TO:          HONORABLE CITY COUNCIL  
FROM:        CITY MANAGER  DEPARTMENT: PUBLIC WORKS  
DATE:        SEPTEMBER 15, 2008  CMR: 347:08  
SUBJECT:     APPROVAL OF MEMORANDUM OF AGREEMENT WITH TROJAN TECHNOLOGIES TO PROVIDE ULTRAVIOLET (UV) DISINFECTION EQUIPMENT FOR THE PALO ALTO REGIONAL WATER QUALITY CONTROL PLANT UV DISINFECTION FACILITY PROJECT WQ-06014

RECOMMENDATION
Staff recommends that Council approve and authorize the City Manager or designee to execute the attached Memorandum of Agreement (MOA) with Trojan Technologies (Attachment A).

DISCUSSION
Scope of Services Description
The MOA (Attachment A) creates a binding commitment for Trojan Technologies to supply UV disinfection equipment to a city-selected contractor who will install the disinfection equipment and appurtenant facilities. In approving the MOA, the City is not obligated to Trojan Technologies should Council decide not to award the construction contract later this year. In short, the MOA:

1. Establishes the cost of the UV disinfection equipment at $1,618,338 (includes sales tax);  
2. Requires Trojan Technologies to provide identical bid prices to bidders on the UV disinfection construction project;  
3. Requires Trojan Technologies to manufacture and deliver UV disinfection equipment to the contractor awarded the construction contract; and  
4. Requires Trojan Technologies to furnish consumable parts to the RWQCP at fixed prices for five years after construction.

Trojan Technologies was selected over other firms because they provided the lowest life-cycle cost. The life-cycle cost analysis gives the best value by considering capital as well as operation and maintenance (O&M) costs. Selection of Trojan Technologies was completed prior to construction bidding, allowing the City to avoid significant extra design costs and avoid delays related to preparing multiple, customized designs for each UV equipment manufacturer. The State Water Resources Control Board (SWRCB) approved the RFP and selection of Trojan Technologies as consistent with the state funding requirements for a low-interest loan.
Trojan Technologies will manufacture and deliver to the contractor a UV3000Plus disinfection system including modules, lamps, controls, and appurtenant equipment. Trojan Technologies will also coordinate the final design as well as furnish submittals, system documentation, a patent agreement, training, and start-up services. After project completion, Trojan will provide consumables (e.g., replacement lamps, ballasts, etc.) at a guaranteed price for five years and at current list price thereafter.

Summary of Solicitation Process

<table>
<thead>
<tr>
<th>Supply of UV Disinfection Equipment/ RFP 125217</th>
<th>UV Disinfection Equipment/ RFP 125217</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Length of Project</td>
<td>18 months</td>
</tr>
<tr>
<td>Number of Proposals Mailed</td>
<td>4</td>
</tr>
<tr>
<td>Total Days to Respond to Proposal</td>
<td>30</td>
</tr>
<tr>
<td>Pre-proposal Meeting Date</td>
<td>April 10, 2008</td>
</tr>
<tr>
<td>Number of Company Attendees at Pre-proposal Meeting</td>
<td>4</td>
</tr>
<tr>
<td>Number of Proposals Received:</td>
<td>3</td>
</tr>
<tr>
<td>Company Name</td>
<td>Location (City, State)</td>
</tr>
<tr>
<td>1. Trojan Technologies Inc.</td>
<td>London, Ontario, Canada</td>
</tr>
<tr>
<td>2. Infilco Degremont/Denard</td>
<td>Richmond, VA</td>
</tr>
<tr>
<td>3. WEDECO</td>
<td>Charlotte, NC</td>
</tr>
</tbody>
</table>

Three firms submitted proposals. A fourth firm did not submit a proposal because the California Department of Public Health had not yet approved their disinfection equipment for recycled water.

Proposal review was performed by an evaluation committee consisting of representatives from the Public Works Department RWQCP and from the design-consulting firm of RMC Water and Environment. The committee carefully reviewed each firm's qualifications and submittal in response to the criteria identified in the RFP. The evaluation team considered proposal completeness, financial capabilities of the firm, adequacy of technical support, satisfactory availability of replacement parts, acceptance of the MOA terms, patent license agreement, and specifications and adequacy of existing equipment installations. All three firms were well qualified and responsive. For the qualified firms, the RFP based selection on lowest overall life-cycle cost. The 30-year life-cycle equipment, installation, and O&M costs were developed per the RFP through vendor submittals and engineering estimates; the costs are summarized below.

UV Disinfection Equipment: Life-cycle Cost Evaluation Summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Trojan Technologies</th>
<th>Infilco Degremont/Denard</th>
<th>WEDECO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Cost</td>
<td>$1,618,338</td>
<td>$1,708,185</td>
<td>$2,361,203</td>
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<tr>
<td>Installation Cost</td>
<td>$4,437,231</td>
<td>$4,550,971</td>
<td>$6,067,567</td>
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<tr>
<td>O&amp;M Cost</td>
<td>$2,346,692</td>
<td>$2,335,016</td>
<td>$3,842,018</td>
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<tr>
<td>Overall Life-cycle Costs</td>
<td>$8,402,261</td>
<td>$8,594,172</td>
<td>$12,270,788</td>
</tr>
</tbody>
</table>
PROJECT UPDATE
A project update is included as Attachment B.

TIMELINE
The project is in the final stages of design. A project timeline is below.

- Bid Construction Project October 2008
- Award Construction Project December 2008
- Construction Start April 2009
- Construction Complete October 2010

RESOURCE IMPACT
The UV disinfection equipment will be procured through a construction contract estimated at $11 million, which includes the equipment committed by Trojan Technologies in this MOA at a price of $1,618,338 (includes sales tax). Funds for the UV disinfection project have been budgeted in the FY 2008-2009 Wastewater Treatment Fund capital budget (WQ-06014) in the amount of $20,000,000.

POLICY IMPLICATIONS
This staff report does not represent a change to existing City policies.

ENVIRONMENTAL REVIEW
The City of Palo Alto performed an environmental review under provisions of the California Environmental Quality Act (CEQA). An environmental impact assessment was prepared for the project and it was determined that no potentially adverse impacts would result from the development and that the project would have a less than significant impact on the environment. The environmental impact assessment and negative declaration were unanimously approved by City Council on April 28, 2008 (CMR:214:08).

ATTACHMENTS
Attachment A: Memorandum of Agreement
Attachment B: UV Disinfection Project Update
Attachment C: Certification of Nondiscrimination

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DEPARTMENT HEAD: GLENN S. ROBERTS
Director of Public Works

CITY MANAGER APPROVAL: JAMES KEENE
City Manager