

DetentionSafe

*Advanced Cleaning + Infection Control to
Secure Indoor Environments*



WCP Facility Solutions



Mission

Utilize physics and chemistry to greatly improve indoor air quality and provide secure surface hygiene to reduce the likelihood of infections and repeated exposure to hazardous chemicals and toxins throughout incarcerated populations.

About WCP Facility Solutions

Business centered around Facility Health and Wellness

- Healthcare (HAI / CAI Eradication)
- Education (Student + Staff Safety / Savings Benefits per Facility)
- Industrial Staff (Employee Absenteeism / Environmental Safety)
- Agriculture (EPA Restrictions / Eliminate Mold + Bacteria)
- Entertainment (Music Venues / Stadiums, Arenas, Theaters, Clubs)
- Recreation (Cruise line Safety / Hospitality Industry, Gyms)
- Retail (Odor Reduction / Antimicrobial Laundry Additive)
- Liability Risk Mitigation (Lawsuit Avoidance / Fine Reduction)
- Reduction of large scale infectious outbreaks (Correctional Facilities)

Product Agnostic

- Find best in class products, design and implement a coordinated suite of healthy building technologies and integrate them into cost effective solutions and savings



DetentionSafe Agenda

PHASE 1

Identify the Problems

PHASE 2

Increase Indoor Air Quality (IAQ) and implement cleaning and infection control solutions

PHASE 3

Develop monitoring tools for staff to ensure system compliance

PHASE 4

Construct Cost/Benefit Analysis

Immediately: “*Upgrade current public health practices.*”

WCP Facility Solutions recognizes there are no “*silver bullets*” in the world of infection control. We know the problem is complicated and requires multiple solutions. WCPFS specializes in implementing safer cleaning and infection control strategies to “*control*” the spread of microbes.

Let us attack this problem for you by

- Using a systematic layered approach focused on proven methods of transmission and transference
- Instituting state of the art technologies to alleviate costs
- Implementing disruptive products to provide superior outcomes
- Monitoring outcomes from utilized technologies
- Collecting relevant data and providing systematic analysis for “best practice scenarios”

Methods of Transmission



Surfaces

Touch Contamination



Textiles

Spore Capture / Bacteria



Hygiene

Hand Washing



Exposure

Outside Sources



Air

Vectors / Air System Handling

The Problem: Infectious Outbreaks among Detained Individuals

- **Costs:** California estimates it costs \$33,453 per year for individual inmate healthcare¹
- **Costs:** Department of Corrections and Community Supervision Overall health care costs for the state prison system average about \$350 million annually since 2012-13, peaking just under \$400 million in 2016-17. Costs have trended significantly lower since, likely due in part to declines in the state prison population. Over same period, health care costs for each incarcerated individual have averaged about \$7,380 per year (29% higher in 2020-21 than eight years earlier)²
- **Costs:** New York City Jails report spending \$347 million on healthcare for roughly 13,000 individuals or approximately \$147/day³
- **Litigation:** Correctional facilities across the country are facing *civil rights lawsuits* for their alleged negligent management of the health crisis and resulting harm suffered by inmates. The actions—or more aptly, inaction—of many prison authorities will likely continue to bring a large volume of class action cases concerning inmate treatment during the COVID-19 pandemic⁴

Implementing Proactive Measures Against Transmission Vectors Can Reduce Associated Risk

¹ California State Legislature, Legislative Analyst's Office, California Legislature's Nonpartisan Fiscal and Policy Advisor "How Much does it cost to incarcerate an inmate?" 2021-2022 updated 1/2022

² Aging prison population means higher costs for New York (<https://www.northcountrypublicradioprison-population-means-higher-costs-for-new-york>) 11/17/2022

³ New York City Independent Budget Office- Melissa Elias, Amanda Gallea - "Why has the cost of correctional health services increased in the last decade" 2022

⁴ Expert Institute - "Dozens of Prisons Now Face COVID-19-Related Civil Rights Lawsuits" - Carolyn Casey J.D. 9/9/2021

BIOPROTECT™

6 Hour Hand Sanitizer

- Regular hand sanitizers work only when the product is wet
- BIOPROTECT™ unique alcohol-free foaming hand sanitizer delivers 6-hour residual protection on skin surfaces
- Benzalkonium Chloride/Aloe formulation, non-sticky, non-greasy, no odor
- Once applied the material bonds to the skin surface and provides continual protection even after hand washing/hygiene procedures
- Application on hands reduces inoculation of touch points throughout the environment, reduces cross contamination
- Alcohol-free, no fire hazard for storage, or false positive drug testing results for personnel
- Reduces staff absenteeism and presenteeism, aids in keeping inmates well



Surface Antimicrobials

Chlorine Dioxide (ClO₂) Solution Surface Deodorizer

Chlorine Dioxide (ClO₂) - Off Gassing Deodorizing Tablets

Hypochlorous Acid (HOCL) - Disinfectant

- **Chlorine Dioxide (ClO₂)** is an all-purpose, surface cleaner which is an excellent solution to eliminate smoke and odors
- **Off Gassing Tablets** require no labor – simply place the tablet in the appropriate container of water
- **Chlorine Dioxide (ClO₂)** is the CDC's recommended product for disinfection of PPE vs Ebola.
- **Hypochlorous Acid (HOCL)** is made naturally by white blood cells in all mammals for healing and protection
- **Hypochlorous Acid (HOCL)** is a powerful oxidant that is effective against bacteria, fungi, and viruses

Label Claims Bacteria and Fungi

- Salmonella enterica
- Escherichia coli
- MRSA
- Salmonella enterica
- Acinetobacter baumannii
- Staphylococcus aureus
- Legionella pneumophila
- Aspergillus niger
- Enterobacter aerogenes
- Listeria monocytogenes

Label Claims Viruses

- HIV-1
- Norovirus (feline calicivirus surrogate)
- Respiratory syncytial virus
- Rotavirus
- H1N1 flu virus
- H5N1 flu virus
- Hepatitis B
- Hepatitis C

SHIELD™

Disruptive Biostatic Agent 90 Day Surface Protectant

- Effective on surfaces for up to 3 months
- Eliminates bacteria, mold, fungus, algae, and other odor causing microbes
- Organic, non-toxic, non-leaching, water-based molecule
- Persistently kills organisms mechanically instead of chemically
- EPA approved for porous and non-porous surfaces
- Works on textiles in laundry solutions, provides odor control, anti-static component
- A Silicone Quaternary Ammonium Salt (Organo-Silane Molecule)
- Approved for direct surface, food, and pet contact
- Edison Award Winning *“Best New product”*





SHIELD™

Laundry Treatment

- Organic product non-toxic, water-based molecule laundry softener for clothing, uniforms, textiles, and tablecloths
- Extends garment/uniform life as bacteria feed off dead skin cells embedded within the clothing fibers
- When the SHIELD™ treatment has dried and establishes its mechanism of defense the matrix inherently adds beneficial hydrophobic qualities to textiles with which it has been applied
- This process enhances the material's ability to resist spills, soiling, liquids and absorption of sweat and body odors while still allowing the garment to significantly breathe and provide evaporative cooling
- Produces persistent residual self-sanitizing activity against athlete's foot fungus (*Trichophyton mentagrophytes*) on treated socks. Durable for up to 10 repeated washings; prevents 99.9% of athlete's foot fungus growth
- Provides anti-static component, exceptional odor control

Perfect Clean™ Microfiber

- **Physically removes 85% of grime, dust and Micro-organisms**
- **Durable and Chlorine Stable designed to meet CDC guidelines for Blood-Borne Pathogens**
- **Lint-free therefore lessens particulates produced from paper towels**
- **Multicolor to identify use area (Bathroom vs Kitchen Applications) helps limit cross contamination**
- **Provides an electrostatic charge to *attract* debris**
- **Aides in achieving Dwell Time**
- **Reduces waste**
- **Highest Absorption Capacity of any Product Tested**
- **Multiple patents including internationally patented "Built-in Antimicrobial Product Protection"**





F.O.G. Eradication



- Mop Floors
- Sanitize Tables
- Clean Bathrooms
- Clean Grease Traps
- Clean Cooking Equipment
- Clean Windows
- Cost Effective Formulation

SIMIX™ Floor Coating

- Provides a Nano-Technology Surface Treatment rendering flooring surfaces antimicrobial, through high pH (12) and inclusion of Spot-On technology
- Nano-Technology forms a glass-like composite, and is not a wax, therefore much less slippery
- Easy-to-use (two people can apply 10,000 square feet in approximately 2-hours)
- Maintenance is as easy as periodic swabbing with Simix™ multi-surface cleaner
- Significant labor cost savings over conventional floor treatments
- Adjunctive to increased air quality: Eliminating bio burdens



SIMIX™ Floor Coating Reducing “Slip and Fall” Incidents

SIMIX Multi-Surface Ceramic Clearcoat creates less slippery floors and is rated as high traction by ANSI standard “Dynamic Coefficient of Friction” (DCOF) testing. Using a tribometer on a wet surface, floors treated with Simix™ maintain high DCOF ratings (above .42) and are safer for students, customers, faculty and staff. This results in a reduction of “slip and fall” incidents, relating filing of potential lawsuits, insurance claims and processing of requisite paperwork.



Coating DCOF result ANSI Standard Range SIMIX
Ceramic Clearcoat = .436 High traction

Indoor Air Quality Approach

We understand that decreasing overall particulates and bio-burdens found in confined spaces, leads to requisite decreases in associated cleaning costs, along with decreased risk of airborne transmission of microbes and decreases the likelihood of microbial touch contamination and exposure to pathogenic organisms, therefore preventing infections and subsequent hospital visits.

WCPFS maintains access to a number of disruptive filtration technologies which can accomplish this goal, and can suggest the optimal IAQ solution for your needs.



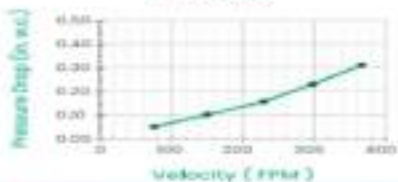
Air – Greentech™ Containment Filter with ODOgard™

- **The most cost effective solution for improving indoor air quality, eliminating odors, and saving energy in commercial buildings.**
- **Great for older equipment, areas that require better filtration, construction material off-gassing, high traffic areas, LEED buildings, and any odors or volatile organic compounds, everywhere you have a pleated**
- **True mechanical MERV 13A with low pressure drop equal to a true mechanical 8A airflow, for better energy efficiency and provides less stress on existing HVAC systems.**
- **2 in 1 filter- High MERV rated filter plus the advantages of gas phase reductions for odors and VOC's.**
- **ODOgard™ creates a molecular bond with odors and renders the odor inert, eliminating them.**



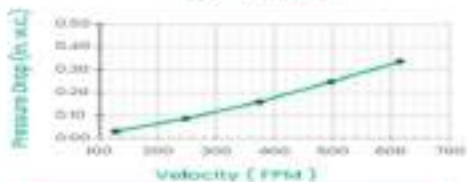
Greentech Filters+ Pressure Drop vs. Flow Rate

1" Filter



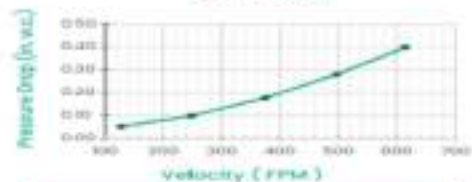
Velocity (fpm)	Press Drop (in. w.c.)
73.75	0.05
147.50	0.10
221.25	0.16
295	0.23
368.75	0.31

2" Filter



Velocity (fpm)	Press Drop (in. w.c.)
123.00	0.03
246.00	0.09
369.00	0.16
492.00	0.25
616.00	0.34

4" Filter



Velocity (fpm)	Press Drop (in. w.c.)
103.25	0.05
206.25	0.10
309.50	0.16
412.50	0.23
616.75	0.40

ASHRAE 52.2 Test Data

Filter Size:
24" x 24" x 2"

Test Aerosol:
KCl, Neutralized

Flow Rate:
1,968 CFM

Velocity:
492 FPM



Size Range (µm)	Initial Fractional Efficiency	
0.30 - 0.40	19.0%	E ¹
0.40 - 0.55	26.7%	
0.55 - 0.70	34.9%	
0.70 - 1.00	44.3%	
1.00 - 1.30	55.3%	E ²
1.30 - 1.60	61.9%	
1.60 - 2.20	68.0%	
2.20 - 3.00	76.3%	
3.00 - 4.00	82.3%	E ³
4.00 - 5.00	86.3%	
5.50 - 7.00	88.2%	
7.00 - 10.00	90.0%	

Monitoring – We do what we say we do...

- Purity Alliance maintains a number of strategic alliances with technology companies providing monitoring of viable air samples and surface contamination with cloud based and off-site notification capabilities
- Providing “state of the art” measurement of environmental parameters such as:
 - Temperature
 - Humidity
 - Ozone
 - CO₂
 - CO
 - Pressure Differentials
 - Particulate Matter from 0.1 micron to 10 micron
 - VOC’s
- We have the ability to detect/analyze biofilms on surfaces, and in conduits to detect inoculation with Legionella and other water-borne microbes
- Protect staff, employees, guests, visitors and decrease likelihood of transmission to residents





Keep Transport Vehicles Safe

- Clean all Transport Vans, Buses, and Vehicles with Microfiber
- Deodorize with Chlorine Dioxide Off-Gassing tablets
- Sanitize with Hypochlorous Acid (HOCL)
- Residually protect with SHIELD™ Technology
- Remain continuously and residually protected from facility, to court appearances, work sites, transport destinations and all spaces in between

DetentionSafe Summary



Lower Operating Costs

Cleaning, Staff Absenteeism and Presenteeism



24/7 Protection

Continuous surface + textile cleaning and sub-micron air filtering



Helps Ensure Safety

of staff and visitors



Environmentally Safe

SHIELD™ Surface Protectant

BIOPROTECT™ 6-Hour Hand Sanitizer

SHIELD™ Laundry Treatment

PerfectCLEAN™ Microfiber

IAQ Monitoring Technologies

Greentech™ Indoor Air Filtration Solutions

Hospital-grade Disinfectants

Environmental Monitoring

Infection Control Consulting



WCP Facility Solutions

Your Partner for Safe and Healthy Facilities

Thank You For Your Interest!

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