



# REQUEST FOR PROPOSALS

# **FOR**

Tapia Water Reclamation Facility Chloride Study

PROPOSALS DUE by 3:00 p.m., September 7, 2017

LAS VIRGENES – TRIUNFO JOINT POWERS
AUTHORITY
4232 LAS VIRGENES ROAD
CALABASAS, CA 91302
818.251.2100

August 2017

# REQUEST FOR PROPOSALS Las Virgenes – Triunfo Joint Powers Authority

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#### **ATTACHMENTS**

- Tapia WRF NPDES Permit and TSO
- Standard Consultant agreement
- Tapia Water Reclamation Facility Alternative Disinfection Study (July 2011)

# **I. BACKGROUND INFORMATION**

The Las Virgenes – Triunfo Joint Powers Authority (JPA) was formed between the Las Virgenes Municipal Water District (LVMWD) and the Triunfo Sanitation District (TSD) in 1964 to construct, operate and maintain a joint wastewater treatment system for their respective service areas, primarily within the Malibu Creek Watershed. The JPA facilities include the Tapia Water Reclamation Facility (WRF), the Rancho Las Virgenes Composting facilities, approximately 60 miles of trunk sewers, and an extensive recycled water transmission and distribution system.

The Tapia WRF was originally constructed to treat 0.5 million gallons per day (MGD). Several expansions have increased the plant to a capacity of 12 MGD, treating wastewater to the tertiary level. Tapia currently treats approximately 7.0 MGD ADWF, which is disposed of through three different methods: recycled water use, discharge to the Los Angeles River, or discharge to Malibu Creek. Discharge to Malibu Creek and the Los Angeles River are regulated under a National Pollutant Elimination System (NPDES) permit issued by the Los Angeles Regional Water Quality Control Board. Due to the development and implementation of new Total Maximum Daily Loads to protect benthic macroinvertebrates in Malibu Creek, the permit limits for nutrients discharged to Malibu Creek have been drastically reduced making discharge of effluent impractical.

In 2016, the Joint Powers Authority Board selected the use of indirect potable reuse as the preferred method to attain regulatory compliance through a project known as "Pure Water Project Las Virgenes – Triunfo. A new Advanced Water Treatment Plant (AWT) will be constructed to produce purified water from Tapia's effluent, which will be used for surface water augmentation, and eventually, treatment and distribution to potable water customers. The implementation of indirect potable reuse will eliminate almost all discharge of Tapia's effluent. There will still be instances of discharge to the L.A. River when there is not enough available water to start up the AWT or when there is high effluent flows at Tapia due to wet weather.

In June of 2017, the Los Angeles Regional Water Quality Control Board approved a new NPDES permit and Time Schedule Order (TSO) for Tapia. The permit recognized that compliance with the wintertime TMDL nutrient limits would be achieved through indirect potable reuse and provided a 13.5-year time schedule for compliance. The TSO was issued to address a change in the chloride limit for discharge to the Los Angeles River. In previous permits, the limit for chloride in effluent discharged to the Los Angeles River was 190 mg/L. However, during the permit renewal, it was found that there was no regulatory justification for this limit and that a Basin Plan limit of 150 mg/L should be implemented. Because Tapia cannot meet the 150 mg/L limit, a TSO was issued. In the TSO a milestone schedule was included which calls for a chloride source investigation and evaluation report with identified options and recommendations to be completed which will result in the consideration of a discharge-specific variance, the development of a site-specific water quality objective, or other basin plan amendment to restore the 190 mg/L chloride limit. The scope of this RFP is to develop the source investigation, evaluation, identification of options and recommendation for chloride in Tapia effluent as outlined in the TSO.

# **II. SCOPE OF WORK**

The proposed scope of work includes the following tasks, however, the consultant should include additional tasks as necessary for the ultimate success of the project:

# 1. Investigation

- a. Identify chloride levels in all source waters delivered to residents in JPA service area from 1999 to present. The composition of the various sources of water delivered to the service area shall be described, including but not limited to water from the SWP, Colorado River Aqueduct, Los Angeles Department of Water and Power, and Las Virgenes Reservoir.
- b. Identify chloride concentrations in the influent, effluent, and receiving water from 1999 to present, if available.
- c. Describe impacts of drought, water conservation, and statewide water efficiency standards on final effluent chloride concentrations.
- d. Identify potential impacts from unique geology in the Malibu Creek Watershed on chloride levels.
- e. Identify impacts to the final effluent chloride concentrations from the use of sodium hypochlorite at the Tapia WRF, Westlake Filtration Plant and in potable water distribution system maintenance.
- f. Investigate the number of water softeners in the service area using available data.
- g. Identify possible source reduction activities including, but not limited to, chlorine dose optimization and ultraviolet light disinfection.
- h. Complete a Chloride Source Investigation Report.

#### 2. Evaluation

- a. Evaluate data from the Chloride Source Investigation Report and impacts on chloride levels in the final effluent.
- b. Evaluate beneficial uses of the receiving water downstream of Discharge Point 005, the frequency of the discharge, characterization of discharge location and flow path, and the impact the discharge may have on the receiving water.
- Evaluate potential source reduction activities that the Permittee can feasibly implement to reduce chloride in influent and effluent, including timeframes for each activity.
- d. Evaluate the effect of drought on chloride levels in source and influent water and substantiate whether or not the findings in 97-02 are applicable to Tapia WRF's discharge.
- e. Complete Chloride Evaluation of Options Report.

## 3. Identification of options

- a. Propose possible source reduction activities including, but not limited to, public outreach, chloride dose optimization, and the cost, impact and feasibility of installing an ultraviolet light disinfection system (The 2011 Tapia Water Reclamation Facility Alternative Disinfection Study is attached as a reference to this RFP as it previously evaluated the implementation of UV disinfection).
- b. Propose solutions that may include utilizing the Chloride Source Investigation and Evaluation Reports, development of a Site-Specific Objective, a Basin Plan Amendment, and/or a discharge-specific variance for consideration by the Regional Water Board.
- c. Complete an Identification of Options Report.

#### 4. Recommendation

- a. Present a recommendation and supporting data for appropriate remedial actions including possible source reduction activities and site-specific or discharge-specific regulatory actions.
- b. Complete a Recommendation Report.
- 5. Develop a project schedule indicating major milestones to complete the study as soon as possible assuring compliance with the April 1, 2018 investigation deadline in the TSO. It is assumed that the study will be completed by the January 1, 2019 deadline.
- 6. Conduct JPA staff workshops to receive input/direction.
- 7. Review available materials related to the project.
- 8. Perform site visits as necessary.
- 9. Attend and/or present at JPA/ RWQCB meetings as necessary (Assume a minimum of four meetings).

## III. SERVICES OR DATA PROVIDED BY DISTRICT

The District will provide the following data, access, services or resources:

- · Access to the facilities.
- · Available records.
- District staff to answer questions.

#### IV. MINIMUM CONSULTANT QUALIFICATIONS

- The selected firm shall have staff registered as a State of California Professional Engineer.
- The District's standard Consultant Agreement is included as an attachment. The consultant shall have the ability to execute the agreement for Professional liability insurance for \$2 million.
- Proven experience on at least three recently completed projects of scope.

#### V. PROPOSAL REQUIREMENTS

- 1) Legal name of firm with address, telephone number and the name of at least one principal.
- 2) Project understanding and approach.
- 3) A recommended scope of work, which clearly displays an understanding of the project, including a proposed schedule.
- 4) Provide an itemized list of cost for the investigation, evaluation, identification of options, and recommendation listed in the scope of work.
- 5) List of assumptions or recommended services that are not a part of the proposal.
- 6) Names and résumés of individual(s) proposed to perform the services, including proof of professional registrations, as appropriate.
- 7) Names, qualifications and principals of any sub-consultants to be utilized in providing the service(s).
- 8) References for three recently completed projects of similar scope, including contact person and telephone number.
- 9) Description of the firm's internal quality control process.
- 10) Certificate of professional liability insurance.
- 11) Cost to perform the services, a schedule of rates and any anticipated rate changes. The costs and rate schedule shall be provided in a separate package.

# **VI. EVALUATION CRITERIA**

Proposals will be evaluated based upon the following:

- 1) A comprehensive and understandable Scope of Work.
- 2) Expertise in performing the Scope of Work.
- 3) The quality of performance on similar past projects, including those on which the proposed team has worked together.
- 4) The ability to meet time schedules and complete the work within established budgets.
- 5) The firm's history and resource capacity to perform the requested service.
- 6) The experience and qualifications of assigned personnel.
- 7) The cost of proposal.

Interviews with selected consultants maybe conducted as a part of the review process.

# VII. REQUEST FOR PROPOSAL SCHEDULE

Request for Proposals

Pre-proposal Meetings

Proposal Due Date (3:00 p.m.)

Interviews if necessary (week of)

Acceptance of Proposal (Board meeting)

August 8, 2017

If requested by consultant

September 7, 2017

September 25, 2017

November 6, 2017

Please submit five (5) physical copies and one (1) digital copy of your proposal no later than 3:00 p.m. on September 7, 2017 by mailing or delivering them to:

Attn: Brett Dingman, P.E. Las Virgenes Municipal Water District 4232 Las Virgenes Road Calabasas, CA 91302

For questions, or to arrange a tour. Please contact Brett Dingman (818) 251-2330, bdingman@lvmwd.com.