VICTOR VALLEY WATER DISTRICT, CALIFORNIA

Design of Infrastructure Improvements for Compliance with the Arsenic Rule

HIGHLIGHTS

- Detailed costs developed for IX and C/F under several scenarios, including: life cycles, blending options, and annual water production.
- Detailed costs developed for arsenic waste residual disposal, including: non-hazardous, California hazardous, and RCRA classified waste.
- Proposed schedule allows for fast track design and construction of two facilities and 4 miles of pipeline in less than 14 months.

An ion exchange treatment packaged system was evaluated against C/F under several life-cycle scenarios and treatment modifications.

Carollo is currently working with the Victor Valley Water District to develop two treatment facilities with a combined capacity of 15 mgd. Several area wells with moderate levels of arsenic will be blended with "cleaner" wells. The anticipated treatment strategy is as follows:

- Base demand - Activate low arsenic wells.
- Moderate demand - Activate blending facility to blend low and moderate arsenic wells.
- High demand - Activate treatment facility with option of side stream treatment.

The proposed pre-purchase strategy and conjunction of pipeline and treatment facility work will help ensure project completion by the January 2006 deadline for compliance with the Arsenic Rule. Two treatment facilities and up to 4 miles of new pipeline will be needed to bring the District's Zone 3 area into compliance with the arsenic rule.