



## ELK RIVER PUBLIC UTILITY DISTRICT

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### **Flammable Vapor Ignition Resistant (FVIR) Water Heaters Notice**

Beginning July 1, 2003 gas water heater manufacturers will be required to meet new safety design standards on all gas fired water heaters. This new standard will have a direct effect on consumers. Residential natural and propane gas water heaters with storage capacities of 30, 40, or 50 gallons and input ratings of 75,000 Btu or less must comply with the new American National Standards Institute (ANSI) standard: ANSI Z21.10.1 1-2001. Phase 2 will be effective July 1, 2004 and will include 30, 40, and 50 gallon power-vented water heaters. In July 1, 2005 phase 3 will cover the remaining models.

The reason for this major change in gas water heater design is to reduce the risk of accidents involving flammable vapors and gas water heaters. In recent years our industry has noticed an increase in the occurrence of accidents involving the improper storage or improper use of gasoline and other flammable materials. Where flammable vapors are present, accidental ignition is potentially possible from a variety of sources including electrical sparks from appliances, vehicles, lawn equipment, switches, motors, static electricity, etc. A very small percentage of these accidents were related to the pilot light on the gas water heater, apparently igniting the flammable vapors.

For years, it was determined the best solution for gas-fired appliances was to elevate the potential ignition source off the floor in areas where flammable vapors may be present and that undoubtedly prevented some accidents. However, the industry wanted to do better. A coalition of participants, including gas industry associations, government agencies, water heater manufacturers, and others has worked diligently to re-design the gas water heater to reduce the chance of igniting flammable vapors.

The American Water Heater Company in Johnson City, Tennessee has been a leader in the new water heater technology and their Flame Guard Safety System was selected as one of Popular Science Magazine's 1999 "Best of What's New" honors. This design was the first to meet the new Flammable Vapor Ignition Resistant (FVIR) water heater standard and has successfully completed lab and field tests. ERPUD has made these units available to our customers for several years.

The new ANSI standard will apply to new water heaters manufactured and not to existing water heaters. Water heaters manufactured prior to July 1, 2003 may continue to be installed until existing inventories are depleted. While existing water heaters are very safe, the new design will significantly enhance the safety of gas water heaters.

Page 1 of 2



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We all understand the price for research and development; testing, manufacturing, advertising, etc. of any new product can be very costly. I am sure we also agree it is difficult to put a price on safety. While this new technology will increase the cost of a gas water heater, natural gas water heaters still maintain significant advantages in lower operating cost, efficiency, hot water recovery rate, dependability, and safety.

The International Code Council Inc., which incorporates the International Fuel Gas Code, Building Officials and Code Administrators International Inc, International Conference of Building Officials, Southern Building Code Congress Inc, and the American Gas Association have addressed the installation of gas appliances meeting the ANSI standard. The current International Fuel Gas Code, section 305.3, provides for an exception stating "Elevation of the ignition source is not required for appliances that are listed as flammable vapor resistant and for installation without elevation". Since the majority of residential water heater installations are in garages, the ability to eliminate the current elevation stand requirement will help compensate for the additional cost of the new ANSI design standard.

For more information please call or drop by any of our convenient offices or visit our website [www.erpud.com](http://www.erpud.com). Click on the Safety tab; then choose Flammable Vapor Ignition Resistant Water Heaters. You may also click on the Appliances tab; then choose Water Heaters and link to the American Water Heater Company website.

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Page 2 of 2

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