



IMPLEMENTING A SUCCESSFUL PREVENTATIVE MAINTENANCE PROGRAM

From AllMax Software, Inc.

The screw pump just unexpectedly went down and there aren't enough hours left in the workday to fix it without going into overtime. You aren't sure when the last time the equipment was checked since the work order log hasn't been updated.

Sounds like a stressful situation. A situation that can be completely avoided with a preventative maintenance (PM) program.

There are four key reasons why PMs fail and those reasons are easy to avoid. Once you have a PM program in place, there are then many things you can do to build upon it.

Why is Preventative Maintenance Important?

It comes down to saving time, money, and improving your plant efficiency. Your first car taught you the importance of preventative maintenance, or what the lack of it can do. If you drive your car for three years without ever getting an oil change, being stranded on the highway with a cracked engine block and a \$3,000 bill makes you a quick believer in preventative maintenance.

Preventative maintenance extends equipment life, decreases corrective maintenance, reduces equipment downtime, and increases accountability. This leads to saved time and money, increased safety, and better plant efficiency.

Why Do Programs Fail?

No Buy-In- Many municipalities think they are too small, meaning they don't have a large enough workforce to keep up with the PMs or they don't have the time. Also, when implementing a PM program, many times the purchase of a CMMS program is discussed and it simply becomes a matter of being too expensive for smaller utilities. The benefits and reason for the program aren't clearly explained so there is either zero support from up top or zero participation from the people doing the work.

Poor Planning- Most PM programs that fail do not have a clearly defined goal before they even get started. You have to know what you're working toward or what you're trying to accomplish. Poor research and data collection during the planning phase are also common. This leads to not knowing the scope of the PM program. This is usually due to not having that type of historical information available from the previous program. Even if you do have an ultimate goal for the program and know the scope, if you don't have a plan in place to get there, it will more than likely fail. This is where having no processes defined hurts your chances.

Poor Execution- Poor planning usually leads to poor execution and many things can contribute to poorly executing your PM program. Falling behind is a tough one to avoid. You simply become overwhelmed with corrective and emergency maintenance and PMs get skipped. It may simply be a case of limited resources to complete the tasks: no parts available, no maintenance techs available, no priority placed on certain pieces of equipment and tasks. Poor scheduling can sometimes lead to falling behind. It doesn't make much sense to schedule eight hours of PMs every day and this leaves room for no corrective maintenance. Likewise, not evaluating your PM schedule to accommodate sick leave, vacation days, training days, etc. Lastly, no accountability. Did the work get done? How do I know? Did something happen during the PM that will hamper our ability to do it next time, etc?

No Review- If you don't have a full review on a routine basis, you're never going to know if the system is working or if the work you are doing is meaningful. Ask these questions during your review: Is the program working? Are the PMs still applicable? Do you know your costs? What areas need improvement?

No buy-in, poor planning, poor execution, and no review process have traditionally been the four areas where PM programs fall flat and are unsuccessful.

How to Make a Successful PM Program

So, how do you avoid all of that mess? Creating a program that can be followed for years to come is important. When you're talking about tracking anything or recording data, it is important to think about the next person. Ask yourself, will the next maintenance manager or maintenance personnel be able to understand this and pick it up where you left up. What will you be leaving behind?

Getting Buy-In- PMs are especially important for small utilities. We already know PM cuts down on corrective maintenance and this means a cut down on big-budget projects. A big plus for smaller facilities. Be very clear to your peers, supervisors, and workforce as to what the ultimate goal of the PM program is. These programs involve a lot of tracking, labor hours, wrench time, downtime, completion speed. CMMS programs are a valuable tool for any plant. The pros far outweigh the cons. Most importantly, they provide you the tracking necessary to generate tons of reports to help you make some informed decisions.

Proper Planning- Once you know what it is you're building toward, you have to know what you're working with. Take inventory of equipment, spare parts, locations, and establish naming conventions that make sense. Once you know everything you have at your disposal, it's time to prioritize. What pieces of equipment are crucial to the plant's performance, what spare parts must you ensure are always on hand.

Scheduling- Take a look at your inventory and run it up against the manufacturer's maintenance. Once completed, you can start laying out a schedule. Come up with naming conventions for the PM tasks as well. Also, define what an ideal time frame for the completion of the task would be. Then prioritize the PMs. This will help when you have instances of a high-priority PM vs. a medium-priority corrective task. Finally, start laying out your master calendar, being sure to leave room for corrective maintenance.

Define Roles- Defining the roles and the processes within the program is a crucial step to ensure success. Figure who is responsible for creating, assigning, approving, and closing work orders and establish a chain of command.

Flawless Execution- Simply follow the plan you've laid out. Make sure PMs are being completed on time, and that everyone is doing their job based on their responsibilities within the PM program. If you have planned properly, then you should see success. But that is only half of the execution. You have to keep accurate records if you want to eventually be able to do some serious reporting and decision making.

Check your Success

You've implemented a properly planned and flawlessly executed PM program. But just how successful were you? Review your PM monthly, quarterly, and annually. Are PMs being completed promptly? Was anything missed? Are any PMs non-applicable or do you need to edit any schedules?

Do you need to repair or replace anything in the facility? A successful PM plan will give that data to make the decision. Ask if the PM is making sense financially. Can the utility handle the time management?

Finally, find what can be improved. Maybe you need to hire additional labor or increase your budget. Would the facility benefit from a CMMS? The answers to all the above questions can be easily found and reviewed with the help of a PM program.

What's Next?

Putting a successful PM program in place kills two birds with one stone. By implementing it, you make your corrective maintenance more manageable. And once it's in place, you can then look to sharing your experience with other departments in the city or neighboring municipalities. Street departments, fleet maintenance, parks and rec, all of these can benefit from a PM program. With the PM, you'll be getting a lot of valuable data. With your core maintenance under control, you can build off that into a full-blown asset management program.

Antero From AllMax Software, Inc.



AllMax Software, Inc. has been providing and supporting data management software solutions designed for maintenance, wastewater, water, and pretreatment professionals for over 25 years, serving over 2,000 customers around the world. Providing state-of-the-art technology and innovative software solutions, AllMax can address the unique data management needs of plants and facilities.

AllMax Software, Inc. makes preventative maintenance programs a breeze. Computerize your maintenance records, equipment tracking, work order management, and reporting with Antero CMMS.



Equipment and Asset Tracking- Tracking equipment and assets is a core part of the preventative maintenance plan. With Antero, the Equipment section allows you to create comprehensive records on all equipment. Enter as much detail as you need, including description, location, original value, vendor, warranty information, and more. Enter consequence of failure and probability of failure numbers to calculate asset criticality. Review work order Templates and Procedures that have been created for a piece of equipment, currently open work orders, maintenance history, in-service history, and more.

Work Orders- Take control of your assigned work in the My Work section of Antero. Easily sort and organize assigned work orders and procedures. Quickly view and complete work with the Work Order Viewer. View your Calendar, customize a Dashboard with useful information, or locate equipment in Mapping. My Work ensures that all the information necessary to get a job done is easily accessible for Antero users.

Work Management- Facility managers have identified that ensuring maintenance is getting done is a top priority. The Work Management section gives you all of the tools to ensure work orders and procedures are distributed, reviewed, and completed. Easily create and schedule new preventative maintenance templates and procedures. Quickly identify and distribute new work orders or address work that needs attention. Custom statuses and indicators give you the information necessary to make decisions.

Meaningful Reports- Antero includes numerous built-in stock reports. Drill down to gain a better understanding of your maintenance program. While Antero features popular usage and cost reports, others are available as well, including employee and labor, parts usage, vendors and orders, and a variety of reports related to work orders and procedures. Custom reports are also available as a service through our technical support department.

All in all, a preventative maintenance program saves time and money by extending equipment life, decreasing corrective maintenance, and reducing equipment downtime. But it is possible to create an unsuccessful PM plan with poor planning, poor execution, and no buy-in. Through clear pros and cons, research, and defined responsibilities, a preventative maintenance program can support the need for improved equipment and facilities and information that leaves a legacy.

If anything, preventative maintenance avoids those unexpected stressful situations. For more information on the Antero CMMS software, contact AllMax Software, Inc. today.



www.allmaxsoftware.com
(800) 670-1867 | sales@allmaxsoftware.com

[f](#) [t](#) [in](#) [▶](#) : AllMax Software