

Water Heater Report

Oct 12,2006

At the May 2006 board meeting we were presented a proposal to replace the four A O Smith, 100 gallon hot water heaters with either four new 100 gallon A O Smith water heaters, option 5 attached, at a cost of \$11,693.00, or replace them with four On Demand heaters, option 3 attached, at a cost of \$16,450.00.

We were told the water heaters we now have were leaking and needed replaced. After being elected to the Board of Directors I decided to look into this to be sure we needed to spend this kind of money.

I first called Smith Mechanical and requested that he tell me how much hot water was needed to service six washing machines and four showers. He asked me what we had and I told him we had the four 100 gallon heaters servicing these showers and washing machines. He said this was a little over kill and I told him that was why I had called for the information. He said there was a formula to figure it out and he would call me back. On his return call he said it would take only 58 gallons per minute. He said this would never happen as the machines all cycle at different times and most likely not all of the showers would be running at the same time. He suggested and I agreed, that one of the 100 gallon heaters would be enough to service what we had. I then went to the water heater closet and looked them over closely. I found lime deposits on two off the union connectors. The one that had been shut down earlier in the year and one that was in service. I felt of the union on the one in service and found water.

I had David shut down the other two heaters on July 28,2006 and flush them out with cold water. After the remaining heaters were shut down, with one left running, we observed how it was operating for a full month. We had no complaints of hot water shortage. We then increased the shower timers to about six minute. To this date we have had no complaints.

I then called Smith Mechanical and told him of the lime deposits on the union connectors. He said 50%of the calls he gets to replace a water heater was only a leaking union.

With the Board of Directors approval, I had Smith Mechanical change out the leaking unions, check the anodes, and test the tanks. They found six leaking unions and one leaking drain valve. They then tested all four tanks and found them to be sound and ready for service.

We have four 100 gallon A O Smith, commercial hot water heaters. They have glass liners with lime protection anodes. They have 300,000 BTU, fast recovery burners. We have one on line since July 28, 2006. Should we have a problem,

when the park is full, we can put a second one on line and still have two in reserve. Someday these heaters will wear out. I am not against replacement with On Demand heaters when this does occur. On Demand systems are less expensive to operate and will save on fuel costs. We will need to know how many On Demand heaters we actually need for our laundry and showers. We had been using all four 100 gallon heaters for too many years and have wasted lots of dollars on extra fuel costs. We are now operating on one 100 gallon water heater and this should cut our fuel costs some. The cost for the repairs was \$563.21. A copy of the invoice is attached.

The system for On Demand heaters was \$16,450.00 and was not budgeted for, minus the repair cost on the heaters of \$563.21 leaves \$15,986.79 we did not have to spend. It also gives us time to get reserves and plan for the eventual replacement of the heaters

Charlie