

**WEST VALLEY WATER DISTRICT  
PROJECT STATUS REPORT FOR  
GROUNDWATER WELLHEAD TREATMENT SYSTEM PROJECT**

**CLEAN UP OF PERCHLORATE AND VOC CONTAMINATION IN  
GROUNDWATER WELL NO. 6 AND WELL NO. 11 IN THE RIALTO AREA**

**DETAILED ACTIVITY REPORT AS OF MARCH 1, 2012**

The proposed project consists of the construction and operation of a groundwater wellhead treatment system to remove perchlorate, nitrate, and trichloroethylene (TCE) from groundwater coming from drinking water production wells located in the Rialto-Colton Groundwater Basin (Basin). As part of the proposed project, groundwater from contaminated wells will be conveyed via existing and new pipelines to a proposed treatment plant to be built at the West Valley Water District's (WVWD) headquarters located at 855 West Baseline Road, in the City of Rialto. Upon successful completion of a required initial startup demonstration period, overseen by the California Department of Public Health (CDPH), approximately 2,000 gallons per minute (gpm) of treated groundwater from the proposed project will be used by the District and the City of Rialto for drinking water supply.

**PROJECT STATUS**

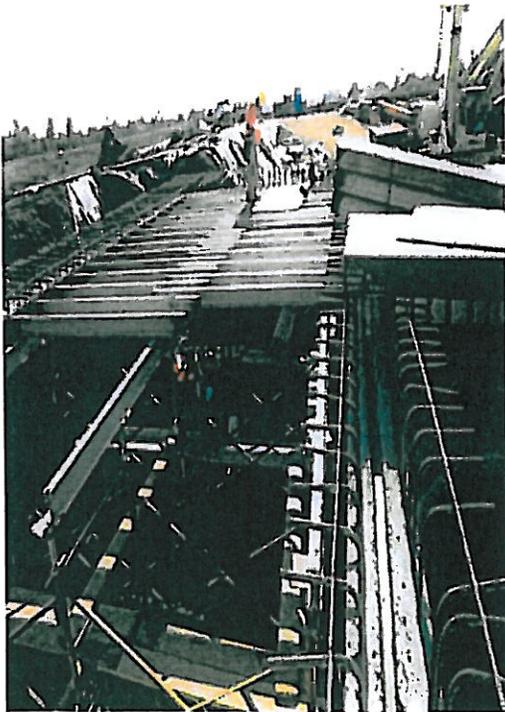
The Groundwater Wellhead Treatment System Project consists of three separate projects: the construction of a treatment plant; the re-equipping and integration of Well No. 6 and Well No.11 with the treatment plant; and pipelines connecting the wells to the treatment plant.

***Treatment Plant***

In April of 2011 the West Valley Water District (District) issued a notice to proceed to WM Lyles Company (WM Lyles) for the construction of the treatment plant. WM Lyles was selected through a competitive bidding process prior to the awarding of this project. The original project anticipated constructing the treatment plant on a foundation that consisted of cast in place piles (approximately 200). The project was designed to minimize the displacement of potential unsuitable material on the site. WM Lyles proposed at their own expense, to retest the site material in order to confirm the extent of the unsuitable material. After the tests were completed, it was proposed to remove the unsuitable material in order to reduce costs and the amount of time to construct the foundations and underground tanks. The District approved the proposal and WM Lyles began the removal of approximately 900 cubic yards of unsuitable material in August of 2011 and concluded in September of 2011. Majority of the material was hauled to an approved disposal site in Parker, Arizona.



Once the unsuitable material had been removed, WM Lyles commenced construction of two underground tanks; chlorine contact tank and backwash tank. These two tanks were completed January of 2012. At that time, new backfill material was delivered and compacted to prepare for the construction of the slab foundations for the building and equipment.



As WM Lyles continues to construct the foundation, underground plumbing, and electrical and control systems, several large pieces of equipment have been delivered to the site: two aeration tanks; (4) bulk chemical storage tanks, (1) DAF tank, (2) Siemens multi-media filters and several large valves and piping supplies. The Fluidized Bed Reactors will be delivered when needed. This equipment has been provided to WM Lyles by the District to be installed as part of their contract.

The manufacturing and delivery of this equipment was funded by the US Department of Defense's Environmental Security Technology Certification Program (ESTCP).



### ***Well No. 6 and Well No. 11***

Well No 6 and Well No. 11 are two existing groundwater wells located in the Rialto/Colton basin that are being re-equipped and integrated with the treatment plant. This project was awarded to Fleming Environmental in February of 2012. Fleming Environmental has been selected through a competitive bidding process prior to the awarding of this project. A preconstruction meeting has been conducted and work will commence in April of 2012.

### ***Pipelines***

The District is requesting bids for the construction of the pipeline portion of this project. The pipelines will enable the well water to be conveyed to the treatment plant. This portion of the project will also construct pipelines for discharge of treated water during the testing phase of the project to the Cactus Flood Control Basin and a sewer line to connect to the City of Rialto's sewer system for discharge of suspended solids from the back wash process. We are planning to award this project in March of 2012, commencing work in April of 2012.

### **SCHEDULE**

The overall project construction is scheduled to be complete by the end of July 2012, at which time we will begin the testing phase of the treatment plant. We are anticipating a 6-9 month testing period to demonstrate the performance and operational requirements prior to delivering water to the District's drinking water system. We are anticipating that a final permit from the California Department of Public Health would be issued in the first quarter of 2013.

## **PERMITS**

The District is responsible for obtaining all permits on this project. Below is a list of permits required and their status as of this report.

**CEQA:** The District completed a Mitigated Negative Declaration and filed a Notice of Intent to construct the project in September of 2009.

***Santa Ana Regional Water Quality Control Board (Regional Board):*** The District is required to obtain two permits with the Regional Board. The first permit required is for the removal of contaminated and unsuitable material from the site. The District conducted a Phase II study of the site and found that the site was used as an old burn and dump site. A plan was put in place and approved by the Regional Board to remove and haul the material to an approved dump site in Parker, Arizona. Once the work commenced to remove the material, a monitoring plan was implemented and a final report was submitted to the Regional Board. The second permit required is a Waste Discharge Permit (WDR). This permit will enable the District to discharge to the Cactus Basin during the testing period and ultimate operation of the plant for the future. The District has received a letter from the Regional Board stating that our application is complete, however the Regional Board is unable to issue a permit until a new General Permit is adopted at its June 8, 2012 Regional Board meeting.

***South Coast Air Quality Management District (AQMD):*** The District is required to obtain two permits from AQMD. The first is a construction related permit for the removal of hazardous material from the site. The permit has been obtained and removal of the material is complete. The second permit required is for the operation of the treatment plant. Two areas that are requiring a permit is; the water aeration tanks and the acetic storage tank. The aeration tanks permit is issued and the District is permitted to install these tanks. The acetic storage tank permit is in process and we should have it in a couple of weeks.

***San Bernardino County Flood Control Permit (Flood Control):*** The District is required to obtain two Flood Control permits. The first is a permit to gain access to two pieces of property adjacent to the project site. This property is being used by the contractor as a storage and laydown area. The second permit is for the construction of the pipelines in Flood Control property, and the use of the Cactus Basin for recharge of the discharged water during testing and future operations of the project. The permit will be issued in March of 2012. The District and Flood Control will eventually enter into a licensing agreement for the permanent use of the property for the pipelines and operation of the treatment plant.

***US Army Corp of Engineers (USACE):*** No permit is required by the USACE.

***US Fish and Wildlife Service (F&W Service):*** Due to the fact that there are no endangered species in the vicinity of the project, no permit is required by the F&W Service.

**California Department of Fish and Game (CDFG):** The District is required to conduct a survey for the Borrowing Owl and found them not to be present in the area. Therefore, no permit is required by the CDFG.

**California Department of Public Health (CDPH):** The District has prepared and submitted a permit application to amend the District's drinking water permit to operate for the implementation of the groundwater wellhead treatment system project. The permit application is accompanied with the Guideline 97-005 documentation for Well No. 11 and Well No. 6. This document is currently under review by the San Bernardino office of CDPH and pending approval.

### **BUDGET**

We are estimating the total project cost to be approximately \$22.4 million. The funding sources include:

CDPH Prop 84	\$10.0 million
Supplier' Costs	
ESTCP/DOD	\$2.9 million
SWRCB/RWQCB CAA Fund	\$2.7 million
SAWPA/DWR Prop 84	\$1.0 million

The remaining amount will be covered by the District, approximately \$5.8 million.

The CDPH Prop 84 funds will cover the majority of the treatment plant construction excluding the major equipment: fluidized bed reactors, aeration tanks, multimedia filters and other equipment. This equipment was identified as owner provided equipment in the WM Lyles contract.

The ESTCP/DOD funds are being used to purchase the major equipment as described above.

The SWRCB/RWQCB CAA funds have been used for: treatment plant and pipeline design; CEQA and geotechnical services; grant application preparation; project management; National Contingency Planning (NCP) process; treatment plant bid documents; site work preparation including the relocation of (2) fuel tanks which will remain at the same address during the life of the project; and CDPH 97-005 permit preparation.

The SAWPA/DWR Prop 84 funds will be used for the pipeline construction and site work.

The remaining tasks or activities that are not covered by the funds identified above will be covered by the District.

The original treatment plant project budget is \$10,926,052. To date the District has issued three change orders:

1. Contract Change Order No 1 in the amount of \$ 383,948 consisting of:
  - a. Eliminating the cast-in-place drilled holes pile support system.
  - b. Requires the hauling of RCRA material away from the site.
  - c. Redesign of the treatment plan foundation system to a slab on grade instead of a pile-supported foundation.
  - d. Removal of RCRA and non-RCRA hazardous waste encountered as a result of the building of the treatment plant. Legally dispose of such waste.
  - e. Screen all Class II non-hazardous waste and/or non-contaminated material (8-inch minus) and reuse at bottom of approximate 12 feet excavation.
  - f. Eliminates the use of the previously identified in (WML Co.'s original bid) Mecca disposal site, and alternately will employ the Parker site.
  - g. Allows hazardous waste hauling to commence at 7:00 a.m. over a minimum of nine (9) working days and further allows use of the West Valley Water District West Gate for this purpose.
  - h. Includes all T&D costs, import of suitable material, building slab redesign engineering and consulting costs associated with this change.
  
2. Contract Change Order No 2 in the amount of \$129,731 consisting of:
  - a. Process pumps for the project changed from the listed manufacturer Deming to Paco, as Paco Pumps meet the California Code of Regulations' NSF certification requirements. Deming pumps do not meet the NSF Certification requirements.
  
3. Contract Change Order No 3 in the amount of \$42,242.33 consisting of;
  - a. Contractor electrifying the chain hoist and motorized trolley with 460V, 3 phase power in the blower room; and
  - b. Changes to the location of the electrical service requested by Southern California Edison (SCE); and
  - c. A change in low headroom hoist, at no cost to the District.

New Total treatment plant contract amount with WM Lyles is \$11,481,973.33.

Any costs that exceed the funding provided by CDPH and others will be covered by the District.