Building Division Bulletin # 07-001

**Topic:** Sierra Vista Sub-watershed Water Conservation Overlay Zone (Gray Water and Hot Water on Demand).

**Affected Area:** All New Construction of residential structures located in the Sierra Vista Sub-watershed Water Conservation Overlay District.

**Effective Date:** January 5, 2007

**Background:** On December 5, 2006 the Cochise County Board of Supervisors adopted the Sierra Vista Sub-watershed Water Conservation Overlay District. The overlay district has a specific set of regulations that applies to all development within a particular geographic area, rather than the entire County. **These new regulations went into effect on January 5, 2007.** Although the overlay zone does not change anyone's underlying or existing zoning, it requires new water conservation site development standards that will be required with every new residential or non-residential building permit in the Sierra Vista Sub-watershed. These standards generally apply to new construction. The following is a summary of the adopted changes to the Zoning Regulations and to what project that the measures will pertain to.

**RESIDENTIAL PERMITS ONLY**

**Gray Water Plumbing:** New residential construction shall have gray water line(s) plumbed to stub out, and to be capped and clearly marked so as to permit the optional use of gray water by residents. The gray water plumbing must connect at least two plumbing fixtures, and preferably those that produce the most gray water without compromising the efficient evacuation of the black water pipes.

**General and Means of Identification**
This measure is accomplished by connecting at least (2) fixtures (laundry, tub, bathroom sink, but not kitchen sink.) to a gray water system clearly identified. The industry standard for gray water pipe identification is a continuous stamped label on the pipe or tape stating “DANGER-UNSAFE WATER.” Another accepted means of identification is to have the pipe used for gray water to be colored purple.

**Construction Document requirements**
For the purpose of this measure, construction documents shall provide information on the materials proposed and methods of installation. These drawings or specifications shall include details of construction, including a system profile and/or construction sections necessary to determine compliance with this water conservation measure.

**Installation**
This adopted water conservation measure only requires the applicant to plumb the system to a stub
out. If the applicant wishes to complete the system, documentation on the construction methods for the holding tanks, irrigation or disposal field must be submitted in accordance with the Arizona State Plumbing Code Appendix G. Gray Water piping having a direct connection to the sanitary drain shall be downstream of an approved water seal type trap or traps. If no such trap exists, an approved vented running trap shall be installed upstream of the connection to protect from possible waste or sewer gases from the building. All valves shall be readily accessible (access without the necessity for removing a panel or similar obstruction).

**Hot Water on Demand**: In new construction, a hot water system will be installed to provide hot water on demand at the point of use in sinks and baths/showers. Recirculation devices shall include timers, temperature sensors or remote control operation. Point of use hot water heaters that serve individual fixtures or other alternatives that deliver hot water at each fixture within a waiting period of 15 seconds or less are acceptable.

**Construction Documents**
The construction shall include the type of water heating system being proposed. This may be in the form of cut-sheets for a specific appliance or notation on the construction documents stating the operation procedure the system will provide. Manufacturers should have this information available to the consumer.

For additional questions about conforming to these new regulations, please contact Luis Garcia at the Planning Department at 520-432-9240.