

# Prevention is the Best defense

AEgis® Microbe Shield



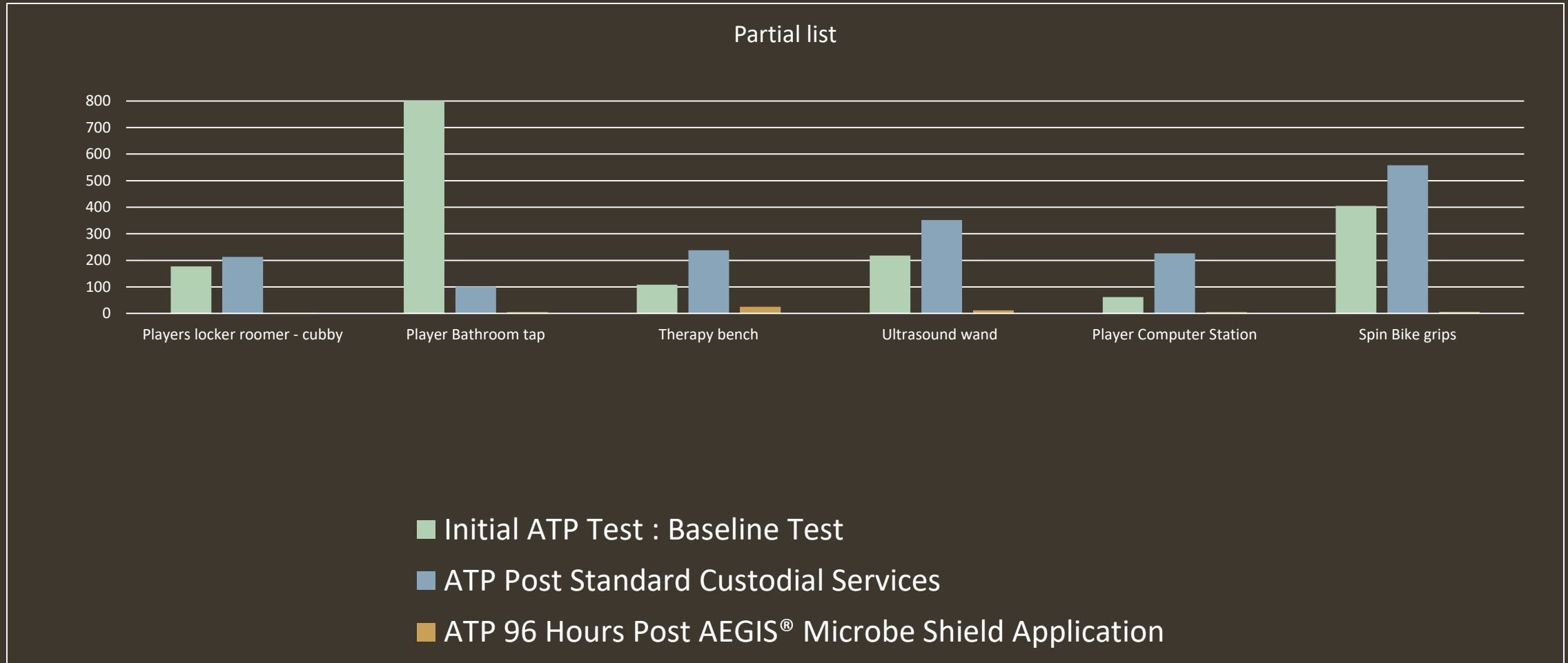
**“A clever person solves a problem. A wise person avoids it.”**

*— Albert Einstein*

- Bacteria and viruses are everywhere
- Moisture + Warm = mold

*These are all facts that cannot be disputed, but there are solutions to all problems*

# NHL Locker room after 3 day APT Meter Test



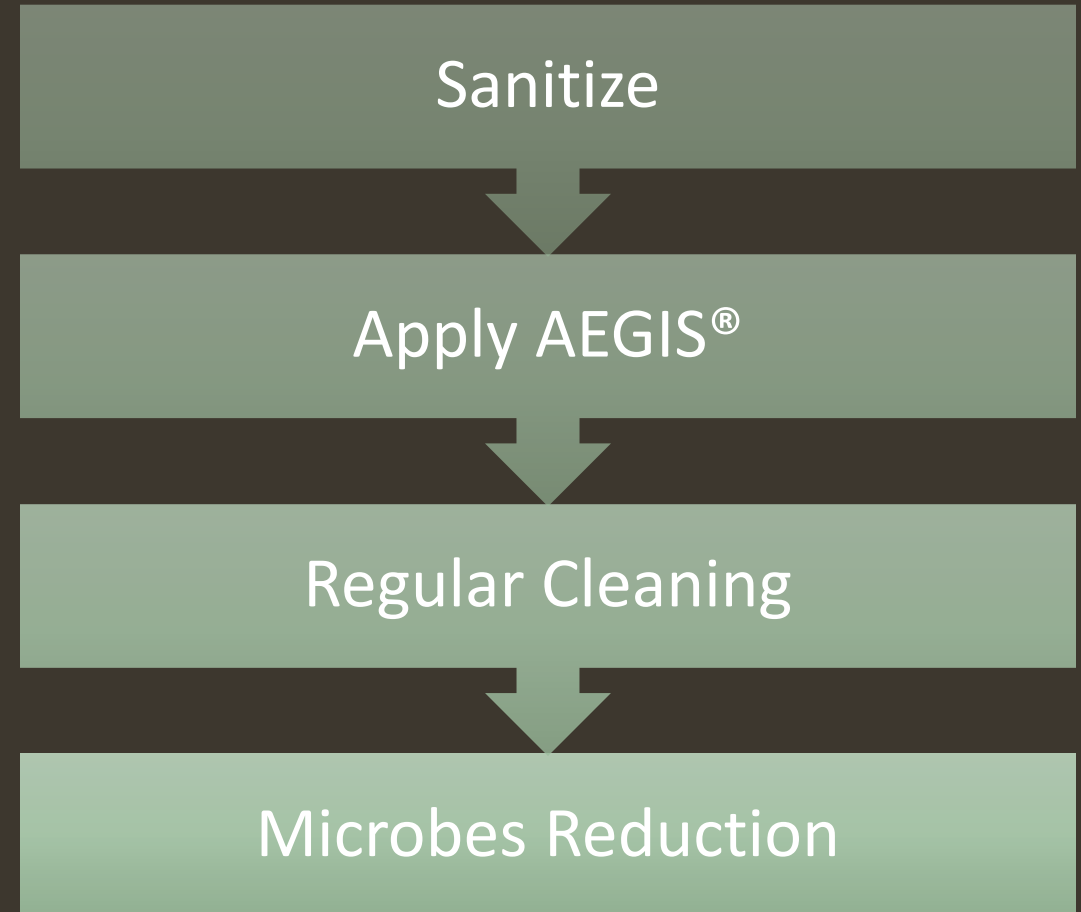
# RESULTS of ATP Meter Test

- Microbes increased by over 200% after custodial services from bench mark
  - Often caused by cross contamination
- Introduction of AEGIS<sup>®</sup> Microbe Shield reduced of microbes by over 80.5% from bench mark
  - Microbes cannot live on an AEGIS<sup>®</sup> treated surface eliminating cross contamination

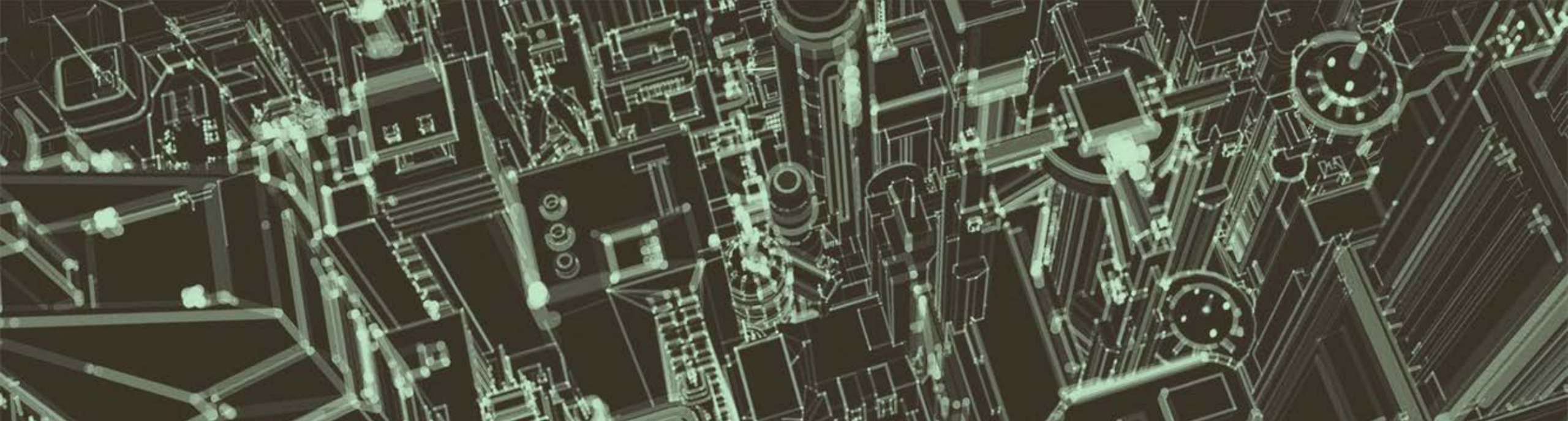
Location	Bench Mark	After Custodial	AEGIS <sup>®</sup>	AEGIS <sup>®</sup> 96Hours
Players locker room - cubby	177	213	13	2
Therapy bench	108	238	3	25
Player Computer Station	62	226	3	5

# Solve the problem

- Sanitize the surface that AEGIS® is being applied to
- AEGIS® application team uses a variety of application techniques to apply AEGIS® to “high touch”, and “common accumulation” areas for microbes
- Custodial services clean just as they had in the past
- AEGIS® Picks up the slack







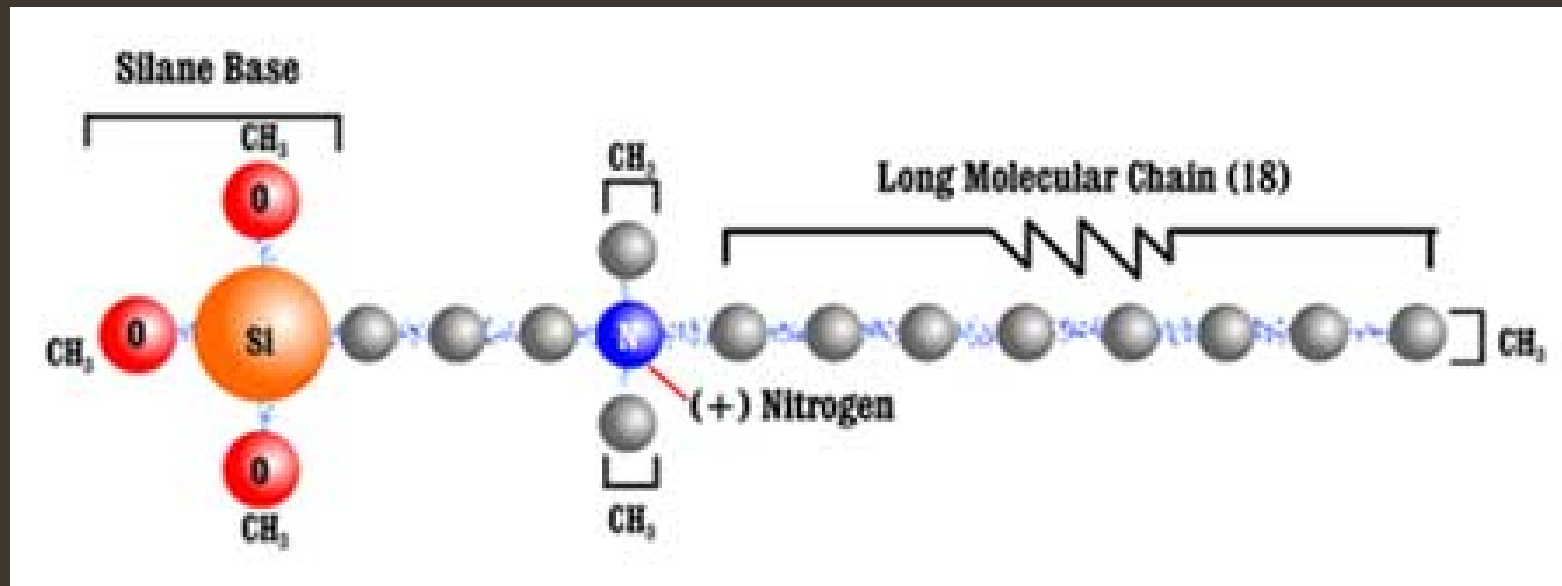
# HOW DOES AEGIS<sup>®</sup> WORK

Scientific Explanation



# AEGIS<sup>®</sup> Microbe Shield

A spear like molecular chain with a Silane base anchoring it to almost any surface



# AEGIS<sup>®</sup> Microbe Shield

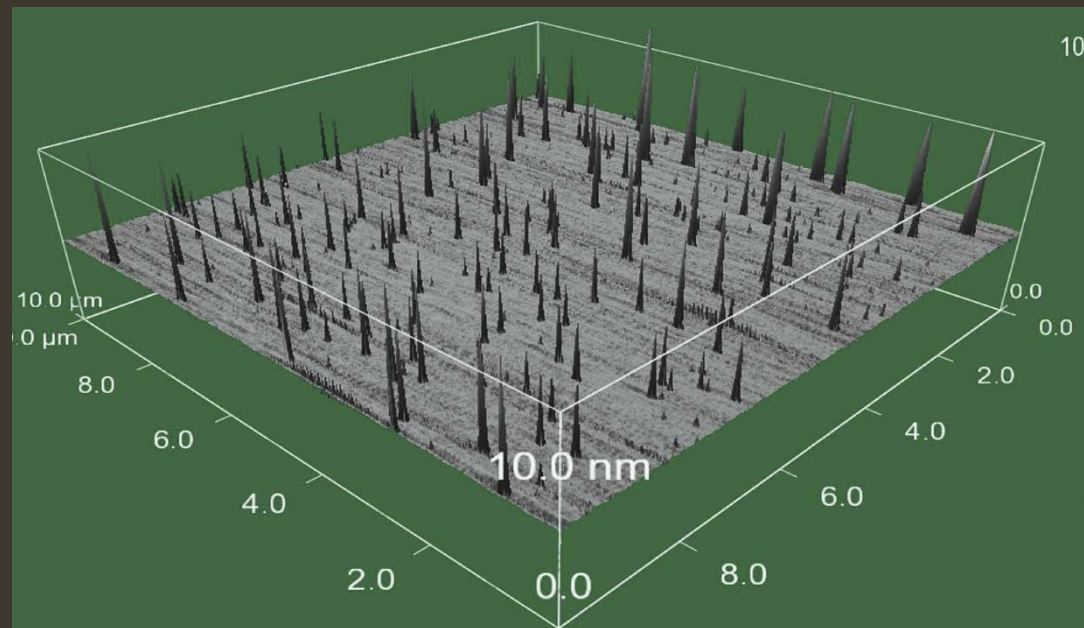
Now think of MILLIONS of spears, like as a bed of nails, and that bed of nails will rupture any microbe that comes in contact with it.





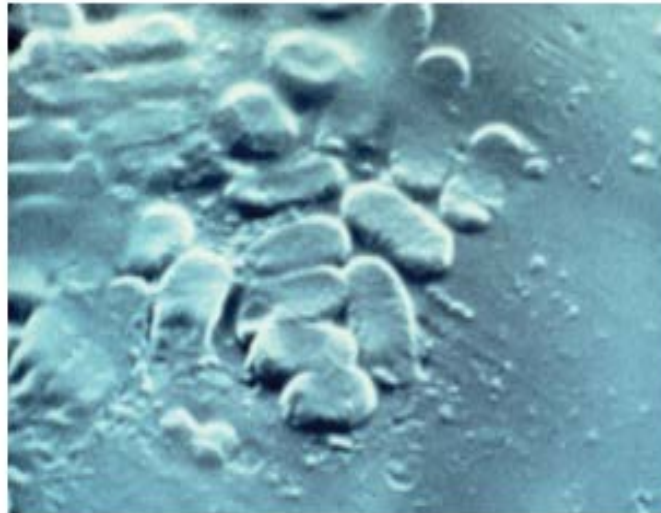
# AEGIS<sup>®</sup> Microbe Shield

This is an actual picture taken with a micron microscope,

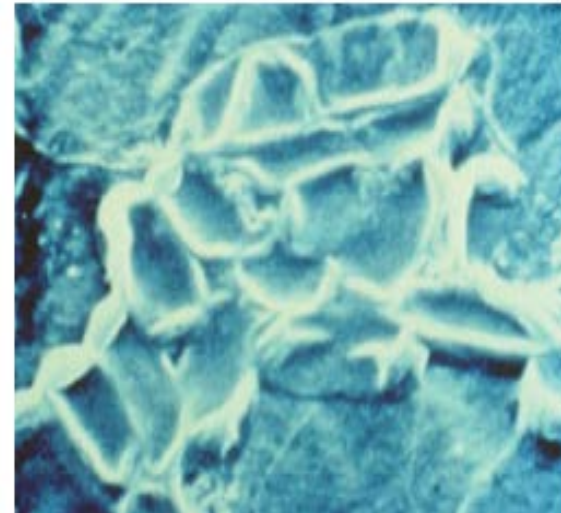


# AEGIS<sup>®</sup> Microbe Shield

What *E.coli* cells look like when they come in contact with AEGIS<sup>®</sup>



Normal *E. coli* cells on untreated surface.



*E. coli* cells ruptured after contact with treated surface.

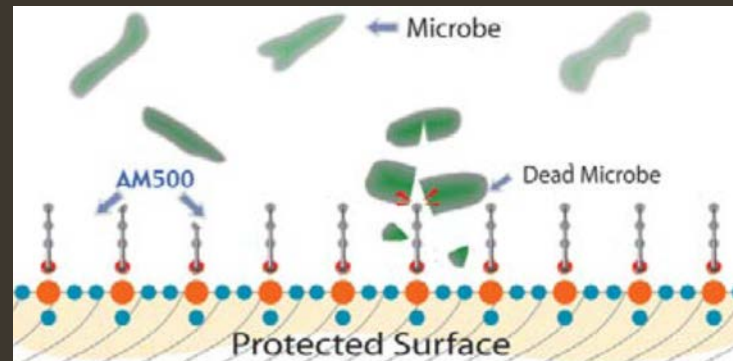
# AEGIS® Microbe Shield

**Durable. Invisible, odorless, will not affect the performance of the equipment.**

SUBSTANTIATION “Durable” is commonly used in the AEGIS Antimicrobial active. All claims on the AEGIS Canada label have been tested and approved by Health Canada.

Years of applying the antimicrobial has proven that the solution is invisible and odorless when applied and it will not affect the performance of equipment.

REFERENCE Health Canada Registration Number PMRA PCP# 15133



# AEGIS<sup>®</sup> Microbe Shield

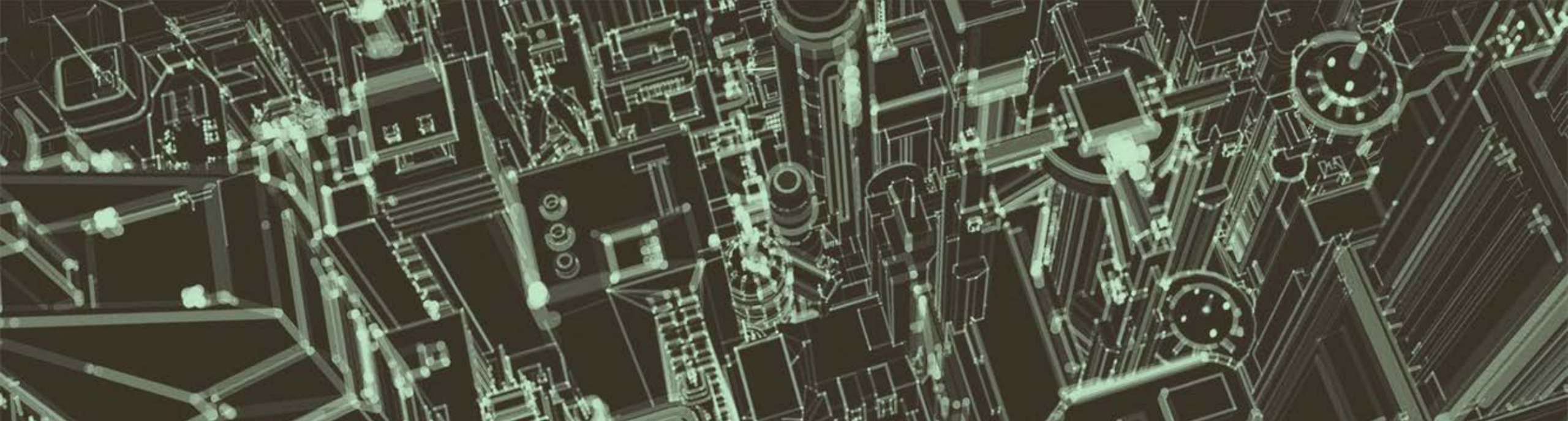
## Eliminates problems caused by odor-causing bacteria on treated surfaces

SUBSTANTIATION “Provides freshness and combats deterioration and discoloration caused by bacteria, fungi and algae,” taken from the AEGIS. All claims on the AEGIS label have been tested and approved by Health Canada.

REFERENCE Health Canada Registration Number PMRA PCP# 15133







# Industries Already Using AEGIS®

Brief list of clients with in Canada





# AEGIS® in University Faculties and Education Facilities

- Dalhousie University
- Mount Allison University
- Saint Mary's University
- Universite sainte anne Halifax
- Mount Allison University
- University of Alberta
- Annapolis Valley Regional School Board
- Chignecto-Central Regional School Board, Princess Margaret Rose School
- Halifax Christian Academy
- Canadian Coast Guard College, Sydney, NS

# AEGIS® in Sport and Fitness Facilities

- **Toronto Argonauts training facility**
- **Montreal Alouettes training facility**
- **Village of Ryley Swimming and Fitness Center**

# AEGIS® in Sport and Fitness Facilities

- **New Jersey Nets Training and Locker Room Facilities -Meadowlands**
- **Washington Redskins Locker Rooms and Training Facility-VA**
- **Ohio State University athletic facilities-Columbus, OH**
- **Washington Wizards Training and Locker Facilities-Washington, DC**
- **University of Illinois Locker Rooms and Training Facilities-Champaign, IL**
- **Southern Illinois University Locker Rooms and Training Facilities-Carbondale, IL**
- **University of Tulsa Locker Rooms and Training Facilities-Tulsa, OK**
- **Southeast Missouri State Locker Rooms and Training Facilities-Cape Girardeau, MO**

# AEGIS® in Sport and Fitness Facilities

- **Minnesota Vikings Training Facility-Minneapolis, MN**
- **Miami Heat Training and Locker Facilities-Miami, FL**
- **Cleveland Browns Training and Locker Room Facilities-Cleveland, OH**
- **Atlanta Hawks and Atlanta Thrashers athletic facilities-Atlanta, GA**
- **Milwaukee Bucks Training and Locker Facilities-Milwaukee, WI**
- **Detroit Pistons Training and Locker Room Facilities -Detroit, MI**

# AEGIS® in Sport and Fitness Facilities

- **Colleton River Plantation: Nicklaus and Dye Clubhouses-Bluffton, SC**
- **Highlands Country Club-Highlands, NC**
- **Warwick Hills Country Club-Detroit, MI**
- **Virginia Tech-athletic facilities, Blacksburg, VA**
- **University of South Carolina-Athletic offices, Training and Locker Room Facilities -Columbia, SC**
- **Cal State Bakersfield- Training and Locker Room Facilities -Bakersfield, CA**
- **Swarthmore College- Training and Locker Room Facilities, Swarthmore, PA**
- **Thiel College- Training and Locker Room Facilities, Greenville, PA**
- **Winthrop University-Indoor Softball Practice Bldg-Spartanburg, SC**

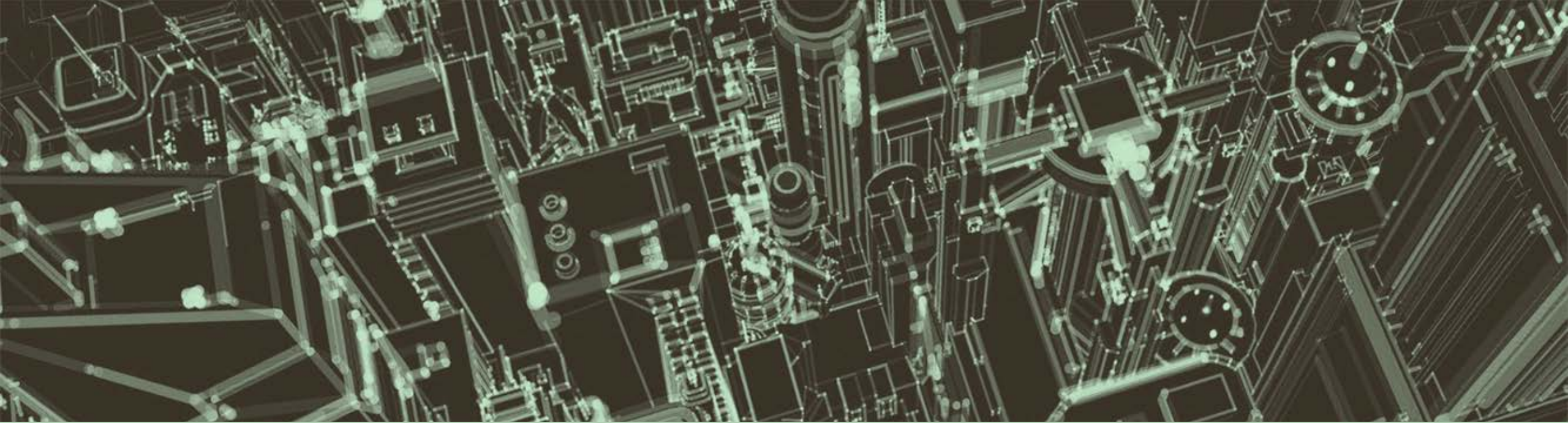


# AEGIS® in Hospitals and Medical Facilities

- **Ronald McDonald house Vancouver**
- **Windsor Regional Cancer Centre (high touch)**
- **St. Michaels, Toronto (isolation units)**
- **Royal Victoria, Barrie (ventilation, high touch)**
- **William Osler, Brantford (ventilation, high touch)**
- **Saint Mary's University**
- **Operating Rooms, Centennial Building, QEII, Health Sciences, VG Site**
- **Emergency Medical Care Inc,**
- **Capital District Health Authority, Dartmouth**
- **Westwind Veterinary Hospital – Dr. Deb Carrol**

# AEGIS® in Citizens' Protection

- **Toronto Transit Commission, ONT**
- **Ottawa Rapid transit system, ONT**
- **Beaver County, AB**
- **StCatherines Fired Department**
- **Halifax Regional Municipality**
- **Municipality of the County of Lunenburg**
- **Eric Spicer Building, Victim Services**
- **Parks Canada Facility, Dartmouth**
- **Kentville Police Department**
- **Spring Garden St Courthouse, Cells**



# Overview of Case Studies



# AEGIS® in Textiles

40 Day study conducted at a 24hr care facility by Spartan Mills and the Virkler Company on bacteria and hospital blankets.

Control – NOT treated

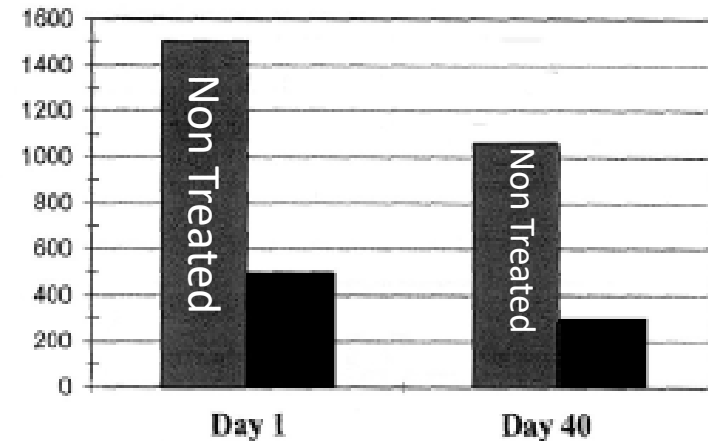


TREATED with AEGIS®

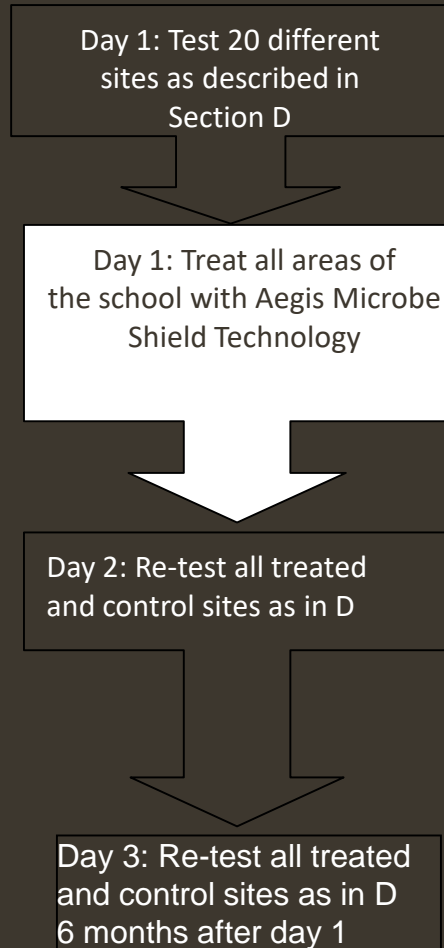


At the end of the study, the results showed a reduction of **60% of germs in 1 day** and **73% after 40 days** as apposed to non-treated blankets.

#	Description	Average Odor Perception Studies <sup>1</sup> (0-10)	Bacterial Retrieval Studies <sup>1</sup>				Pass/Fail
			Average Total CFU/g		Average % Reduction		
			Day 1	Day 40	Day 1	Day 40	
1	Untreated	3.3	1500	1051	0%	0%	Fail
2	Treated	1.5	500	283	66%	73%	Pass



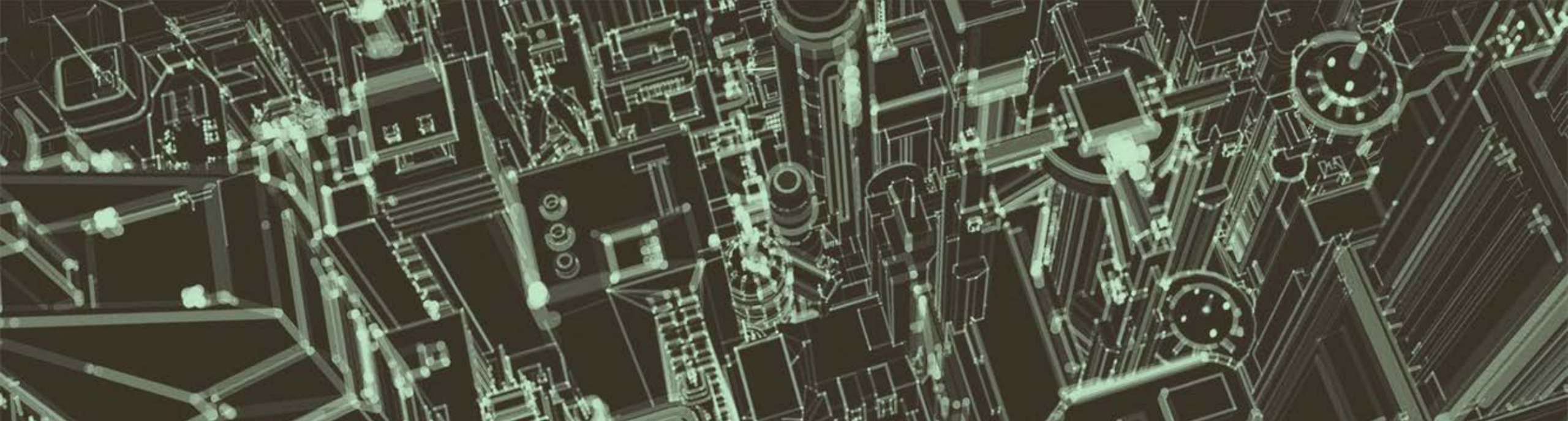
# AEGIS<sup>®</sup> on Hard Surfaces



Site Number	Description	Total Heterotrophic Bacteria (cfu/sample)	
		1/2/2010 Prior to Treatment	3/3/10 Post-Treatment
1	Front Entrance Handicap	14400	10
2	Principal's Door	19000	25
3	Exit A	160	144
4	Soap handle Boys' Washroom	140	24
5	Room 218 Keyboard	3600	20
6	Room 218 Desk 1	940	21
7	Room 218 Desk 2	960	192
8	Room 217 Mat	1200	61
9	Phones - common	2400	37
10	Phone - office	2600	3
11	Kindergarten desk	560	14
12	Kindergarten Play Stove	2200	15
13	Gym Bench	820	74
14	Stair C Handrail	2600	25
15	Stair C Door	1400	33
16	Computer Lab Keyboard	600	5
17	Science Counter	15600	114
18	Boys' Toilet Seat	2700	<1
19	Drinking Fountain	2600	20
20	Wall outside Room 105	300	2

94.37% reduction





# Summary of AEGIS®



# Why AEGIS® is the Right Solution

- **Used and proved to be effective in multiple industries**
  - **Sports**
  - **Medicine**
  - **Education**
  - **Transportation**
  - **Construction**
- **Safe and Environmentally friendly**
  - **No harmful off gassing**
  - **No harmful chemicals**
- **Cost Effective**
  - **Lasts 1-3 years on high touch surfaces**
  - **Lasts the lifetime of textiles or construction materials**
  - **Reduces custodial costs and improves building health**