Upgraded Contamination Control Protects Data Center Uptime

ABM

Why is protecting equipment from air and surface contamination important?

An average minute of data center downtime costs $8,851[1]

80%
of data center managers say their last outage was **preventable**.[2]

70%
of data center failures are caused by **human error**.[3]

74%
of data managers believe their last outage of $1M or more could have been prevented with better **processes, management, or configuration**.[3]

Your data center isn't average. Upgraded procedures protect on three fronts:

1 Control All Entry Points to Keep Contamination Out:

- ☐ Use double sets of doors
- ☐ Seal the envelope
- ☐ Install entryway matting
- ☐ Restrict operations and materials

- • Keep out particles, cut energy cost of cooled air loss
- • All assembly or unpacking should happen in staging areas outside the data center

2 Control What's Already Made It Inside:

- ☐ Empty all trash receptacles daily
- ☐ Target all entryway floors for vacuuming
- ☐ Use strict SOPs for tools and cleaning patterns
- ☐ Subfloor plenums and drop ceilings decontaminated
- ☐ Monitor humidity levels

- • Micro and macroscopic protocols
- • Use cleaning products approved for data center equipment

3 Control the Equipment that Controls Your Environment:

- ☐ Change cooling system filters on schedule
- ☐ Clean ducts and airways on schedule to avoid buildup
- ☐ Maintain systems mechanically

- • Stop particles created by wear and tear

Particular Problems:

Air pollution | Dirt and dust | Electrostatic dust | Ferrous metal particles | Fibers | Human hair | Lint | Packing materials | Pollen | Salt (sea or deicing) | Skin particles | Zinc (and tin) whiskers

All your operations and equipment affect each other.

Particulates in HVAC systems can increase cooling energy costs.
EPA recommends removing contaminants to reduce energy use.[4]

Airborne gases can also lead to corrosion and failures.
ASHRAE recommends data centers monitor for corrosion rates.[5]

Particles and build up can interfere with critical equipment and cause failures.
ASHRAE recommends ISO Class 8 clean room requirements for data centers.[5]

We Develop Targeted SOPs for Data Center Contamination Control
Talk to the Team that Optimizes Operations for Uptime and Efficiency
866.448.4979 | ABM.com/Mission-Critical

Sources:
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