# AGREEMENT FOR THE EVALUATION OF TREATMENT ALTERNATIVES TO REDUCE TDS FROM THE WASTEWATER TREAMENT PLANT

This agreement for evaluation of treatment alternatives to reduce TDS from the Redlands Wastewater Treatment Plant ("Agreement") is made and entered into this 17th day of September, 2008 ("Effective Date"), by and between the City of Redlands, a municipal corporation ("City") and Michael N. DiFilippo ("Consultant"). City and Consultant are sometimes individually referred to herein as a "Party" and, together, as the "Parties."

In consideration of the mutual promises contained herein, City and Consultant agree as follows:

### ARTICLE 1 - ENGAGEMENT OF CONSULTANT

- 1.1 City hereby engages Consultant to evaluate treatment alternatives to reduce TDS from the Redlands Wastewater Treatment Plant (the "Services").
- 1.2 The Services shall be performed by Consultant in a professional manner, and Consultant represents that it has the skill and the professional expertise necessary to provide the Services to City at a level of competency presently maintained by other practicing professional consultants in the industry providing like and similar types of Services.

#### ARTICLE 2 - SERVICES OF CONSULTANT

- 2.1 The Services which Consultant shall perform are more particularly described in Exhibit "A," entitled "Scope of Services," which is attached hereto and incorporated herein by this reference.
- 2.2 Consultant shall comply with all applicable Federal, State and local laws and regulations in the performance of this Agreement including, but not limited to, the Americans with Disabilities Act, the Fair Employment and Housing Act and prevailing wage laws.

#### ARTICLE 3 - RESPONSIBILITIES OF CITY

- 3.1 City shall make available to Consultant information in its possession that may assist Consultant in performing the Services.
- 3.2 City designates Wen Huang as City's representative with respect to performance of the Services, and such person shall have the authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to performance of the Services.

#### **ARTICLE 4 - PERFORMANCE OF SERVICES**

- 4.1 Consultant shall perform the Services in a prompt and diligent manner and in accordance with the schedule set forth in Exhibit "B," entitled "Project Schedule."
- 4.2 At any time during the term of this Agreement, City may request that Consultant perform Extra Services. As used herein, "Extra Services" means any work which is determined necessary by City for the proper completion of the project or work for which the Services are being performed, but which the Parties did not reasonably anticipate would be necessary at the time of execution of this Agreement. Provided the Extra Work does not exceed twenty percent (20%) of the compensation to be paid by City to Consultant for the Services, such Extra Work may be agreed to by the Parties by written amendment to this Agreement, executed by City's City Manager. Consultant shall not perform, nor be compensated for, Extra Work without such written authorization from City.

### **ARTICLE 5 - PAYMENTS TO CONSULTANT**

- The total compensation for Consultant's performance of the Services shall not exceed the amount of Nineteen Thousand Eight Hundred Forty Dollars (\$19,840). City shall pay Consultant on a time and materials basis up to the not to exceed amount, in accordance with Exhibit "C" entitled "Project Costs," and based upon the hourly rates shown in Exhibit "D," entitled "Rate Schedule." Both Exhibits "C" and "D" are attached hereto and incorporated herein by this reference.
- 5.2 Consultant shall submit monthly invoices to City describing the work performed during the preceding month. Consultant's invoices shall include a brief description of the Services performed, the dates the Services were performed, the number of hours spent and by whom, and a description of reimbursable expenses, if any. City shall pay Consultant no later than thirty (30) days after receipt and approval by City of Consultant's invoice, provided (1) the Services reflected in the invoice were performed to the reasonable satisfaction of City in accordance with the terms of this Agreement, (2) that the number of hours of Services set forth in the invoice reflects the amount of time ordinarily expended for such Services by members of the profession currently practicing in the same locality under similar conditions, and (3) that all expenses, rates and other information set forth in the invoice are consistent with the terms and conditions of the Agreement.
- 5.3 All notices shall be given in writing by personal delivery or by mail. Notices sent by mail should be addressed as follows:

<u>City</u>

Consultant

Wen Huang Municipal Utilities and Engineering Dept. City of Redlands Michael N DiFilippo Consultant 2803 Woolsey Street When so addressed, such notices shall be deemed given upon deposit in the United States Mail. Changes may be made in the names and addresses of the person to who notices and payments are to be given by giving notice pursuant to this section 5.3.

#### **ARTICLE 6 - INSURANCE AND INDEMNIFICATION**

- 6.1 All insurance required by this Agreement shall be maintained by Consultant for the duration of its performance of the Services. Consultant shall not perform any Services unless and until all required insurance listed below is obtained by Consultant. Consultant shall provide City with certificates of insurance and endorsements evidencing such insurance prior to commencement of the Services. All insurance policies shall include a provision prohibiting cancellation or modification of the policy except upon thirty (30) days prior written notice to City.
- 6.2 Workers' Compensation and Employer's Liability.
  - Consultant shall secure and maintain Worker's Compensation and Employer's Liability insurance throughout the duration of its performance of the Services in accordance with the laws of the State of California, with an insurance carrier acceptable to City.
- 6.3 Hold Harmless and Indemnification. Consultant shall defend, indemnify and hold harmless City and its elected officials, employees and agents from and against any and all claims, losses or liability, including attorneys' fees, arising from injury or death to persons or damage to property occasioned by Consultant's and its officers', employees' and agents' sole negligent acts or omissions in performing the Services.
- Assignment. Consultant is expressly prohibited from assigning any of the Services without the express prior written consent of City. In the event of agreement by the Parties to assign a portion of the Services, Consultant shall add the assignee as an additional insured and provide City with the insurance endorsements required by this Agreement prior to the performance of any Services by the assignee. Assignment does not include printing or other customary reimbursable expenses that may be provided for in this Agreement.
- 6.5 Comprehensive General Liability Insurance. Consultant shall secure and maintain in force throughout the term of this Agreement comprehensive general liability insurance with carriers acceptable to City. Minimum coverage of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate for public liability, property damage and personal injury is required. City shall be named as an additional insured. Such insurance shall be primary and non-contributing to any insurance or self-insurance maintained by City.

Business Auto Liability Insurance. Consultant shall have business auto liability coverage, with minimum limits of One Million Dollars (\$1,000,000) per occurrence, combined single limit for bodily injury liability and property damage liability. This coverage shall include all Consultant owned vehicles used in connection with Consultant's provision of the Services, hired and non-owned vehicles, and employee non-ownership vehicles. Such insurance shall be primary and non-contributing to any insurance or self insurance maintained by City. City shall be named as an additional insured.

#### ARTICLE 7 - CONFLICTS OF INTEREST

- 7.1 Consultant covenants and represents that it does not have any investment or interest in real property that may be the subject of this Agreement or any other source of income, interest in real property or investment which would be affected in any manner or degree by the performance of Consultant's Services. Consultant further covenants and represents that in the performance of its duties hereunder, no person having any such interest shall perform any Services under this Agreement.
- 7.2 Consultant agrees it is not a designated employee within the meaning of the Political Reform Act because Consultant:
  - A. Does not make or participate in:
    - (i) the making or any governmental decisions regarding approval of a rate, rule or regulation, or the adoption or enforcement of laws;
    - the issuance, denial, suspension or revocation of permits, licenses, applications, certifications, approvals, orders or similar authorizations or entitlements;
    - (iii) authorizing City to enter into, modify or renew a contract;
    - (iv) granting City approval to a contract that requires City approval and to which City is a party, or to the specifications for such a contract;
    - (v) granting City approval to a plan, design, report, study or similar item;
    - (vi) adopting, or granting City approval of, policies, standards or guidelines for City or for any subdivision thereof.
  - B. Does not serve in a staff capacity with City and in that capacity, participate in making a governmental decision or otherwise perform the same or substantially all the same duties for City that would otherwise be performed by an individual holding a position specified in City's Conflict of Interest Code under Government Code section 87302.

7.3 In the event City officially determines that Consultant must disclose its financial interests by completing and filing a Fair Political Practices Commission Form 700, Statement of Economic Interests, Consultant shall file the subject Form 700 with the City Clerk's office pursuant to the written instructions provided by the Office of the City Clerk.

### **ARTICLE 8 - GENERAL CONSIDERATIONS**

- Attorneys' Fees. In the event any action is commenced to enforce or interpret any of the terms or conditions of this Agreement the prevailing Party shall, in addition to any costs and other relief, be entitled to the recovery of its reasonable attorneys' fees, including fees for the use of in-house counsel by a Party.
- 8.2 Prohibition Against Assignment. Consultant shall not assign any of the Services, except with the prior written approval of City and in strict compliance with the terms, and conditions of this Agreement.
- 8.3 Documents and Records. All documents, records, drawings, designs, cost estimates, electronic data files, databases and other documents developed by Consultant in connection with its performance of the Services, and any copyright interest in such documents, shall become the property of City and shall be delivered to City upon completion of the Services, or upon the request of City. Any reuse of such documents, and any use of incomplete documents, shall be at City's sole risk.
- Independent Contractor Status. Consultant is for all purposes under this Agreement an independent contractor and shall perform the Services as an independent contractor. Neither City nor any of its agents shall have control over the conduct of Consultant or any of Consultant's employees, except as herein set forth. Consultant shall supply all tools and instrumentalities required to perform the Services. All personnel employed by Consultant are for its account only, and in no event shall Consultant or any personnel retained by it be deemed to have been employed by City or engaged by City for the account of, or on behalf of City. Consultant shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent, nor shall Consultant have any authority, express or implied, to bind City to any obligation.

#### 8.5 Termination.

- A. Unless earlier terminated as provided for below, this Agreement shall terminate upon completion and acceptance of the Services by City.
- B. This Agreement may be terminated by City, in its sole discretion, by providing thirty (30) days' prior written notice to Consultant (delivered by certified mail, return receipt requested) of City's intent to terminate.

- C. If this Agreement is terminated by City, an adjustment to Consultant's compensation shall be made, but (1) no amount shall be allowed for anticipated profit or unperformed Services, and (2) any payment due Consultant at the time of termination may be adjusted to the extent of any additional costs to City occasioned by any default by Consultant.
- D. Upon receipt of a termination notice, Consultant shall immediately discontinue its provision of the Services and, within five (5) days of the date of the termination notice, deliver or otherwise make available to City, copies (in both hard copy and electronic form, where applicable) of any data, design calculations, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by Consultant in performing the Services. Consultant shall be compensated on a pro-rata basis for Services completed up to the date of termination.
- 8.6 Books and Records. Consultant shall maintain any and all books, ledgers, invoices, accounts and all other records and documents evidencing costs and expenses related to the Services for a period of three (3) years, or for any longer period required by law, from the date of final payment to Consultant pursuant to this Agreement. Such books shall be available at all reasonable times for examination by City at the office of Consultant.
- 8.7 Entire Agreement/Amendment. This Agreement, including the Exhibits incorporated herein by reference, represents the entire agreement and understanding between the Parties as to the matters contained herein, and any prior negotiations, written proposals or verbal agreements relating to such matters are superseded by this Agreement. Except as otherwise provided for herein, any amendment to this Agreement shall be in writing, approved by City and signed by City and Consultant.
- 8.8 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California.
- 8.9 Severability. If one or more of the sentences, clauses, paragraphs or sections contained in this Agreement is declared invalid, void or unenforceable by a court of competent jurisdiction, the same shall be deemed severable from the remainder of this Agreement and shall not affect, impair or invalidate any of the remaining sentences, clauses, paragraphs or sections contained herein, unless to do so would deprive a Party of a material benefit of its bargain under this Agreement.

IN WITNESS WHEREOF, duly authorized representatives of the City and Consultant have signed in confirmation of this Agreement.

CITY OF REDLANDS

CONSULTANT

By:

N. Enrique Martinez, City Manager

Michael N. DiFilippo

Attest:

City Clerk

#### **EXHIBIT A**

#### SCOPE OF SERVICES

The City of Redlands may be required to reduce its wastewater TDS in the near future. Currently, the treatment plant discharges water to the Santa Ana River with an average TDS of 425 mg/l. Its current discharge limit for TDS is 450 mg/l; however, it may be reduced to 400 mg/l. This proposal will identify and evaluate treatment approaches to meet this possible requirement. Lastly, as we discussed with Steve Johnson, the Technical Manager for the Mountainview Generating Station, the power plant may provide viable disposal options for Redlands. These will also be evaluated.

The project will consist of four tasks.

#### Task 1 – Data Gathering

Some data has already been provided (at our meeting last week). Additional wastewater plant operating data may be requested to fully evaluate the plant's options. This could include a process flow diagram of the wastewater plant. Also, operating data from the Mountainview Generating Station will be obtained and reviewed as needed (much of it is already in hand).

#### Task 2 - Identify Treatment Technologies

Three or four alternatives will be identified and evaluated – mostly they involve reverse osmosis to remove salt from wastewater. Other technologies will be identified, but not seriously pursued, e.g. evaporation and crystallization.

#### Task 3 – Evaluate Alternatives

Each treatment option will be outlined and evaluated – identify required equipment, estimate area requirements, estimate operating costs (chemicals and power), estimate order-of-magnitude installed equipment cost, and estimate the need for additional staff to operate the equipment. The Mountainview Generating Station will be part of the options analysis, since it could provide a viable means of disposal for reverse osmosis brine.

#### Task 4 – Summarize Findings

A draft report will be submitted for initial review and comment. After incorporating City input, a final report will be issued. The findings will be presented in a meeting with Water Resources Staff at the completion of the study.

## **EXHIBIT B**

# PROJECT SCHEDULE

The Project is anticipated to be completed within eight weeks of notice to proceed.

### **EXHIBIT C**

### **PROJECT COSTS**

Services will be provided on an hourly rate basis. Tasks in this scope of work will be completed for a not to exceed amount of \$19,840 including direct costs.

# Treatment Alternatives to Reduce TDS - Project Costs

Task Description	hours
1. Gather Chemistry & Flow Data	12
2. Identify Treatment Technologies	12
3. Evaluate Alternatives	32
4. Summarize Findings	J 24
Prepare Draft Report	32
Finalize Report	8
Meeting with Water Resources Staff	8
Total	104
Labor @ \$185/hour	\$19,240
Expenses	
Total	\$600
	\$19,840

Expenses include travel (one visit to Redlands) plus outside copying services (if required).

## **EXHIBIT D**

## RATE SCHEDULE

## **Consulting Services**

\$185/hour
\$185/hour
At Cost
At Cost
\$0.585/mile
15%

# MUNICIPAL UTILITIES & ENGINEERING DEPARTMENT

### **MEMORANDUM**

TO:

N. Enrique Martinez, City Manager

FROM:

Rosemary Hoerning, Municipal Utilities & Engineering Director

DATE:

September 17, 2008

SUBJECT:

Consulting Service Agreement for Evaluation of Treatment Alternatives to Reduce TDS

from the Wastewater Treatment Plant, with Michael N. DiFillipo

During a recent permit review for the City's Wastewater Treatment Plant by the Regional Water Quality Control Board (RWQCB), RWQCB considered lowering the discharge limit for the total dissolved solids (TDS) for the Plant from 465 mg/L to 400 mg/L, based on their findings in a recently-issued Groundwater Basin Management Plan. The average TDS in the plant effluent is approximately at 425 mg/L. In order to comply with the potential more stringent discharge limit for TDS, additional treatment or other alternatives may be necessary. While MUED staff is still negotiating with RWQCB to maintain the existing TDS discharge limit, Staff has worked with Yucaipa Valley Water District (YVWD) and Mountain View Power (MVP) to identify alternatives.

The first alternative to lower the TDS at the Plant is to install a treatment system, such as reverse osmosis (RO), to reduce the TDS level prior to percolation of the effluent back into groundwater. However, concentrated TDS wastestream from the RO treatment process, brine, is required to be properly disposed. Participation in construction of a brine line may be the only viable way to dispose of brine. YVWD is currently working on a project, valued at \$18 million, for extension of the Santa Ana Regional Interceptor (SARI) brine pipeline from the city of San Bernardino to Yucaipa. Staff has estimated the preliminary financial impact for installation of a RO system, participation in the brine line construction, and purchase the capacity for treatment at the Orange County Sanitation District (OCSD) may cost well over \$10 million.

Staff favors a second alternative, which is to install an RO system at the wastewater plant, but instead of participating in the YVWD's brine line project to dispose of the brine, work with MVP to utilize the city's existing recycled water pipeline which delivers water to MVP. Under this scenario, brine from the city's RO system would be mixed in the water going to MVP, and MVP would use the water as they currently do and dispose of the TDS using their existing brine line system. Additional evaluation is required to confirm this alternative is viable because it results in a higher concentration of TDS in the water delivered to MVP. Staff has obtained a cost proposal from Michael N. DiFillipo to evaluate treatment alternatives.

Michael N. DiFillipo has worked with MVP for many years prior to becoming a water expert providing consulting services to MVP on an on-going basis. Mr. DiFillipo is very familiar with the MVP's system and its operation and his work has been highly praised by MVP. Based on a recent meeting with Mr. DiFillipo and an MVP representative, staff believes that Mr. DiFillipo is in a best position to provide cost-effective evaluation services for this project. Because MVP is a private operation it is important MVP representatives approve the consultant performing the studies of their plant and allow access to their

CONNENT FOR

CHANGE

PROPERTY

PROPE

facilities and records. Staff has evaluated the level of service required for the Project and believes the scope of work and associated project fee in the Agreement are reasonable and appropriate.

The Agreement has been reviewed by the City Attorney.

FISCAL IMPACT: The fee for the scope of work is \$19,840. Funding for the project is included in the Wastewater Projects Budget.

#### **ATTACHMENT:**

(1) Agreement for Evaluation of Treatment Alternatives to Reduce TDS from the Wastewater Treatment Plant

cc: Chris Diggs, Water Resources Manager Wen Huang, Engineering Manager