The Value of Preventive Maintenance

Supplying a life sustaining product 24/7, 365.

Introduction

- Seth Goertz, Technician for United Water ID.
- I hold Water IV and Distribution III licenses.
- 1999 started with the City of Weiser, ID in the water dept.
- 2004 started at United Water in T&D
- 2005 moved to Production Dept.
- 2009 moved into the Control Systems part of the Production Dept.

Definition of P.M.

- Preventive maintenance is a schedule of planned maintenance actions aimed at the prevention of breakdowns and failures. The primary goal of preventive maintenance is to prevent the failure of equipment before it actually occurs. It is designed to preserve and enhance equipment reliability by replacing worn components before they actually fail.

Why is PM important to the water industry?

Without Adequate PM we get…

We have a lot to look at!

- Our water distribution systems are buried.
- Treatment plants are designed for 20 years.
- Reservoirs, booster stations, and prv’s once installed never need to be maintained.
- Most city planners are more concerned with streets and sidewalks that the health of the water system.

Up hill battle

- When the water system is running well no one knows we exist other than to complain that our water is too expensive.
- Getting manpower and financing to maintain these thousands to millions of dollar systems seems harder to justify to the than the initial project.
- Breaking the “It’ll run itself” mentality.

What can we do?

- It’s not my responsibility. “I told them guys and they don’t listen to me. So I figure if they don’t care I don’t care.”
- They do care (hopefully). Like anything education is the key!

What I like about a PM program.

- It gets the dusty manuals looked at.
- Operators get comfortable and confident with equipment.
- **Builds trouble shooting skills.**
- Getting the info into a spreadsheet can give you data to educate the City Fathers or Department Managers.

Starting A PM

- Identify your assets. (Pumps, valves, mains, generators, etc.)
- Set up a maintenance schedule based on recommended intervals or as water quality dictates.
- Train the operators!

PM Hazards

- Damage to an adjacent equipment during a PM task.
- Damage to the equipment receiving the PM task to include such things as: Damage during the performance of an inspection, repair, adjustment, or installation of a replacement part.
- Installing material that is defective, incorrectly installing a replacement part, or incorrectly reassembling material.

Something to keep in mind.

- In the fossil fuel power industry 52% of unplanned power disruptions comes in the first week after a planned maintenance shut down.