Ecostratum Insights

January 2020 Vol. 6 Issue 1

Sustainability Trends!

You need a sustainability tool box. Why? To maximize your assets. Real estate usage is being disrupted so much so that billions of dollars of building assets need redeployed. Take the self-test below to measure your sustainability aptitude.

Trend	Sentinel Event	Score (1= unlikely) (3=maybe) (4=possibly) (5= likely)	
Mobility	Self-driving cars become the norm		
Mobility	Drones dominate freight delivery		
Buildings	Retail malls convert to distribution centers		
Buildings	Industry uses tech for a smaller footprint		
Urbanization	Smaller homes "sell" convenience, not status		
Urbanization	Personal space within co-working offices		
Work	Timeclocks become wearable technology		
Work	Professional clubs determine wages		
TOTAL			_

Sustainability Score: 5-10 late adopter

10-20 user 20-30 futurist

Ask the Expert?

Q: Will mobile microscopy replace commercial laboratory analyses? A: No. Mobile analytics, including microscopy, are being improved.



Stachybotrys Chartarum magnify 400X

Photo Credit: Ecostratum

Biggest Environmental News Stories 2019

(List created by Ecostratum in no particular order or importance)

- 1. Johnson & Johnson Baby Powder looks at trace asbestos report.
- 2. Monsanto Roundup possibly linked to Non-Hodgkin's lymphoma.
- 3. Juul e-cigarettes possibly linked to vaping-related illnesses.
- 4. Flint Michigan, above safe drinking water levels of lead reported.5. Fracking operations in ND undergo an EPA groundwater study.
- 6. Wild fires in California linked to PGE deferred line maintenance.
- 7. Legionella cases reported at Mt. Carmel Hospital, Columbus, OH.
- 8. HVAC mold colonization reported at Seattle's Children's Hospital.
- Asbestos reported at swim center of 2020 Tokyo Olympics.
- 10. Chinese scientist gets 3-years prison for gene-edited babies.

Calendar of Events

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

"Creating Value with Sustainability"

March 31, 2020 Ohio EPA Compliance Assistance Program, Columbus, Ohio

"Air Permitting Basics and Reporting"

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 F: 513-965-0071



"A Higher Level of Thinking". Technical developments are presented with a business case underpinning. Contact Steve Rucker at

srucker@ecostratum.com

Air Testing Critical Environments

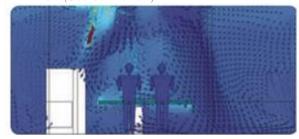
Should you measure air contaminants? Before developing an opinion, consider the influencers described below. Using the fine art of Kentucky Bourbon distilling as a analolgy, an air quality test is an analysis of a "single barrel" of air deemed representative of an entire "multi-barrel bourbon batch" of room air. The characteristics of the single barrel (e.g. single air sample) should represent the entire batch (room air). In short, detailed knowledge of the single barrel cast (age, type of wood, fire charring) are similar to the critical room characteristics of laminar airflow, thermal dispursion and flowrates. The simple truth is that bourbon quality is a mulitfaceted science and so is indoor air quality (even more so).

In 2018, the CMS Joint Commission included Ventilation, Pressure and Air Exchanges (58%) as the number two most frequently cited Element of Care deficiency

Bourbon Sniff & Taste Test (Source: Nautica)



Laminar Air Flow (Source: Huntair)



The Silver Tsunami Environmental Impact

Zillow release a report picked up by the WSJ that detailed metro areas where 30% of single family housing stock had owners age 60 years or older. Predictably, these homes will be available within the next 20 years. Dayton-Springfield & Cleveland-Akron Ohio were in the top 10 list. What is the environmental impact of this future supply bubble of mid-century housing?

- 1. Housing may be demolished and repurposed for green space
- 2. New home construction will determine the absorption of older
- 3. Fewer buyers in the de facto retirement suburbs outside cities
- 4. Uptick in services infrastructure for food, medicine and health
- 5. Uptick in household maintenance & construction waste

In short, low absorption by Gen X'ers (born 1965-1983) and Millennials (born 1981-1997), who have invested heavily in urban core revitalized housing, will force a repurposing of the supply bubble neighborhoods referenced above.

OEPA Considering Significant Asbestos Change

Q: Will the amount of notifiable ACM change from 50SF to 3SF? A: Probably. 3 SF or LF has been the de facto emergency level. This change in effect makes emergencies reportable to regulators.