

Clean for Health — The New Rules —



Overview

- Define cleaning as a form of preventive medicine, and ultimately, health enhancement – the “New Rules”...
- Enable adoption of processes that align with a Clean for Health mission, while targeting quality and lower costs.
- Learn and become teachers of the “New Rules”...

Cleaning as Medicine

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Defining cleaning:

- Cleaning
- Green Cleaning
- Clean for Health

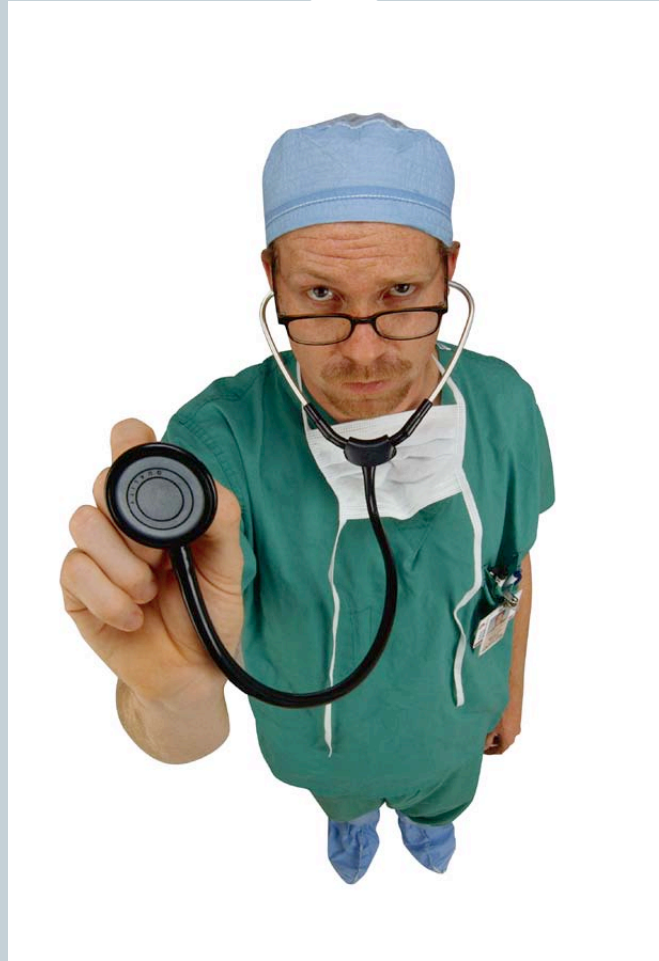
Tracking Contaminants

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- Where are contaminants coming from?
- Where are contaminants going?
- What is their impact on health?

What Does *This* Man Have?

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...That We Often *Don't*?

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Bay Area Jobs Outlook III - The Highest-/Lowest-Paying Gigs in the Bay

Wed Feb 06, 2008 at 07:06:21 AM



The fella with the mop earns an average of \$12.59 an hour in San Francisco. The fella with the Semitic good looks pulls in \$57.62.

What's Missing?

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Professional Education / Upward Mobility



A Standard of Care



Measurement Tools to Check the Health of
the “Patient”

The New Rules

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- Cleaning is a form of preventive medicine or healthcare.
- Buildings are ecosystems – so *solutions* are systems.
- Education is the foundation of a clean-for-health future.
- The *standard of care* varies, but is always health-focused, and targets quality and lower costs.
- Measurement is a key tool to optimizing CFH just as a stethoscope, diagnostic and other instruments are to optimizing medicine.

Education on What?

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The Science of Better, Faster, Healthier Cleaning

- Indoor Environments
 - Public Health
 - CIMS
 - IEHA
 - GS-42
 - LEED
 - Other

The Standard of Care

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Main Ingredients

- Continuous Improvement
- Systems Thinking (Deming)
 - Unification of elements
- Holistic view of the building environment (ecosystem)
- Measurement to assess progress, track synergies and improve quality
- Measurement as a product and process selection, enhancement and validation tool

***Question to Ask: Is It
Fiscally and Physically Healthy?***

Quality Machine = No Waste, Lower Costs

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A Fine Machine Has No Superfluous Parts

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- The total is greater than the sum of the parts
- Incorporate cleaning and maintenance elements in a unified system that, like a precision machine, has a well-defined purpose and *no superfluous parts*.

Systems Thinking

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- Systems govern ... Put a 'good' person in a 'bad' system, the outcome will likely be bad. If you put a 'bad' person in a 'good' system, the results can still be good.

Systems Thinking

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- The hardest work in deploying a functional cleaning system, such as a High Performance Green, Team, Zone, or Day Cleaning program, is that performed by management up front.

Systems Thinking

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- Determine cleanable square feet
- Calculate production rates of the various types of equipment (e.g., using ISSA's Cleaning Times guide)
- Drill down to best methods - labor, tools, schedules - that will optimize cleaning.
- Optimize labor and scheduling by benchmarking against your past performance and with model facilities similar to yours.

Systems Thinking

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- During a shift analysis, make sure workers get started working right away and make them accountable.
- Job cards outlining tasks and where each worker should be during each part of the shift are a big help.
- Often 15 minutes per worker is lost just getting started (finding tools, getting to work areas) at the beginning of the shift. Eliminating small areas of work "procrastination" can save big dollars.

Systems Thinking

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- Ensure accurate data tracking and analysis. If there is no waste, nothing can or should be cut when budgets come under scrutiny.

Systems Thinking

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- Team (division of labor, specialization of work, speed and quality improvements)
- Day (stable workforce, high visibility of soils (and workers), enhanced security, public relations)
- Green (waste reduction, healthier chemical products, holistic gains involving integrating building systems under programs such as LEED, Green Seal's GS-42, etc.)

Systems Thinking

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- Attract the right workers. Build pride of workmanship. Hire persons interested in learning and advancing.
- Invest in workers. Give them pay incentives based on their level of learning and competence. Treat your workers like first class citizens, educate them to be such, and they will perform that way.

Systems Thinking

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- Observe your best and worst employees *together with your workers*.
- With their permission, videotape them and show the tapes to the team.
- Why they are so productive or unproductive? Identify shortcuts that work, wasted steps and motions, and or correct and incorrect use of tools.

Measurement Tools

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What will you measure effectiveness with?

- **Traditional barometers: productivity, fiscal, turnover, etc.**
- **A variety of scientific devices that measure microbial, particulate or other contaminant presence to evaluate cleanliness.**

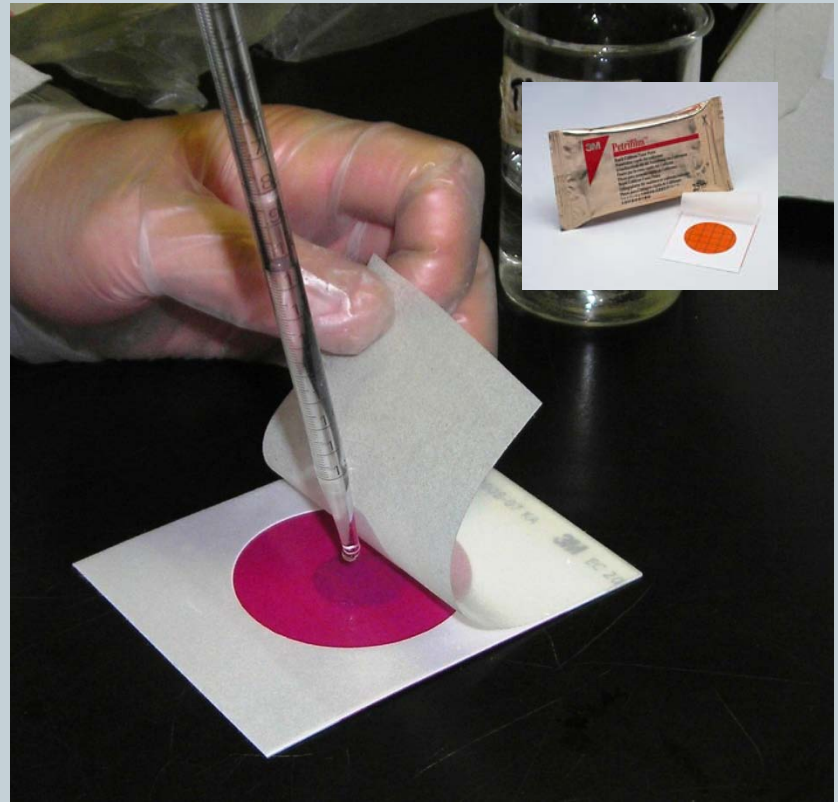
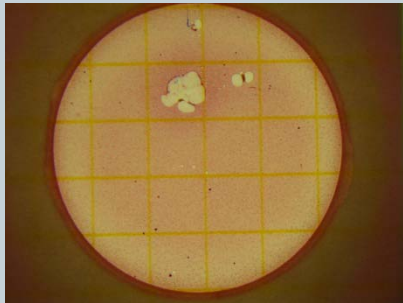
Biological or Organics Sampling

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Bacterial Cultures

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Allergen Measurement

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DUSTREAM™ collector
+ adaptor



DUSTREAM™ collector
+ adaptor

Air Quality Measurement

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Air Sampler



**HANDHELD
PARTICLE COUNTERS**

Results #1

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- In 2004, Dr. Charles P. Gerba, PhD., conducted a blind study titled “Cleaning Desktops and Other Classroom Surfaces Reduces Absenteeism,” in which quaternary ammonium disinfecting wipes were used on various surfaces lowering bacterial levels.
- The study found that classrooms undergoing daily intervention with disinfectant wipes were found to have a statistically significant reduction (50%) in student absenteeism due to illness.

Results #2

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- Similarly, a study conducted at the Association for Children with Downs Syndrome School in Bellmore, N.Y., by Dr. Leonard Krilov, examined the health implications associated with improved cleaning.
- Dr. Krilov tracked the health and attendance impacts after the program was implemented and found that the improved cleaning reduced total illnesses by 24%, doctor visits by 34%, courses of antibiotics by 24% and days absent from school by 46%.

Teach and Prosper

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- When you *teach*, you *learn*.
- Add “*Educator*” to your title
- Share what you are learning ...

Part Two



Moving from Green Cleaning *Product* Certification to Green Cleaning *Service* Certification

Why facility managers and service providers are looking to provide a well-rounded and verified green janitorial program.

Background/Purpose of Cleaning Service Certification



- Cleaning industry in a revolution
- Green Cleaning: high performance without health or environmental damage
- Non-profits are spearheading through standards, especially for chemicals
- Time is ripe to address overall process, including procedures, equipment, etc.
- Purchasers need a way to identify green cleaning service providers
- Providers need specifications to follow

Initial Scope of Efforts



- **Commercial services but not residential**
- **Both in-house and external (i.e., BSCs) service providers**
- **Most facilities but not highly specialized areas (e.g, OR, IT clean rooms, etc.)**

Key Areas



- **Planning requirements**
- **Products, supplies, and equipment requirements**
- **Cleaning procedures requirements**
- **Communications requirements**
- **Training requirements**
- **Labeling requirements**

Planning Requirements



- **Written standard operating procedures**
- **Building-specific green cleaning plans**
 - schedules, communications, floor maintenance
 - vulnerable populations, special areas, etc.
- **Use of powered equipment**
 - equipment must meet criteria
 - quarterly maintenance program

Requirements for Products, Supplies, Equipment



- **For major specified categories, use only environmentally preferable products**
 - Defined in standard
 - Certified by ecolabel or designated by national program
- **Criteria for new powered cleaning equipment**

Requirements for Cleaning Procedures (Examples)



- **Chemicals:** track; limit waste, exposure
- **Waste:** recycle, minimize; reuse
- **Entryways:** matting, cleaned frequently
- **Floors:** extensive criteria for hard floors, carpet care, vacuuming

Requirements for Cleaning Procedures (Examples)



- **Disinfection:** use only where needed and as directed
- **Restrooms:** clean and disinfect; do not mingle equipment with other areas
- **Eating areas:** clean and sanitize surfaces
- **Trash:** pull as needed, especially before weekends, holidays

Requirements for Cleaning Procedures (Examples)



- **Recycling: inspect and clean daily**
- **Indoor plants: collect debris; keep from carpet, vents**
- **Vulnerable populations: reduce exposures, chemicals**

Communications Requirements



- **Plan required to communicate with:**
 - cleaning personnel
 - facility managers
- **Develop plan in conjunction with owners, managers, occupants**
- **Plan shall:**
 - provide for training of staff and feedback
 - identification of special occupant needs

Communications Requirements (continued)



- **Through plan, cleaning service providers shall:**
 - facilitate reduction in cleaning, treatment
 - ✦ e.g., spill reporting procedures
 - notify managers of cleaning products used
 - ✦ make list of all chemicals, MSDSs available
 - ✦ contact person for building

Training Requirements



- All cleaning personnel trained initially upon hiring *before* cleaning independently
 - proper use, handling, procedures
- Site-specific training covering facility cleaning plan
- All cleaning personnel get 24 hours continuing training annually
- Maintain training records

Labeling Requirements



- **Certification applies to specific cleaning service**
 - certification mark may be used in advertising that service
 - not to provider as a whole unless all services certified
- **Facility cleaned by certified service may be so designated**

Certification Process



- Fill out Preliminary Application at www.greenseal.org, full application is mailed
- Application and annual monitoring fees are based on size, number of green cleaning accounts (or facilities)
- Applicant submits records and data (checklist and templates for collecting and submitting data are available)
- Green Seal audits a certain number of accounts (or facilities), based on total
- Also reviews marketing materials
- 1-year license awarded to use trademark

GS-42 Cleaning Service Standard



“This facility is cleaned by a service that meets the criteria of Green Seal's Environmental Standard for Cleaning Services for reduced toxicity, waste, and exposure.”

[GS-42 Cleaning Service Standard]