

# THE FACILITY FILES

By Amanda Parolise



## CARBON FOOTPRINT

Carbon Neutral



# Pump: P2-1

**Date:** August 2013  
**Building:** Mechanical Room  
**Floor:** Basement  
**Year Installed:** 1977  
**Inspected By:** AEM  
**Serial Number:** 0111123  
**Equipment Type:** Secondary Hot Water Pump  
**Manufacturer:** X-Y-Z

**Model:** XYZ SHWP  
**Size:** 310gpm  
**Hp:** 15  
**Volts:** 460/3/60

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## EXISTING CONDITIONS AND DEFICIENCIES

Y	N	NA		Y	N	NA	
			<b>HVAC</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	All ATC devices appear in good condition?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pump in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>ELECTRICAL</b>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is there sufficient head?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is a high-efficiency motor installed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is pressure testing of pipe distribution complete?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there a localized disconnect?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the pump/piping system leak-free?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the pump have a VSD?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pressure differential installed around pump into one gauge?				<b>PLUMBING</b>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the insulation installation complete?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are there localized drains near the equipment?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Equipment and piping labeled with applicable tag and flow arrows?				<b>MAINTENANCE</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flow sensors installed and monitoring flow?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	System flow diagram mounted by unit?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature sensors installed and functioning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O&M manual secured at unit or on file?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the piping installed per detail?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Work order last completed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there access around equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there a service contract for the pump?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there any excess vibration at the pump?				

## END OF EQUIPMENT USEFUL SERVICE LIFE (USL)

USL (YRS)		USL (YRS)	
36	Motor is 36 years old.	20	Motor USL benchmark - 20 years.
36	Controls are 36 years old.	16	Controls USL benchmark - 16 years.
36	Unit is 36 years old.	16	Unit USL benchmark - 16 years.

## STANDARDS AND CODE ISSUES

Y	N	NA		Y	N	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does unit meet current codes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does unit/system meet current energy code?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is emergency power a requirement?				

## ENERGY CONSERVATION

Y	N	NA		Y	N	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	End of USL, replace with new VSD high-efficiency pump?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Consider thermal ice storage?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Can unit/system be retrofitted to meet latest energy code?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Consider DDC, optimize control system management.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Consider waterside economizer?				

## NOTES

Y	N	NA		Y	N	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Can equipment be readily renovated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Are unit controls interactive with building ATC/computer?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Unit basically operates 24-7 year-round.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Are there energy meters (gpm, etc.)?