentrating
- Cancer in the larynx, stomach, liver, prostate and blood (Leukaemia)

#### STUDIES SHOW SIGNIFICANTLY INCREASED RISK OF AIRWAY SYMPTOMS, CHRONIC BRONCHITIS AND TOXIC PNEUMONITIS.

Respirators should be used anywhere that biosolids are aerosolized, such as in the aeration and digestion process.

#### **RISK AREAS**

Inhalation is the most common route for chemicals or pathogens to enter the body, usually via:

- Air-stripping from wastewater
- Bubble aeration
- Working near weirs, outfall and aerated tanks
- Dewatering processes
- Drying, compacting and incineration
- Exposure to chemicals while removing debris from treatment plant equipment

#### BIOLOGICAL AGENTS AND CHEMICAL AGENTS CAN BECOME AIRBOURNE

Biological agents include pathogens such as bacteria, protozoa, viruses, helminths and fungi. Metals will either accumulate in sludge or pass through into the receiving water. Other possible hazards include asbestos and radioactive materials from medical facilities.



## CleanSpace®

RESPIRATORS

#### CLEANSPACE RESPIRATORS FOR PROTECTION AGAINST BIOLOGICAL AND CHEMICAL AGENTS

#### LIGHTWEIGHT (500g)

 Portable and easily transported in tool boxes and vehicles

#### COMPACT

 No belts, cables or hoses for easy movement in critical situations

#### COMFORT

Cool air and no fogging

#### **HIGH-LEVEL PROTECTION**

 Powered air purifying respirator P3/TM3. Half and full face mask options. Be prepared for any level of silica dust

### A REVOLUTION IN RESPIRATORY PROTECTION

#### WATER TOLERANT (IP RATING 66)

 Suitable for use with water applications (CleanSpace Ultra)

#### EASY SET UP AND USE

 Donned in under 15 seconds; Simple assembly; One-button start

#### **SMART BATTERY**

• Long run time. Up to 8 hours of continuous use. Rapid re-charge time in under 2 hrs

#### **AIR-SENSIT® TECHNOLOGY**

Breath-responsive airflow; Adjusts 100 times per second

#### **CLEAR COMMUNICATION**

Transparent silicone mask; Quiet motor

#### ROBUST, REUSABLE SYSTEM

Shockproof with 2 yr warranty

CleanSpace<sup>®</sup> is the world's lightest powered respirator: delivering high protection from harmful airborne substances like silica.

- CE Mark & AS/NZS1716 Approved
- EN166 & ANSI Z87.1+ Impact Rated Protection
- Training tools and product specialist support available





#### **RESPIRATOR & MASKS**

PAF-0070	CleanSpace Ultra Power System (exc mask)	
PAF-1010	CleanSpace™ Half Mask MEDIUM	
PAF-0027	CleanSpace™ Half Mask LARGE	
PAF-0033	CleanSpace™ Half Mask SMALL	
PAF-1014	CleanSpace™ Full Face Mask MEDIUM / LARGE	
PAF-1106	CleanSpace™ Full Face Mask SMALL	
FILTERS & ADAPTOR		
PAF-0035	CleanSpace Particulate Filter P3 Standard (nk 3)	

PAF-0035	CleanSpace Particulate Filter P3 Standard (pk 3)
PAF-0038	CleanSpace Filter Adaptor for large case filters
PAF-0037	CleanSpace™ Hi Capacity (HI CAP)
	Particulate Filter P3 (single)

#### ACCESSORIES

PAF-0057	CleanSpace™ Particulate Pre-Filter (Large Case Filters) (pk 20)
PAF-0058	CleanSpace <sup>™</sup> Particulate Pre-Filter and Coverall (Standard Filter) (pk 20)
PAF-0049	CleanSpace™ Coverall (Standard and Large Case Filters) (pk 25)
PAF-0074	CleanSpace Cleaning & Storage Plug
PAF-1017	CleanSpace™ Full Face Mask Spectacle Kit
PAF-1018	CleanSpace™ Full Face Mask Tear off Visor Anti-Scratch Protectors (pk 10)
PAF-1024	CleanSpace Car Charger
PAF-1030	CleanSpace ELITE Head Harness for Half Mask (fabric)
PAF-0098	CleanSpace Docking Station (for 8 units)

Trial CleanSpace today, contact Customer Support to arrange a demonstration. **WWW.CLEANSPACETECHNOLOGY.COM** | sales@cleanspacetechnology.com

