

**Placitas Trails Water Cooperative (PTWC)
Placitas, NM 87043**

**PTWC Arsenic Abatement Compliance Plan
January 25, 2010**

Historical Background

Placitas Trails Water Coop (PTWC) is a New Mexico cooperative incorporated in 1992 with the purpose of providing safe, reliable water to the Placitas Trails residential community. It consists of approximately 152 member customers in a subdivision that is essentially completely built-out. Its water has a blended arsenic contamination level of 30 to 45 ppb. Since notified as early as 2006 that the revised allowable level is now 10 ppb or less, PTWC has worked steadfastly and diligently to procure the proper technology at the most reasonable cost to remove the arsenic to the EPA acceptable level.

Financially, PTWC has operated with annual revenues of approximately \$75,000 and has had sufficient funds to hire a part-time Level 4 Operator and a part-time professional administrator. This budget has also permitted PTWC to accumulate an equipment replacement (depreciation) reserve of \$100,000.

Arsenic Abatement Efforts

As we now know, there is no single technological solution to removing arsenic from water. Although there are companies, consultants and systems offered for sale, the effectiveness and cost of each technological process is determined by many variable factors such as the nature of the natural impurities in the water, its pH levels, use of chlorination, the selected technology, as well as the site limitations of its geographic location.

In 2007 PTWC secured a loan from the NM Finance Authority in the amount of \$217,000 for this purpose and in October 2007 we contracted with Souder Miller & Associates for a Preliminary Engineering Study. The purpose of the study was to obtain an expert's recommendation on the three best and most cost effective systems for PTWC, considering our water make-up, our site limitations and our aged water system's infrastructure.

We received their report in January 2009. Three systems were recommended; AdEdge, Orca and ARS. All three required up-grades and modifications to our water system's infrastructure. All three ranged in cost estimates of \$350,000 on up. After further study by our Arsenic Advisory Committee and with the advice of additional experts, the Board selected the Orca arsenic removal technology. This technology has been adopted, installed and is in full operation in a neighboring water system called Anasazi Trails with good results. In addition, they have been very generous in sharing their information and experience with us.

PTWC Arsenic Compliance Plan

Presented below is the PTWC Arsenic Compliance Plan we instituted in 2008 which we are

following:

1. Secure an Engineering Firm to conduct a Preliminary Engineering Report on available technological systems compatible with our water system and provide preliminary cost estimates.
Date Completed: PTWC signed an Agreement with Souder Miller & Associates on October 11, 2007 and received a completed copy on January 2009.
2. Secure legal rights to use the Orca proprietary technology and technical assistance.
Date Completed: PTWC signed an agreement with Orca for the use of their technology for design (by a NM Licensed Engineer) of a system compatible with the Placitas Trails water system and for future technical assistance during construction and operational phases on July 9, 2009.
3. Inform the PTWC membership of the progress of the arsenic abatement project, its projected cost at its Annual Membership Meeting in October 2009 and institute a "Special Assessment" of \$45.00 per month per membership, effective January 2010 to raise additional funds of approximately \$400,000 in five years for anticipated expenditures.
In Progress: PTWC held its Annual Membership Meeting on October 21, 2009 and instituted a \$45.00 "Special Assessment" beginning with the January 2010 billings for an unknown number of years.
4. Engage an Engineering Firm to prepare plans and specifications for the repairs and renovations and the installation and integration of the Orca Arsenic Removal technology to our remodeled water system.
Estimated Date of Completion: March 1, 2011
5. Prepare and issue an RFP for the construction, award contracts, construct and test system.
Estimated Date of Completion: January 1, 2012
6. Begin operations.
Estimated Date of Completion: July 1, 2012
7. Achieve compliance with the Arsenic MLC requirements by having a 4 consecutive quarter RAA concentration of Arsenic below the MCL of 0.10 mg/L
Estimated Date of Compliance: January 1, 2014.