Keene Public Library

Building and Grounds Committee

Meeting held 1/13//2023 at 10:00 AM (DRAFT)

Members present: Susan Bloom, Paul Henkel, Kathleen Packard, Justin Somma.

Minutes of our last meeting were approved.

Landscaping – A 2023 tree program was proposed by Bartlett Tree Experts. Andy Bohannon is discussing reduced scope with Bartlett.

Parking – The Public Informational Meeting Monday January 30 about Main Street Infrastructure and Reconstruction was attended by over 250 people. The next event is a public hearing Tuesday February 21st at 6 PM at the Keene High School Auditorium.

Equipment for Heberton Hall and Cohen Hall – Improved ventilation is planned for the AV equipment. Andy Bohannon and Scott Martin are assisting in designing to adequately ventilate the Heberton equipment closet and the small Cohen equipment room.

Dust accumulation within the equipment could make the situation worse. Susan Bloom plans to review with technical staff periodic dust cleaning. Buildings and Grounds Committee members expressed their desire that consideration be given to avoiding excess dust.

One of the attached articles indicates that "...increasing airflow accelerates dust accumulation ... around electronic components." For example, a fan forcing air out of the top vent of a small room would bring dust into the room under the door.

However, a fan and filter bringing clean air into the equipment room or closet at the bottom vent would introduce dust free air and provide a positive pressure in the room. This should cause air to flow out under the door, and out through the top vent, so dust would not be brought into the room. Paul will contact Andy and Scott to ask this be given consideration.

Improved Lighting in Large Print Book and part of the Fiction area. Staff has asked input from Hamblet Electric. Susan Bloom reported that an initial demo by Hamblet Electric showed little improvement. A more substantial proposal will be requested. Funding may be combined with other future improvements and be funded in future years through the capital improvement program.

Human Services – Susan Bloom noted there have been City Manager led discussions about area-wide planning concerning emergency planning and homelessness. She noted Heberton Hall does not have a generator to provide electric power to keep the propane fueled

As you know, the Library is hosting office hours for human service providers. Susan and other staff members are learning about these services and may be able to guide patrons who need services

Paul Henkel, Chair

Next Meeting: 10 AM March 10, 2023 in the Miller-Vincent Room.

What Dust Does to Computer Equipment

March 31st, 2019 Vanguard Cleaning Systems of the Southern Valley

Heat is the eternal enemy of computer equipment--leading to severe and costly damage to sensitive electronic components--and can be significantly exacerbated by the ever-present challenge of dust.

Dust, Heat, and Why Your Computer Equipment Fails

Computer and server hardware is meant to dissipate internal heat generated by electronic components.

Dust inside the equipment can lead to heat damage, resulting in crashes, as well as data loss and service outages, by:

- o Coating the components and solder, preventing heat from dissipating.
- Clogging and stopping fans over the processor, causing it to overheat quickly, and;
- o Blocking air vents, leading to a rapid rise in internal temperature.

sAccording to Science ABC;

The build-up of dust can (and surely does) impact your computer's performance for two main reasons: it causes the components of your computer to retain heat and it makes it more difficult for the internal fans to dissipate heat from the system, thereby decreasing the efficiency of the entire system.

How Does Dust Affect Your Computer's Performance?

When dealing with dust, conventional wisdom recommends increasing air flow to a space and allowing the HVAC filtration system to pick up the airborne particles.

However, according to Advotronix;

[...] increasing the airflow accelerates dust accumulation inside of the server's chassis and around the electronic components. (my emphasis)

Dust accumulation on and around electronics components is bad news and will eventually lead to hardware failure.

Dry dust is heavier than air and tends to form insulating blankets on top of electronic components. With no effective air contact, these insulated components can no longer be cooled and easily overheat enough to operate outside of their specified thermal range.

The Impact of Dust in PC's

14 Aug 2018

By now, someone you know has probably mentioned dust found in your computer could be harmful to it. You're probably wondering how is this possible?



Well, your computer requires airflow and cooling to prevent the components inside, such as the processor, hard drive, memory, and graphics card, from overheating. Fans are the most common method of ensuring your computer gets enough airflow, therefore, keeps cool.

However, fans also move dust particles through your computer in addition to the cool outside air. If left long enough, the dust moving through your computer can build up on the fan and other internal components. When this happens, the dust acts as an insulator, which causes the components to run hotter than they normally would. And overheating is one of the most dangerous things you could allow your computer components to do because it significantly decreases your computer's lifespan unless resolved.