

Facilities Management: Better Outcomes

Parallel execution of maintenance projects with “what if” simulation trials are just clicks away using the coming technologies below. There are three unstoppable trends that facilities managers (FM) need to recognize for success: (1) building life-cycle accounting as the “Go, No Go” decision driver for projects – think improvements that support long-term tenant lease agreements and lower maintenance expense via automation. Remember that you are in direct competition with the “work from home” trend; (2) GIS overlays used in conjunction with CAD or BIM to create simulations – think satellite maps that provide insight about your facility and also your neighbors. A practical application is drone reconnaissance to estimate spatial impacts of land development prior to execution; (3) Continuous monitoring created by “implanting” micro sensors into walls and roofs, then linking them with BIM – think interstitial surveillance of foundations, walls and roofs used to record moisture or cracks. You detect hidden deterioration before it prematurely damages the building. These building analytics are where management and science intersect. Ecostratum currently performs 24/7/365 building testing in support of maximizing building assets.

Tip 1: Golden Crater Award.



This award is a wonkish acknowledgement of underutilized urban hardscape for automobile parking. Winners include Louisville, KY, Denver, CO and Lansing, MI. Urban heat island effect is being studied for links to asthma at heights up to 6 feet. The award has been a driver for green development –

Calendar of Events

June 28, 2019. CETA “Application Guide for the Use of Surface Decontaminants in Biosafety Cabinets (CAG-004), 3801 Lake Boone Trail, Raleigh, NC 27607

February 19-20, 2020 IAQA Annual Meeting & Expo, Palm Beach Convention Cntr. West Palm Beach, Florida

411 Terrace Place
PO Box 0094
Terrace Park, Ohio 45174-0094
www.ecostratum.com



E: srucker@ecostratum.com
P: 513-248-0081
M: 513-526-7391

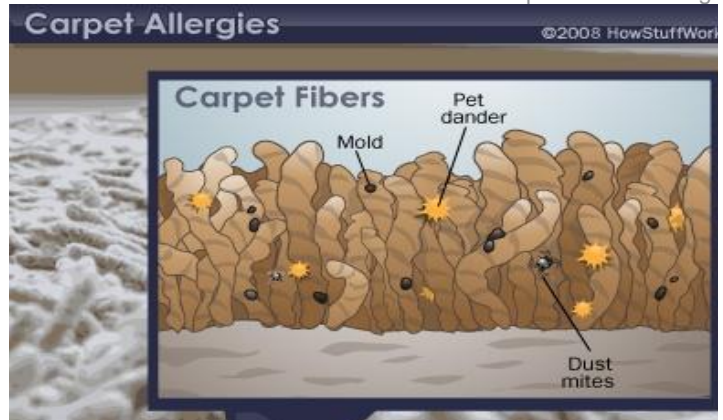
Engineered-Clean Infection Control – Part II

Scientific understanding of gram (-) bacterial toxins has improved over the last 10 years to include cellular components such as Endotoxin - a lipopolysaccharide (LPS) cell wall. The source of these microorganisms is better understood. The major types of gram-negative bacteria and their sources are shown in Table 2.

Table 2: Major Types of gram-negative bacteria

Gram (-) Bacteria	Source
<i>Escherichia coli (E Coli)</i>	Feces & Intestines
<i>Salmonella</i>	Raw Poultry, Eggs, Beef
<i>Shigella</i>	Feces
<i>Enterobacteriaceae</i>	Intestinal Tract
<i>Pseudomonas</i>	Soil & Water
<i>Legionella</i>	Waterborne
Endotoxin	LPS cell wall of Gram (-) bacteria

For hard surfaces, the proper liquid disinfectant can effectively reduce and deactivate organisms. For textile furniture and carpets, proper vacuuming is required, especially to capture endotoxin dust which tends to embed deeply. Within facilities, the allergen etiology shown in the diagram below can be important to understand and control infection. Ecostratum has methods to assist in the proper disinfectant selection of hard surfaces and deep textile cleaning.



Tip 2: Healthcare Economics: When is the impact of USP 800?

Chemical hygiene improvements designed to minimize microscopic exposure to cancer treatment drugs are the impact of USP 800. They are scheduled for implementation **December 1, 2019**. Ecostratum has developed a simple code system to identify key elements of compliance. Feel free to use the codes below.

Code	Exposure Control	How or What?
E1=Engineering	Containment Primary Engineering Control -C-PEC	hood with external exhaust
E2=Engineering	Containment Secondary Engineering Control Rm -C-SEC	room with air changes and depressurized
R1=Residues	Cleaning & Neutralization	benches or floors
C1=Compound	Depressurize, PPE & Cleanwipe	crushed dust ,aerosols,
P1= Patients	Universal Precautions	body fluids, waste, needle sharps