This Memorandum of Agreement (MOA) is entered into this ____ day of ____________, 2008 by and between Trojan Technologies and the City of Palo Alto, a California chartered municipal corporation (City).

Recitals

The following recitals are a substantive portion of this MOA.

A. The purpose of this MOA is to document the agreement between the City of Palo Alto (City) and Trojan Technologies to supply the ultraviolet disinfection system (UV System) for the Regional Water Quality Control Plant at 2501 Embarcadero Way, Palo Alto, CA 94303 UV System Project (Project).

B. This MOA references other documents which are considered integral parts of this MOA. The following documents are incorporated into this MOA:
   1. Specifications
   2. Patent License Agreement
   3. Proposal from Trojan Technologies (dated April 29, 2008)
   4. Notification Letter
   5. Request for Proposal (including all Addenda)

C. This MOA is intended to create a binding commitment by Trojan Technologies to supply the UV System equipment to the City through a contract or purchase order between Trojan Technologies and the City’s General Contractor pursuant to the terms and conditions of this MOA.

D. The City plans to select a general contractor for installation of the UV system through a public bid process and to include appropriate conditions within the contract documents for the selected installation contractor (City’s Contractor) to implement the terms of this MOA.
AGREEMENT

I. Supply of Equipment and Deviations from Specifications

Trojan Technologies agrees to supply the UV System Equipment for the Project as set forth in the Specifications and RFP with only the changes where Requested Deviations are accepted by the City, or are accepted with modifications, as referenced below. The scope of supply and services shall be in accordance with the Specifications, the RFP, and the UV supplier’s proposal with the following modifications listed below. The following modifications to the specifications were requested by Trojan Technologies and the City’s determination regarding these requested exceptions is set forth below. Trojan Technologies requested deviations identified in the proposal but not defined below are not accepted and Trojan Technologies shall meet the specification and RFP requirements. For any conflicting information or requirements between documents, the Specifications shall govern followed by the RFP, followed by the UV supplier’s proposal.

1. No modifications or exceptions were taken by Trojan Technologies.

II. Scope of Services Provided by Vendor

In addition to supplying the UV System Equipment, Trojan Technologies shall also perform the following services:

1. Provide final design coordination with the City’s Project Design Engineer in their completion of the final design of the ultraviolet disinfection system. Design coordination shall include review of design documents by the UV supplier’s Engineers and providing detailed design comments back to the City’s Design Engineer. Design review comments from the UV supplier’s Engineers shall be provided within two weeks of the submittal to the UV supplier’s. Trojan Technologies shall review and provide comments on up to three submittals including drawings and specification. The intent of this coordination is to eliminate change orders during construction associated with the UV supplier’s Equipment. Trojan Technologies assumes financial responsibility for change orders or major design changes associated with the UV equipment due to inadequate review and coordination during the final design process.

2. Provide equipment supply bids to the bidding general contractors that are identical to, and in accordance with the RFP terms and specifications, UV supplier’s proposal, and this MOA. The terms and conditions offered to the general contractors shall be customary to California public works marketplace, to the extent the terms and conditions are not specifically addressed herein.

3. Prepare submittals to the general contractors and Engineer consistent with the RFP specifications, this MOA and the Proposal. The submittals shall be delivered to the Contractor within approximately eight (8) weeks after execution of the Purchase Order or Contract between the UV SUPPLIER and Contractor.

4. Deliver the UV System consistent with the RFP specifications according to a schedule mutually agreed upon with the City’s Contractor.
5. Assist the Contractor to startup, test and put into operation the system to meet all specified requirements.

6. Provide preliminary operation and maintenance (O&M) manuals with storage and installation requirements prior to delivery of equipment. Provide O&M manuals and training to City Employees for operation of UV System.

7. Provide executed Patent License Agreement.

8. Meet other commercial warranty and risk management requirements set forth in this MOA.

9. Trojan Technologies shall provide a performance bond equal in value to the total equipment supply cost listed in Article IV-Price of this MOA if the requirement for the bond is included in the final Bid Documents.

10. Operations Manual and Training: Trojan Technologies shall provide an operations manual and training to the City’s employees as is set forth in the Specifications.

III. City Obligations

1. The City is currently undertaking the design of the Project and will incorporate UV SUPPLIER’s UV System Equipment into the final design for the Project. The City plans to competitively bid and award the public works contract for the installation of the UV System not later than May 1, 2009. The City agrees that subject to the conditions below, it shall award the public works construction contract to the lowest responsible and responsive bidder consistent with California law and the City’s Charter and Municipal Code.

2. The City shall require City’s selected Contractor to install UV supplier’s UV System equipment pursuant to the terms of this MOA. City shall require its Contractor to enter into a purchase order or contract with Trojan Technologies to acquire UV System solely from Trojan Technologies. The City shall further require that City’s Contractor obtain UV System Equipment from Trojan Technologies in full compliance with the terms set forth in this MOA.

3. This obligation to obtain UV System from Trojan Technologies shall be conditioned upon the award of the construction contract for the Project, and the favorable result of any legal challenge to this process which could result in a court order or judgment preventing the City from either executing the construction contract for the Project or requiring City’s Contractor to install Trojan Technologies’ UV System equipment. If City fails to proceed with the Project, is prevented from entering into the construction contract, or is prevented by legal proceedings from designating Trojan Technologies’ UV System equipment for inclusion in City’s Project, the City shall have the right to terminate this MOA pursuant to Article VI and the City shall not be liable to Trojan Technologies for any damages including, but not limited to restocking, proposal preparation and contracting costs, or loss of prospective profit.
IV. Price

The UV System equipment shall be manufactured, assembled, insured, crafted, delivered, and maintained prior to acceptance for the sum of $1,495,000 dollars in US currency, exclusive of California sales tax. This total amount shall be inclusive of all payments for the Trojan Technologies’ costs including the services listed in Article II of this MOA and those costs set forth below.

<table>
<thead>
<tr>
<th>Element</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply lamps, banks, ballasts, power distribution centers and electrical distribution system</td>
<td>$725,850</td>
</tr>
<tr>
<td>Ultraviolet transmittance monitor</td>
<td>$12,500</td>
</tr>
<tr>
<td>Cleaning system</td>
<td>$84,000</td>
</tr>
<tr>
<td>Factory testing</td>
<td>$20,000</td>
</tr>
<tr>
<td>Supply instrumentation and controls</td>
<td>$75,000</td>
</tr>
<tr>
<td>Configure instrumentation and controls</td>
<td>$30,000</td>
</tr>
<tr>
<td>Assembly and fabrication</td>
<td>$40,000</td>
</tr>
<tr>
<td>Prepare submittals</td>
<td>$40,000</td>
</tr>
<tr>
<td>Freight / delivery to site</td>
<td>$13,000</td>
</tr>
<tr>
<td>Training, start-up, and testing assistance</td>
<td>$40,000</td>
</tr>
<tr>
<td>Patent license</td>
<td>$0</td>
</tr>
<tr>
<td>Performance bond</td>
<td>$22,500</td>
</tr>
<tr>
<td>Hydraulic gates and associated equipment</td>
<td>$323,000</td>
</tr>
<tr>
<td>Module storage racks, stilling plates</td>
<td>$9,150</td>
</tr>
<tr>
<td>480V delta-wye transformers</td>
<td>$25,000</td>
</tr>
<tr>
<td>Checkpoint bioassay (recycled water channel)</td>
<td>$35,000</td>
</tr>
<tr>
<td><strong>Total Equipment Supply Cost</strong></td>
<td>$1,495,000</td>
</tr>
</tbody>
</table>

1. Trojan Technologies agrees to offer all proposing contractors on the Project the equipment and services specified in this MOA, and as more specifically set forth in the Specifications, at the price set forth herein and without additional terms and conditions inconsistent with this MOA. Any such additional terms and conditions offered to proposing contractors, not inconsistent with the terms of this MOA, shall be those customary to the public works marketplace in California and offered at no additional cost.

2. The price set forth herein shall reflect shipping F.O.B. City of Palo Alto. Contractor will not accept C.O.D. shipments. Trojan Technologies shall be responsible for payment of all charges for handling, shipping, pack aging, wrapping, bags, container, boxing, crating, labeling, customs and duties, taxes (except for California sales tax), storage, insurance and other related matters. Trojan Technologies shall cause all UV System equipment to be insured for the full value during all phases of packaging and delivery and such insurance shall remain in place for five (5) working days after delivery, during which time, Contractor shall inspect the equipment to insure that all equipment has been provided and that the equipment has arrived in an undamaged condition.

3. Price Escalation: The costs included in this MOA shall remain in effect and are not subject to escalation unless the Contractor does not accept delivery of equipment prior to May 1, 2009. After such date, pricing is subject to an escalation clause based on selected and mutually agreeable Bureau of Labor Statistics (BLS) indices, computed from May 1, 2009 until the accepted delivery date.
4. The following consumable parts price, including shipping and handling shall be guaranteed and shall remain in effect and not subject to escalation for a period of 5 years following project completion:

**Element and Price (including shipping and handling)**

- UV Lamp, $150
- Electronic ballast, $400
- Quartz sleeve, $83
- Wiper, $23
- UV transmittance monitor, $12,500
- UV intensity monitor, $2,100
- Cleaning system filter assembly, $150
- Cleaning solution (ActiClean TM), gallon, $15
- Fuses (power distribution center), $20

Following the 5 year period, the maximum allowable price for Consumable Parts shall be the Manufacturer’s current list prices.

**V. Payment Terms**

Trojan Technologies agrees to supply the UV System equipment and services at the proposed price on the following payment terms:

1. 75% of the sum set forth above on delivery of UV Disinfection Equipment to site and acceptance by City’s Contractor and delivery of preliminary operation and maintenance (O&M) manual.

2. 15% on installation of UV System.

3. 10% on successful completion of performance testing, submittal and approval of O&M manual, training of City’s employees and upon substantial completion of the UV System.

The partial payments set forth above shall be due only upon full and complete performance of each benchmark task listed above for all equipment and services required pursuant to the specifications.

A 10% retention will be withheld by the City and Contractor from each of the payments listed above. Such 10% retention shall be provided to Contractor for payment to Trojan Technologies at the time of final payment as required by the contract documents and prevailing California law.

The City will include in the Contract with the Contractor the Contractor’s obligation to make payment for undisputed amounts for the UV Vendor’s costs within two (2) weeks of receipt of payment for such amounts from the City.

**VI. Terms and Conditions**

1. Factory Inspections: Trojan Technologies acknowledges that time is of the essence for the manufacture, assembly and delivery of the UV System. Accordingly, Trojan Technologies shall
authorize and arrange for manufacturing and assembly site inspection(s) by representatives of the City and City’s Contractor. The factory inspection requirements are set forth in the specifications.

The City and/or Contractor will visually inspect shipment(s) from Trojan Technologies upon receipt at construction site to determine whether they conform to the requirements of this MOA. Notwithstanding these provisions for inspection, Trojan Technologies acknowledges that the UV System is not reasonably subject to mere visual inspections to ascertain whether the equipment fully conforms to the specifications and that testing after installation is required prior to final acceptance of the equipment. Contractor shall be required to schedule performance testing to allow for the presence of Trojan Technologies.

2. Patent License Agreement: The price set forth above shall include the cost for the Patent License Agreement attached hereto as Attachment “A”. Trojan Technologies shall execute said Patent License Agreement and take such other actions as may be required to effectuate the licensing terms contained therein. The Patent License Agreement shall be executed and delivered to the City within 10 days of receipt of the payment due from the City Contractor for delivery and acceptance of the equipment to the construction site.

3. Storage of The UV System Prior to the Time for Delivery: Trojan Technologies shall store said equipment at its cost in a safe manner until City’s Contractor is ready for delivery to site.

4. Warranty: Trojan Technologies expressly warrants that all goods and services shall conform to all specifications, drawings and samples. Goods and services shall be new and of good merchantable quality, free from material defects of workmanship and fit for the purpose for which sold or provided. For purposes of this warranty, any parts not meeting the foregoing quality shall be deemed defective. Trojan Technologies provides warranties on all equipment provided as set forth in the specifications, including the extended warranties defined in the Specification Section 11285. Trojan Technologies warrants the goods and services shall conform to the description contained herein and be free from defects in material and workmanship for a period of one (1) year from the substantial completion of the UV system. Upon Trojan Technologies’ receipt of written notice within thirty (30) days of discovery of any defect, and a determination Trojan Technologies that such defect is covered under the foregoing warranty, Trojan Technologies’ responsibility is to correct the defect at Trojan Technologies’ option, repair or replace the defective part or parts at the Project site. This warranty does not cover failure or damage due to storage, installation, operation or maintenance not in conformance with Trojan Technologies’ written instructions and requirements or due to accident, misuse, abuse, neglect or corrosion. This warranty does not apply to any equipment other than the UV system provided by Trojan Technologies. Trojan Technologies shall have no responsibility for the condition of primed or finish painted surfaces after the Productions leave their point of manufacture. Trojan Technologies shall not be required, pursuant to this warranty, to install replacement or repaired parts for which installation is the responsibility of the City’s Contractor, whether or not Trojan Technologies may otherwise be responsible for costs associated therewith. Field touch-up of shop primed or painted surfaces are normal and shall be at Contractor or City’s expense. Any touch-up or repainting required to shop primed or painted surfaces, for reasons other than improper or incorrect application in the shop, shall be Contractor or City’s responsibility. The foregoing warranty provisions shall also be applicable to equipment or software supplied to Trojan Technologies by a third party entity and provided to Contractor via this MOA. Any warranties provided by third party equipment or software supplier shall be assigned to the City after final acceptance.
5. Liens, Claims And Encumbrances: Trojan Technologies warrants and represents that all the goods when delivered will be free and clear of all liens, claims, encumbrances and infringements of any patents, trademarks, copyrights or franchise rights.

6. Independent Contractor: Trojan Technologies, and Vendor’s employees or persons under contract to Trojan Technologies in the performance of services on this MOA, including services provided on City property, shall perform work as independent contractors. Trojan Technologies shall provide insurance to cover its work and its employees as required by the Contractor. Further, neither party to this MOA is the agent or legal representative of the other party for any purpose, nor shall the actions of either party under this MOA create a partnership, joint venture or relationship of principal and agent between the parties. Trojan Technologies shall maintain the following forms of insurance coverage for all work done on City property, and similarly require its subcontractors doing work on City property to maintain similar insurance, including: (1) Public Liability and Property Damage Insurance, including contractual liability, both general and automobile, in the amount of at least $1,000,000 per occurrence for general liability, and $1,000,000 per occurrence combined single limit for bodily injury and property damage for automobile liability (2) Workers’ Compensation Insurance as required by law and for not less than $1,000,000. With the exception of Worker’s Compensation Insurance, the City and the Contractor shall be added as additional insureds to such policies.

7. Indemnification: To the fullest extent permitted by law, Trojan Technologies shall protect, indemnify, defend and hold harmless City, its Council members, officers, employees and agents and the Contractor and its officers, employees and agents (each an “Indemnified Party”) from and against any and all demands, claims, or liability of any nature, including death or injury to any person, property damage or any other loss, including all costs and expenses of whatever nature including attorneys fees, experts fees, court costs and disbursements (“Claims”) resulting from, arising out of or in any manner related to performance or nonperformance by Trojan Technologies, its officers, employees, agents or contractors under this Agreement, regardless of whether or not it is caused in part by an Indemnified Party.

Notwithstanding the above, nothing in this Section 7 shall be construed to require Trojan Technologies to indemnify an Indemnified Party from Claims arising from the active negligence, sole negligence or willful misconduct of an Indemnified Party.

8. Assignment: Assignment by Trojan Technologies of its responsibilities under this MOA, will not be binding upon the City or City’s Contractor unless such assignment has had prior written approval of the City and City’s Contractor, which approval shall be solely within the discretion of City and its Contractor. The City shall place conditions in the City Contractor’s construction documents which similarly prevent assignment by City’s Contractor of responsibilities without prior written approval of the City and Trojan Technologies. Failure to obtain approval of any assignment, including an involuntary assignment to creditors, shall constitute a breach of this MOA which may lead to termination.

9. Jurisdiction: This MOA shall be administered and interpreted under the laws of the State of California, without regard to the conflict of laws provisions thereof. The United Nations Convention on the International Sale of Products will not apply. The jurisdiction for any litigation arising from this Purchase Order shall be in the state of California, and shall be venued in the County of Santa Clara of the U.S. District Court.

10. Modifications: No modification to this MOA, nor any waiver of any rights, shall be effective unless agreed to in writing by both Parties.
11. Liquidated Damages: The Contractor may include liquidated damage penalties in the Purchase Order agreement with Trojan Technologies. Such damages are only applicable if directly related to the Trojan Technologies' failure to deliver the equipment within the time period stipulated in this MOA, failure to support the startup of the equipment, or failure of the equipment during the startup where any such failures result in a delay to the critical path of the construction project schedule. The amount of such damages in the aggregate shall not exceed ten (10) percent of the total equipment contract price as listed in Article IV-Price of this MOA.

12. Notices: All notices under this MOA shall be in writing and shall be considered delivered and effective on the earlier of actual receipt or (i) the day following transmission if sent by facsimile when followed by written confirmation by overnight carrier or certified United States/Canadian mail; or (ii) one (1) day after dispatch if sent by private overnight carrier (e.g., DHL, Federal Express); or (iii) five (5) days after posting if sent by certified mail. Notice shall be sent to the following persons:

To the City:
City of Palo Alto
Attn: James Allen
Public Works Department
Regional Water Quality Control Plant Div.
2501 Embarcadero Way
Palo Alto, CA 94303
Phone: 650-617-3130
Fax: 650-856-0196
E-mail: james.allen@cityofpaloalto.org

To the Supplier:
Trojan Technologies
Attn: Carl McDonald
3020 Gore Road
London, ON Canada N5V 4T7
Phone: 519-457-3400 x2234
Fax: 519-457-3030
E-mail: cmcdonald@trojanuv.com

13. Severability: If any portion of this MOA is held invalid, the Parties agree that such invalidity shall not affect the validity of the remaining portions of this MOA, and the Parties shall seek in good faith to agree to substitute for the invalid provision a valid provision that most closely approximates its terms.

14. Entire Agreement: This MOA along with the incorporated Specifications and Attachments supersedes all proposals, oral or written, all negotiations, conversations or discussions between the Parties and contains the entire understanding and agreement of the Parties relating to this subject matter. In the event of a conflict between the terms and conditions of this MOA and its attachments, this MOA shall control.

15. Patent and Copyright Infringement: Trojan Technologies shall defend any action or proceeding brought against Contractor or the City based on any claim that the equipment infringes any patent or copyright, provided the equipment is used in the manner specified and are not modified, altered, or combined with any other equipment without Trojan Technologies' prior written permission. Contractor or the City shall give prompt written notice to Trojan Technologies of any such action or proceeding and will reasonably provide authority, information and assistance (at Contractor or City's expense) in the defense of same. If Contractor or the City is enjoined from the operation or use of the equipment, Trojan Technologies shall take reasonable steps to procure the right to operate or use the equipment. If Trojan Technologies cannot so procure such right within a reasonable time, Trojan Technologies shall promptly, at Trojan Technologies' option and at Trojan Technologies' expense, (i) modify the equipment so as to avoid infringement of any such patent or copyright,
(ii) replace said equipment with equipment that does not infringe or violate any such patent or copyright, or (iii) as a last resort, remove the equipment and refund the purchase price.

16. Excusable Delay: Trojan Technologies shall not be liable for any delay in performance or failure to perform due to fire, flood or any other act of God, strike or other labor difficulty, act of any civil or military authority or of Contractor, Engineer, or the City, insurrection, riot, embargo, unavailability or delays in transportation or car shortages, or any other cause beyond Trojan Technologies’ reasonable control. In the event Trojan Technologies’ performance is delayed by any of the foregoing causes, Trojan Technologies’ schedule for performance shall be extended accordingly without penalty.

17. Termination for Convenience: Prior to award of the Construction Contract, the City may terminate this MOA without cause by giving ten (10) days prior written notice to Trojan Technologies. Upon receipt of such notice Trojan Technologies will immediately discontinue its activities under this MOA.

18. Cancellation by City’s Contractor: If City’s Contractor cancels the contract or refuses to accept delivery of Trojan Technologies’ fully conforming equipment, Contractor shall be liable to Trojan Technologies for reasonable cancellation charges, administrative costs, commissions to sales representatives, costs incurred by Trojan Technologies for all work performed or in process up to the time of cancellation or refusal to accept delivery, and any other expenses incurred by Trojan Technologies in connection with City Contractor’s cancellation or refusal to accept delivery.

19. Default by the City or City’s Contractor: In the event that City or City’s Contractor should breach its obligations under this MOA, then Trojan Technologies may, without prejudice to any other right or remedy it may have at law or equity, terminate the contract or suspend performance if City or City’s Contractor fails to cure such breach within sixty (60) days of written notice to City and City’s Contractor. In such event, Trojan Technologies shall be paid for all work performed prior to termination/suspension, including all costs related to the termination/suspension. If payments are not made in accordance with the terms contained herein, a service charge may, without prejudice to the right of Trojan Technologies to immediate payment, be added in an amount equal to the lower of 1% per month or fraction thereof or the highest legal rate on the unpaid balance.

20. Default by Trojan Technologies: In the event of any default by Trojan Technologies and prior to City’s Contractor terminating the purchase contract for default, The City or City’s Contractor shall give written notice of default to Trojan Technologies. Trojan Technologies shall remedy the default to the reasonable satisfaction of the City’s Contractor within forty-five (45) days of receipt of such written notice or, if such default cannot reasonably be remedied within such forty-five (45) day period, Trojan Technologies shall promptly begin to remedy the default within the forty-five (45) day period and thereafter provide satisfactory accommodations and/or additional assurances to the City and City’s Contractor as may be necessary to promptly remedy the default, in such event such default shall be deemed to be remedied.

21. Limitation of Liability. Neither Trojan Technologies nor City’s Contractor shall be liable to the other party for any consequential or punitive damages arising from their obligations under the agreement between each other or under this Agreement, whether such damages are based upon breach of contract, breach of warranty, tort, strict liability or otherwise. Liquidated Damages shall not be considered consequential or punitive damages. In no event shall either party’s liability exceed the purchase price of the UV System. Nothing in this paragraph shall
limit the City, City Contractor or Trojan Technologies party's liability with regard to claims made by third parties or indemnification for such claims.

However, the parties understand and agree that as to any agreement(s) entered into between Trojan Technologies and City's Contractor, the City shall be considered a third party. This limitation of liability as between the City and Trojan Technologies shall not limit Trojan Technologies' liability with respect to any bonafide extra work claim or liability imposed on the City for delay or impact damages by City's Contractor arising from any failure of Trojan Technologies to perform in a timely manner as required by the contractor-vendor contract. Liquidated damages imposed on Trojan Technologies by City's Contractor will be an offset to any such claim.

This Memorandum of Agreement is hereby entered into between the City of Palo Alto and Trojan Technologies. By signing this Memorandum of Agreement, the undersigned asserts that they have the authority to enter into this agreement.

City
City of Palo Alto

Supplier

City Manager or Designee Date
City of Palo Alto

Attest:

City Clerk

Approved as to Form:

Sr. Asst. City Attorney

- END OF MOA -
THIS AGREEMENT is made as of the _____ day of ________, 200_ (the “Effective Date”).

BE TWEEN:

Trojan Technologies
("Manufacturer")

- and -

City of Palo Alto
(the "City")

WHEREAS Manufacturer is the registered owner of the Patents (as defined herein) and is prepared to grant the City limited licenses under the Patents, as more fully set forth hereinafter;

AND WHEREAS the City desires to obtain a license under the Patents in order that it may, if necessitated, negotiate for the purchase of, acquire, and/or have manufactured equipment necessary to operate and maintain the ultra-violet light water disinfection equipment supplied by the Manufacturer to the City;

NOW THEREFORE THIS AGREEMENT WITNESSES THAT, in consideration of the promises and mutual covenants contained herein and other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), the parties agree as follows:

1. **Definitions.** In this Agreement, including the recitals and schedules hereto, the following terms shall have the meanings ascribed to them below:

   "Licensed Technology" shall mean the inventions and/or methods claimed in or by the Patents.

   “System” means an ultra-violet light water disinfection system to be installed at the City’s facility located at 2501 Embarcadero Way, Palo Alto, CA 94303 (the “Facility”).

   “Patents” means all patents and patent applications owned by Manufacturer or its suppliers that would be infringed by any person making, using, selling, or offering for sale, the System or the component parts thereof.

2. **License and License Fee / Credit For Purchase.** In consideration of the City’s payment of the License Fee, as defined in section 2.2 below, Manufacturer hereby grants the City a fully paid, irrevocable, non-assignable license under the Patents to negotiate for and purchase the replacement parts and components of the System, use and operate the System,
and commission the production of and/or purchase of replacement components for the System from third parties solely in the event Manufacturer goes bankrupt or otherwise ceases or is unable to provide such replacement components to City under commercially reasonable terms, which shall include, but shall not be limited to, price, delivery schedule and quality.

2.1 Manufacturer hereby represents and warrants to the City that it is the owner of the Patents and that no other person or entity has any rights in the Patents.

2.2 The City shall provide payment in full satisfaction of the license fee required as consideration for the licenses granted hereunder (the “License Fee”). The payment for the License Fee shall be considered as fully paid when the City provides payment for the acceptable delivery of the equipment to the site as stipulated in the Memorandum of Agreement between the City and Manufacturer, Article V-Payment Terms, subparagraph 1.

2.3 The licenses described in this agreement shall only become effective upon receipt by Manufacturer of the License Fee through payment for the acquisition of the system.

3. **Maintenance Services and Replacement Components included.** It is acknowledged that the City may seek to obtain maintenance services and replacement components for the System from the Manufacturer in connection with the city’s use of the System for as long as the System continues in operation. Nonetheless, in the event of a bankruptcy or any other event causing Manufacturer to cease providing replacement components for the System in a commercially reasonable manner, the City will be permitted under this license agreement to enlist the services of another manufacturer to produce spare parts and to provide maintenance. The City or its chosen manufacturer shall use any design drawings, plans and/or models of the System or the subject components solely to replace components for use in the System and not for any other purpose.

4. **Proprietary Rights Notices.** The Manufacturer agrees to reproduce and place on the System all proprietary rights notices required by law including, but not limited to, notices in compliance with 35 U.S.C. section 267.

5. **Taxes.** All taxes, duties or other charges of any kind relating to the license rights granted hereunder (except for taxes based solely on Manufacturer’s profits), shall be the responsibility of the City.

6. **Benefit of the Agreement.** This agreement will enure to the benefit of and be binding upon the respective successors and permitted assigns of the parties hereto.

7. **Assignment.** Neither this agreement, nor any of the rights granted hereunder, shall be assigned by the City without the written consent of Manufacturer.

8. **Notices.** Any notice or other communication to be given in connection with this agreement will be given in writing and will be given by personal delivery or by electronic means of communication addressed to the recipient as follows:
To the City:
City of Palo Alto
Attn: James Allen
Public Works Department
Regional Water Quality Control Plant
Division
2501 Embarcadero Way
Palo Alto, CA 94303
Phone: 650-617-3130
Fax: 650-856-0196
Email: james.allen@cityofpaloalto.org

To the Manufacturer:
Trojan Technologies
Attn: Carl McDonald
3020 Gore Road
London, ON Canada N5V 4T7
Phone: 519-457-3400 x2234
Fax: 519-457-3030
E-mail: cmcdonald@trojanuv.com

or to such other address or individual as may be designated by notice by any party to the other parties. Any demand, notice or other communication given by personal delivery will be conclusively deemed to have been given on the date of actual delivery thereof and, if given by electronic communication, on the day of transmittal thereof if given during the normal business hours of the recipient and on the business day of the recipient during which such normal business hours next occur if not given during normal business hours on any day.

9. **No Partnership, Agency.** The parties hereto shall be independent contractors with respect to each other, and nothing in this agreement shall in any way be construed to constitute any party as an agent, employee or representative of any other, and further, nothing in this agreement shall be construed to make any of the parties partners, joint venturers or agents or to render them liable for the debts and obligations of any other.

10. **Indemnification.** The Manufacturer shall indemnify and hold harmless the City from and against any and all claims, attorney’s fees, damages and related costs and expenses arising out of the City exercising the license rights granted hereunder.

11. **Governing Law.** This agreement is governed by and will be construed in accordance with the laws of California and the United States. The jurisdiction for any litigation arising from this Agreement shall be in the State of California, and shall be venued in the County of Santa Clara.

12. **Counterparts.** This agreement may be executed in any number of counterparts, each of which will be deemed to be an original and all of which taken together will be deemed to constitute one and the same instrument.

IN WITNESS WHEREOF the parties have executed this agreement in counterparts where necessary.

MANUFACTURER:

By: __________________________
Authorized Signing Officer

CITY OF PALO ALTO:

By: __________________________
Authorized Signing Officer

City of Palo Alto – RFP 125217
UV Disinfection Project Update

Currently, the RWQCP disinfacts final treated water by adding 12.5% strength sodium hypochlorite, a chlorine based disinfectant. The Plant’s sodium hypochlorite is industrial grade bleach, about twice the strength of commercial bleach. Chlorine based disinfection generates byproducts and leaves a chlorine residual in the water. Byproducts are minimized by adding a small amount of ammonium hydroxide to the effluent prior to chlorination. The chlorine residual is removed by addition of 25% strength sodium bisulfite to the clean, treated effluent just prior to discharge to the San Francisco Bay. No chlorine is discharged to the Bay.

Project History

The RWQCP began planning for a sustainable future with the initiation of the Long-Term Goals Study in 2000. Through a series of workshops, the RWQCP and community stakeholders set goals for the Plant that met the environmental and socioeconomic needs of member communities. The Plant’s disinfection system and hazardous chemical use was the focus of community stakeholder meetings in 2004 and 2005, with the result that UV presented the most viable alternative to replace the existing chemical disinfection system. On June 19, 2006 (CMR:266:06), Council authorized RMC Water and Environment to prepare the UV Disinfection Facility Plan to assess the feasibility of implementing a UV system to replace the RWQCP’s existing chlorine based disinfection system. The life-cycle assessment determined that the UV disinfection alternative has a lower long-term cost, consumes less energy, lowers the RWQCP’s greenhouse gas emissions, and releases fewer toxins. The UV alternative also offers higher reliability, fewer regulatory risks, and fewer risks of safety and health impact.

<table>
<thead>
<tr>
<th>Life-Cycle Results</th>
<th>Ultraviolet Disinfection Alternative</th>
<th>Existing Chemical Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-year present worth costs</td>
<td>$15.5M</td>
<td>$20.1M</td>
</tr>
<tr>
<td>Energy Consumption (kWh/year)</td>
<td>611,038</td>
<td>808,389</td>
</tr>
<tr>
<td>Greenhouse Gas, CO₂ (lb/year)</td>
<td>751,403</td>
<td>1,138,605</td>
</tr>
<tr>
<td>Trihalomethanes (lb/year)</td>
<td>0</td>
<td>1520</td>
</tr>
<tr>
<td>N-Nitrosodimethylamine (NDMA), (lb/year)</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Cyanide (lb/year)</td>
<td>0</td>
<td>190</td>
</tr>
<tr>
<td>Dioxin (toxic equivalent) (lb/year)</td>
<td>$9.7 \times 10^{-10}$</td>
<td>$5.0 \times 10^{-7}$</td>
</tr>
</tbody>
</table>

UV disinfection is a proven technology with more than 104,000 worldwide installations and use in more than 20% of North America’s wastewater plants. For the RWQCP’s UV project, hundreds of ultraviolet lamps will be submerged in channels to safely disinfect treated wastewater flowing across the lamps. A UV system transfers electromagnetic energy from a mercury arc lamp to an organism’s genetic material. When UV radiation penetrates the cell wall of an organism, it destroys the cells’ ability to reproduce and subsequently kills them.

The physical structure of the UV disinfection facility will be built with durable materials such as concrete, stainless steel, and aluminum and is expected to have a life expectancy of 30 years or more. The UV channels will contain consumable parts such as lamps, ballasts, and sensors that
will be kept in stock, replaced on a routine basis, and restocked through the original equipment manufacturer.

The UV system has been designed to disinfect up to 80 million gallons per day, during peak wet-weather periods. This matches the capacity of the existing chemical disinfection system. During Summer and early Fall, irrigation demand is high and wastewater flows are lower, averaging 23 million gallons per day. The surplus UV system capacity will be used to disinfect up to 8.6 million gallons per day of recycled water. After construction and testing of the UV system, there will be a number of regulatory steps that must be completed before the UV system is approved by the state for recycled water. In the interim, the Plant’s existing chlorination based system will be used to disinfect recycled water.

**Environmental and Community Benefits**
UV disinfection will require less total energy and produce less total carbon dioxide than the Plant’s current chemical based disinfection system. UV requires more onsite energy; however, the chemicals used by the RWQCP have a greater sum of energy use and carbon dioxide emissions embedded in chemical manufacturing and delivery activities. A total annual carbon dioxide emission from the UV disinfection process is estimated to be 751,403 pounds while chemical based disinfection is estimated to be 1,138,605 pounds.

UV disinfection will eliminate or reduce delivery, storage, and use of hazardous chemicals. With UV, overall chemical deliveries to the RWQCP will be reduced from about 141 to about 31 bulk truck deliveries per year, thus reducing hazardous chemical transport locally and regionally. After UV startup, the Plant will close the ammonium hydroxide and sodium bisulfite chemical storage and feed facilities and minimize the use of sodium hypochlorite. This is consistent with the Plant’s long-term goal to (a) maximize worker safety and (b) minimize or eliminate chemical use. Delivery, storage, and annual use of approximately 134,000 gallons of sodium bisulfite, approximately 290,000 gallons of sodium hypochlorite, and approximately 50,000 gallons of ammonium hydroxide will be eliminated. Annual use of sodium hypochlorite will be reduced from about 222 tons currently to about 77 tons after UV system startup.

Release of toxins is among the greatest challenges when using chlorine-based disinfection. UV disinfection will not create the same toxins produced in chlorine based disinfection, including ammonia residuals, chlorine residuals, trihalomethanes (THMs), N-Nitrosodimethylamine (NDMA), or cyanide. Consequently, UV disinfection affords a greater level of environmental protection than chlorine based disinfection.

**Project Financing**
Staff submitted an application for the UV disinfection project to the SWRCB for a low-interest State Revolving Fund (SRF) loan. In October 2008, the SWRCB is expected to commit to funding the project, subject to the outcome of actual project construction bids. The low-interest loan will reduce the project’s financial impacts on customers by spreading out upfront expenses for construction, design, and construction management over a 20-year period. Staff will return to Council to authorize the loan amount and future payments as well as to request authority to execute the loan agreement. The funding commitment is for an approximately 2.5% interest, 20-year loan. The construction cost of the UV project is currently estimated at $11.0 million. Total
project cost, including design and construction management is expected to be $13.2 million. Total project costs covered by the loan are expected to be $11.9 million. The annual operating cost of UV is estimated to be $166,000. Annual loan payments to the SWRCB are estimated to be $840,000, and are partially offset by the lower operating cost of UV disinfection compared to chemical based disinfection (approximately $210,400 savings per year).

The breakdown of loan payments by contributing local agencies is shown below. More accurate cost details will be developed when the design is finalized.

<table>
<thead>
<tr>
<th>Estimated SRF Loan Payments by Contributing Partner Agency</th>
<th>Capacity</th>
<th>%</th>
<th>Annual Loan Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributing Partner Agency</td>
<td>MGD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Palo Alto</td>
<td>15.30</td>
<td>38.16</td>
<td>$320,544</td>
</tr>
<tr>
<td>City of Mountain View</td>
<td>15.1</td>
<td>37.89</td>
<td>$318,276</td>
</tr>
<tr>
<td>City of Los Altos</td>
<td>3.8</td>
<td>9.47</td>
<td>$79,548</td>
</tr>
<tr>
<td>East Palo Alto Sanitary District</td>
<td>3.06</td>
<td>7.64</td>
<td>$64,176</td>
</tr>
<tr>
<td>Stanford University</td>
<td>2.11</td>
<td>5.26</td>
<td>$44,184</td>
</tr>
<tr>
<td>Town of Los Altos Hills</td>
<td>0.63</td>
<td>1.58</td>
<td>$13,272</td>
</tr>
<tr>
<td>Totals</td>
<td>40.0</td>
<td>100</td>
<td>$840,000</td>
</tr>
</tbody>
</table>

*Capacity expressed in annual average flow, million gallons per day*

The UV disinfection facility will expand recycled water capacity. The additional capacity qualifies the RWQCP for a state grant under the Water Recycling Program. Staff is monitoring state and federal grants for the project and will report to Council when the grant application process commences.
Attachment B
Certification of Nondiscrimination

As suppliers of goods or services to the City of Palo Alto, the firm and individuals listed below certify that they do not discriminate in employment of any person because of race, skin color, gender, age, religion, disability, national origin, ancestry, sexual orientation, housing status, marital status, familial status, weight or height of such person; that they are in compliance with all Federal, State and local directives and executive orders regarding nondiscrimination in employment.

1. If Proposer is INDIVIDUAL, sign here:

   Date:________________________

   ________________________________
   Proposer's Signature

   ________________________________
   Proposer's typed name and title

2. If Proposer is PARTNERSHIP or JOINT VENTURE, at least (2) Partners or each of the Joint Ventures shall sign here:

   TROJAN TECHNOLOGIES
   Partnership or Joint Venture Name (type or print)

   Date: Apr 28, 2005
   Helen Nova Scotia Unlimited Liability Company
   Per: ____________________________ V.P.
   Member of the Partnership or Joint Venture signature

   Date: Apr 28, 2005
   Trojan Technologies LLC
   Per: ____________________________ V.P.
   Member of the Partnership or Joint Venture signature

3. If Proposer is a CORPORATION, the duly authorized officer(s) shall sign as follows:

   The undersigned certify that they are respectively:

   ____________________________________ and ____________________________________
   Title ________________________________ ________________________________

   Of the corporation named below; that they are designated to sign the Proposal Cost Form by resolution (attach a certified copy, with corporate seal, if applicable, notarized as to its authenticity or Secretary's certificate of authorization) for and on behalf of the below named CORPORATION, and that they are authorized to execute same for and on behalf of said CORPORATION.

   Corporation Name (type or print)
   By: ____________________________ Date: ____________________________
   Title: ________________________________

   By: ____________________________ Date: ____________________________
   Title: ________________________________

City of Palo Alto – RFP 125217