The PJM Pipeline

PJM Mechanical Contractors Publication

JULY 2010

The PJM Pipeline

FOCUS ON WHAT YOU HAVE

A building's mechanical systems are a major investment, comprising roughly 55% of construction costs. But because most of this equipment resides out of sight – and out of mind – on roofs and in mechanical rooms, basements, and interstitial spaces, it is often neglected until problems arise.

HVAC, plumbing and mechanical systems that are not properly cared for break down frequently and have a lifespan that is shorter than expected. Utility bills go up due to decreasing efficiency, and problems that result from poor maintenance are usually extensive, often recurrent, and inevitably costly. Once these problems do occur, owners will find no shortage of contractors who are more than willing to condemn fixable equipment in order to sell new. Naturally, replacement requires less know-how and effort, and is more profitable for the seller.

Building owners can avoid these pitfalls with a professional preventive maintenance program. A good PM contractor takes a holistic, or whole-system, approach to caring for mechanical systems. They examine how everything works together, and individual equipment is maintained and fine-tuned for optimal system performance. How is the air and water balancing in the building? How is temperature control performed? Are there any economizer cycles? What are the occupied and unoccupied times? Is the client heating and cooling the neighborhood for no good reason?

Call PJM's Pat Mosner at (609) 921-1394 to find out how our comprehensive preventive maintenance program can help you. With proper PM, you might very well find that your best ROI can be found, hidden away, in a mechanical room or up on your roof.

Heating - Cooling - HVAC
Plumbing - Refrigeration
Fire Protection - Building Controls
24 Hour Emergency Service

Service Photo Album

Maintenance Review - Engineer inspecting existing conditions and efficiency of hydronic systems.

Fume Hood Exhaust - Pictured are lab fume hood exhausts and process cooling towers.

What's In This Issue

PJM Mechanical Contractors Publication

JULY 2010

The PJM Pipeline

Who's Your Buddy?

The importance of having workers who are well trained in safety is unquestionable. Yes, workers can receive forty-hour OSHA training, tool box talks, specific training, watch videos on safety and understand how to be safe on the job. These things are extremely important to know and implement. But there is something else that workers should practice at all times: the "buddy system". Workers should always keep a close watch on each other, because in many cases potential accidents can be prevented. Accidents happen in a split second, and an extra set of safety-trained eyes may catch something you may have missed. For example, a buddy could spot a potential danger during setup while perhaps your thoughts are elsewhere for the moment.

The buddy system is widely used at Boy Scout Camp, where Scouts are paired with a "buddy". Buddy teams must do activities – swimming, hiking, etc. – together for safety reasons. A Scout knows where his buddy is at all times. During roll call, or when a whistle is blown, boys must be with their buddy and must raise their hands together. It is another way of extending the safety net and training them to look out for one other, because that extra set of eyes, a helping hand, that someone who is watching might see something that his buddy might not.

So when you're on the job – or, for that matter, anywhere else – we say, "Who's your buddy?"

Miracle of Modern Day Plumbing

Modern day plumbing changed human history and our society. Modern plumbing prevents many diseases and promotes sanitary conditions. Some of the first people to design and build a mass public plumbing system were the Romans.

(continued from pg. 1)

Service Photo Album

Underground Pipe - In this photo, an emergency repair is being made to an underground water main. This water feeds the customer's process and needed immediate repair. The break occurred on a weekend, and PJM got the first call on Sunday morning. Two other contractors that had been called had not called back, but our mechanic was on site within 20 minutes. They were back in business that afternoon.

Galvanized Catwalk - In this photo, a new catwalk spans the interstitial space above a new process area. Supply and exhaust ductwork, reheat piping and controls need to be coordinated very closely, and everything that needs to be maintained must be easily accessible. Air and water balancing is in the final stages to complete commissioning.

PJM Mechanical Contractors Publication

JULY 2010

The PJM Pipeline

HOSPITAL WORK

By: Patrick Mosner, President

Hospital work is a bit different than many other projects. Working in an existing operating facility requires isolating your work area in almost a cocoon to keep dust and noise to a minimum so that the rest of the hospital can properly function around you. The real challenge then becomes how not to interrupt services such as chilled water, electric, vacuum, oxygen, reheat, controls, etc. This requires strict coordination and organizing shutdowns, bypassing, providing temporary means and capping with a plan that does not disrupt other functioning areas.

Cleanliness is extremely important. Using solid plastic barriers, booties, scheduled deliveries and perhaps exhaust help keep the areas negative and keep dust within the work area. All of these practices need serious consideration depending on the criticality of the project or area you are working in.

Your client needs to be involved with you through weekly meetings, as the building's occupants will need to know what is happening and when. A client may decide what can be done during operating hours, and what will have to be done on off hours. Because it is a hospital, sometimes off hours may not mean after 4PM or Saturday morning. Operating rooms and certain utilities may need to function during the evening or weekend. Sometimes your shutdown may be between emergency operations. You might have two hours to complete work that might ordinarily take 10 hours, and you need to prep all of the work during the week so that on Friday night at 8PM, you can perform a prefabricated cut cap and get operations back up and running.

In many cases, there are things that cannot be shutdown and you must provide other temporary means and have an immediate switchover. It's not easy work, but it is important to have all of the trades involved in a weekly planning meeting to review what has to happen and when to maintain schedule, quality and happy clients. The client needs to be involved to help with his or her knowledge of the existing facility and to interface with the many users within the building.

As the work progresses, these team meetings can evolve into system walk downs, start ups and commissioning. The key is to get all the trades talking together and have your client as your partner.

Featured Project

PJM Mechanical Contractors, Inc. — Service, Integrity, Safety — Since 1983