

**Metropolitan Domestic Water Improvement District  
Board of Directors Meeting**

**February 11, 2013**

**Update of Well Abandonment and Capping Policy**

**Synopsis**

The Board of Directors is requested to approve the updated Well Abandonment and Capping Policy, an important part of the District's groundwater protection efforts. The Policy was established in 1997 because the Arizona Department of Water Resources (ADWR) did not have sufficient staff and resources to closely oversee well closures. Private and public well owners are required to properly decommission or cap water wells to protect public health and the drinking water quality in the aquifer. The Board amended the policy in May 2003. This protection program has won several state and national awards and many Arizona water providers have adopted the program.

**Background**

The District has had a long history of trying to protect and preserve the high quality of its groundwater supply. As one part of the development of a groundwater protection program (Wellhead Protection), the District's staff has tracked over the last fifteen years the decommissioning of numerous private wells on platted land approved for urban development. Prior to the adopted policy, staff found in many instances that these wells were not being properly closed in accordance with state rules. Often the construction crew was unaware a well existed on the property and heavy equipment decapitated the well thereby providing an unrestricted access for contaminants to enter groundwater supplies.

ADWR requires all wells that will be impacted by urban development be properly abandoned. For instance, if a home lot is planned where a well exists and it is not dry; State law requires the well be backfilled with a cement mixture from the bottom of the well to within 20 feet of the surface. The purpose of the well sealing is to prevent any surface contaminants from entering the well and mixing with groundwater. If the well will not be in the path of a construction project, it can be capped at the surface by welding a steel plate over it.

District staff developed an educational and inspection program for well abandonments and capping. First, the District's Development Supervisor notifies the developer of the State rules on well abandonment and capping and then provides the fifteen years the decommissioning of numerous private wells on platted land approved for urban development. Prior to the adopted policy, staff found in many instances that these wells were not being properly closed in accordance with state rules. Often the construction crew was unaware a well existed on the property and heavy equipment decapitated the well thereby providing an unrestricted access for contaminants to enter groundwater supplies.

ADWR requires all wells that will be impacted by urban development be properly abandoned. For instance, if a home lot is planned where a well exists and it is not dry; State law requires developer with a copy of a step by step manual. The Development Supervisor next notifies the Hydrogeologist of the pending development. The Hydrogeologist reviews in-house aerial photographs that identifies registered wells and determines if the proposed development has any wells. A field inspection of the property is also completed by staff to confirm whether any unregistered wells exist.

The Hydrogeologist then notifies the Development Supervisor of his findings. Any wells found are added onto the water system development plan along with the applicable state rules. The developer then applies for a well abandonment permit with the ADWR and the developer sends a copy to the District. The developer notifies the District when the abandonment will be scheduled so District staff can observe and confirm that the abandonment is completed properly.

The program has been highly praised by the ADWR as being the first in the State to propose such a program. The District received state and national awards for the program from the Arizona Water Pollution and Control Association (2000), Arizona Governor's Pride (1999), the National Ground Water Association (1998), and the U.S. Environmental Protection Agency (2002). Additionally, several Arizona water providers have adopted the program and implemented it.

Tucson Water has adopted the program and added a feature adopted by the District in 2003. The City of Tucson requires if the well owner does not abandon the well within the new subdivision, then the well owner must sign a waiver allowing the water utility to drill a well that would impact the private well. Current state law prohibits a water utility from drilling and operating a well that would impact "exempt" wells (wells pumping less than 35 gallons per minute) unless the well owner waives its rights to object. The modification provides the District with more flexibility in siting future wells within its service areas.

### **Issues**

The policy is being updated so that information and references are current. ADWR has modified its forms as well as has new contact information, all of which is included in the policy. Outdated text has been removed. There are no substantive changes to the policy update, facts.

Staff believes the wellhead protection program has been very beneficial to District customers. First, prevention is always less costly than groundwater clean up and negative publicity. The cost of the program has involved minimal staff time in comparison to the previous mentioned costs. Secondly, the program is designed to be primarily educational but does require the developer to adhere to State rules as a condition of connecting the developer's water system to the District's system. Thirdly, the proposed program has been highly received by the State and nationally as an innovative program and a model. Lastly, the effort has provided the District with good exposure to its customers and others as trying to protect water resources and the health of the community.

Staff believes the proposed update will provide developers and well owners the most current information to conform to State law.

**Staff Recommendation**

It is recommended that the Board of Directors adopt the District's updated policy entitled "Capping and Well Abandonment Manual for Developers and Well Owners."

**Suggested Motion**

I move that the Board of Directors approve the update of the District's policy entitled "Capping and Well Abandonment Manual for Developers and Well Owners."

Respectfully submitted,

Warren Tenney  
Assistant General Manager

I concur with the above-noted recommendation.

Respectfully submitted,

Mark R. Stratton, P.E.  
General Manager