

# Gambling with Deferred Maintenance:

[Today's Solution, Tomorrow's Problem]

**55%** of Facility Managers fall into reactive management

**228 Hours lost** every year as a result of reactive management!

**88%** of Facility Managers say that deferred maintenance is an issue

The business landscape is becoming increasingly complex and competitive, and many companies are operating on a razor-thin edge.

In a push to succeed, organizations and business leaders are constantly looking for ways to streamline, reduce waste, and run as lean as possible. In other words, they're trying to do more with less—keeping costs down by balancing maintenance budgets, optimizing labor schedules, and integrating processes.

As a Facility Manager, you control and oversee your building's critical operations, so you understand today's business pressures as much as anyone in your organization. The upkeep of equipment and systems can have you running in all directions, all around the clock. Managing occupant complaints and expectations adds to the demands you face.

If you're working in an environment with budget and time constraints, your organization may have defaulted into a deferred maintenance scenario, which can create job backlogs. In this case, you're probably reacting to issues, rather than preventing them.

The top challenge for Facility Managers is that they simply do not have enough time to get all of their work done.<sup>1</sup>

- 55% of Facility Managers fall into reactive management.<sup>2</sup> Reactive methods mean you can lose at least 11% of every day—at least 228 hours every year!<sup>3</sup>
- 49% of Facility Managers spend 2 to 4 hours per day dealing with occupant complaints. Of those surveyed, 16% say they spend more than four hours per day doing this.<sup>4</sup>

## More Pressure on Facility Managers

By definition, deferring maintenance is the practice of postponing system checks, repairs, and upgrades to a later budget cycle due to a lack of time, money, or both. The idea is to minimize the investment into existing systems and personnel to improve cash flow and reduce expenses. In other words, spend less get more.

Deferring maintenance can deliver more, but not always in the ways you want. Instead, it can lead to:

- **More unplanned expenses** – Failure to replace worn or malfunctioning system – If you defer maintenance, you can expect future expenses to be equal to or greater than the cost of the part squared, or **15 times** the total repair cost.<sup>5</sup>
- **More safety risks** – Operating under a reactive mode can mean more safety liability, and that can lead to an increase in insurance claims. – **Insurance claims can rise by up to 71%** when facility teams are operating in a reactive manner, and each claim is 11% more expensive.

**81% Higher energy costs**

in facilities with **deferred maintenance issues**

**71%** of this increase is **HVAC related**

**Each \$1**  
avoided by **deferred maintenance**

**creates \$4**  
in **future expense**<sup>8</sup>

**1 Labor week**  
for each set of **100 filters**

**EQUALS**

**\$96,153**

in **deferred maintenance**

- **More system downtime** – Should repairs become necessary, you may have to wait for parts to be produced and shipped.
- **More production bottlenecks** – Without ongoing system maintenance, it can be difficult to keep equipment operating at peak performance.
- **More missed profit opportunities** – Energy and sustainability goals can fall by the wayside whenever preventive maintenance activities are delayed or halted.

The cost of waiting to maintain equipment could potentially be **30 times higher** than the early intervention cost.<sup>5</sup>

## Why Ongoing Maintenance of HVAC Systems is Critical

**Half of a facility's energy costs are attributed to heating, cooling, and moving air.**<sup>6</sup> When HVAC systems are not maintained on time or as planned, they do not perform as they should. Air handler blower fans and other components may begin to short cycle and wear themselves out. The more that components turn on and off and on again, the more energy you waste, and the more likely it is that you'll be dealing with spikes in energy costs.

Proper filter maintenance is essential to keeping HVAC systems operating effectively and efficiently. Compared to components like motors and compressors, filter selection and maintenance may seem simple, but there are multiple facets of the filter and the system it's installed in that must be taken into consideration. These considerations include system airspeed, fan efficiency, filter resistance, service life, efficiency, and cost. Filters are essential to your HVAC system's performance and can extend the life of the system components, decrease your energy spend, and reduce the labor burden of your team, saving you time and money.

### Impacts of Filters on HVAC costs

- 15% to 40% of the **lifetime ownership cost of an air handler unit** is directly attributable to the air filters selected.<sup>7</sup>

### Impacts of Filters on HVAC efficiency

- Only **0.006"** of **surface debris** can result in a **16% efficiency loss** for HVAC coils.
- Up to **37% more energy is consumed** by AHUs with **dirty coils** vs. clean coils.

## Overlooking Air Filters is a Costly Mistake

Filters can play an important role in reducing your deferred maintenance backlog, so having an optimized program for filter maintenance and replacement is vital to a facility's operations. The time spent on filters and related maintenance, such as purchasing, inventory, staging, removal, and installation, is highly labor intensive.

- **20 to 25 labor hours** are required to replace 100 bag/box filters.
- **10 to 15 labor hours** are required to replace 100 pleated filters.
- One labor week for each set of filters equals **\$96,153 in deferred maintenance**.

By failing to look at ways to analyze and improve processes, reactive Facility Managers put themselves at risk. Short-term solutions and price-driven shortcuts may be perceived as problem solving, but in reality they end up costing companies more. The annual facility **cost of deferred maintenance is \$5 million**. 36% of companies **say that number is even higher**.

Instead of reacting to HVAC issues in your facility, you can put in place a preventative maintenance strategy to help you minimize the time and cost involved in maintaining optimal indoor air quality.

Energy use in buildings could be **reduced by**

**10 – 40%**

by **improving operational strategies.**<sup>8</sup>

**Contact your AAF Flanders representative** for a diagnostic evaluation that can help you identify an optimal filtration solution.

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## Now's the Time to Be Proactive

When working with a tight budget and limited resources, it can be challenging to convince executives to allocate investment to HVAC maintenance and filter replacement.

The first step in optimizing your clean air spending is to work through a Total Cost of Ownership (TCO) analysis. A locally optimized filtration analysis will provide the highest level of air filtration solutions, while also minimizing your total life cycle costs. This is where an application and data analysis specialist can take a true consultative and technical approach to understanding your complete air filtration needs, application, and business goals in order to optimize your performance and lower your TCO.

Using advanced diagnostics software, this specialist can act as a partner, providing the insights needed to help you identify a filtration solution that can reduce operational time and costs while increasing energy savings.

### References

1. 250 facility managers answer: What is your biggest FM challenge?, Rivers, 2014
2. Deferred Maintenance: Survey Says Managers Confident About Overcoming Backlog, Facility Net, 2015
3. The 2015 Core Facility Benchmarking Study, iLab Solutions, 2015
4. How Facility Managers Can Handle Occupant Complaints, Facilities Net, 2014
5. Paying for Deferred Maintenance, Buildings.com, June 2006
6. Department of Energy, *2006 Buildings Energy Data Book*
7. Study by the Energy Systems Lab at Texas A&M University, as reported by the Air Conditioning, Heating and Refrigeration News in "*The High Cost of Deferred Maintenance*", December 2008
8. Research by Rick Biedenweg, President of Pacific Partners Consulting Group and former Assistant Vice President of information resources of Stanford University, as reported by schooldude.com.