

CONTRACT MA-080-20010727

FOR

WATER TREATMENT CHEMICALS AND RELATED SERVICES

BETWEEN

OC PUBLIC WORKS

AND

NALCO COMPANY LLC



**CONTRACT MA-080-20010727
WITH
NALCO COMPANY LLC
FOR
WATER TREATMENT CHEMICALS AND RELATED SERVICES**

THIS CONTRACT MA-080-20010727 for Water Treatment Chemicals and Related Services (hereinafter referred to as “Contract”) is made and entered into as of the date fully executed by and between the County of Orange, a political subdivision of the State of California, (hereinafter referred to as “County”) and Nalco Company LLC with a place of business at 10521 Humbolt, Los Alamitos, CA 90720 (hereinafter referred to as “Contractor”), with a County and Contractor sometimes referred to as “Party” or collectively as “Parties”.

ATTACHMENTS

This Contract is comprised of this document and the following Attachments, which are attached hereto and incorporated by reference into this Contract:

Attachment A – Scope of Work

Attachment B – Payment/Compensation

Attachment C – Outside Route

Attachment D – Cooling Towers Included in Contract

Attachment E – Probation – Vendor Clearance Process

Attachment F – Staffing Plan

RECITALS

WHEREAS, Contractor and County are entering into this Contract for Water Treatment Chemicals and Related Services under a usage Contract; and,

WHEREAS, County solicited Contract for Water Treatment Chemicals and Related Services as set forth herein, and Contractor represented that it is qualified to provide Water Treatment Chemicals and Related Services to the County as further set forth here; and,

WHEREAS, Contractor agrees to provide Water Treatment Chemicals and Related Services to the County as further set forth in the Scope of Work, attached hereto as Attachment A; and,

WHEREAS, County agrees to pay Contractor based on the schedule of fees set forth in Payment/Compensation, attached hereto as Attachment B; and,

NOW, THEREFORE, the Parties mutually agree as follows:

DEFINITIONS

DPA shall mean the Deputy Purchasing Agent assigned to this Contract.

CUF shall mean Central Utility Facility

MPY shall mean Mils Per Year

MSDS shall mean Material Safety Data Sheets

USFDA shall mean United States Food and Drug Administration

OSHA shall mean Occupational Safety and Health Administration

ASME shall mean The American Society of Mechanical Engineers

HSRG shall mean Heat System Recovery Generator

SDS Shall mean Safety Data Sheets

BFW shall mean Boiler Feed Water

ARTICLES

General Terms and Conditions:

- A. **Governing Law and Venue:** This Contract has been negotiated and executed in the state of California and shall be governed by and construed under the laws of the state of California. In the event of any legal action to enforce or interpret this Contract, the sole and exclusive venue shall be a court of competent jurisdiction located in Orange County, California, and the parties hereto agree to and do hereby submit to the jurisdiction of such court, notwithstanding Code of Civil Procedure Section 394. Furthermore, the parties specifically agree to waive any and all rights to request that an action be transferred for adjudication to another county.
- B. **Entire Contract:** This Contract contains the entire Contract between the parties with respect to the matters herein, and there are no restrictions, promises, warranties or undertakings other than those set forth herein or referred to herein. No exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing. Electronic acceptance of any additional terms, conditions or supplemental Contracts by any County employee or agent, including but not limited to installers of software, shall not be valid or binding on County unless accepted in writing by County's Procurement Officer or designee.
- C. **Amendments:** No alteration or variation of the terms of this Contract shall be valid unless made in writing and signed by the parties; no oral understanding or agreement not incorporated herein shall be binding on either of the parties; and no exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing.
- D. **Taxes:** Unless otherwise provided herein or by law, price quoted does not include California state sales or use tax. Out-of-state Contractors shall indicate California Board of Equalization permit number and sales permit number on invoices, if California sales tax is added and collectable. If no permit numbers are shown, sales tax will be deducted from payment. The Auditor-Controller will then pay use tax directly to the State of California in lieu of payment of sales tax to the Contractor.
- E. **Delivery:** Time of delivery of goods or services is of the essence in this Contract. County reserves the right to refuse any goods or services and to cancel all or any part of the goods not conforming to applicable specifications, drawings, samples or descriptions or services that do not conform to the prescribed statement of work. Acceptance of any part of the order for goods shall not bind County to accept future shipments nor deprive it of the right to return goods already accepted at Contractor's expense. Over shipments and under shipments of goods shall be only as agreed to in writing by County. Delivery shall not be deemed to be complete until all goods or services have actually been received and accepted in writing by County.

- F. **Acceptance Payment:** Unless otherwise agreed to in writing by County; 1) acceptance shall not be deemed complete unless in writing and until all the goods/services have actually been received, inspected, and tested to the satisfaction of County, and 2) payment shall be made in arrears after satisfactory acceptance.
- G. **Warranty:** Contractor expressly warrants that the goods covered by this Contract are 1) free of liens or encumbrances, 2) merchantable and good for the ordinary purposes for which they are used, and 3) fit for the particular purpose for which they are intended and as specified herein. Except for the foregoing all other implied warranties are disclaimed. Acceptance of this order shall constitute an agreement upon Contractor's part to indemnify, defend and hold County and its indemnitees as identified in **article "Z"** below, and as more fully described in **article "Z,"** harmless from liability, loss, damage and expense, including reasonable counsel fees, incurred or sustained by County by reason of the failure of the goods/services to conform to such warranties, faulty work performance, negligent or unlawful acts, and non-compliance with any applicable state or federal codes, ordinances, orders, or statutes, including the Occupational Safety and Health Act (OSHA) and the California Industrial Safety Act. Such remedies shall be in addition to any other remedies provided by law. The warranty is limited to repair, replacement or refund for defective items. Notwithstanding anything to the contrary contained herein, in no event shall either party be liable to the other for any special, consequential or indirect damages. Without limiting Contractor's obligations to perform the services in a professional and workmanlike manner, the water treatment program does not cover and Contractor makes no warranties with respect to water system biohazards from waterborne pathogens including but not limited to Legionella bacteria or health risks therefrom.
- H. **Patent/Copyright Materials/Proprietary Infringement:** Unless otherwise expressly provided in this Contract, Contractor shall be solely responsible for clearing the right to use any patented or copyrighted materials in the performance of this Contract. Contractor warrants that any software as modified through services provided hereunder will not infringe upon or violate any patent, proprietary right, or trade secret right of any third party. Contractor agrees that, in accordance with the more specific requirement contained in **article "Z"** below, it shall indemnify, defend and hold County and County Indemnitees harmless from any and all such claims and be responsible for payment of all costs, damages, penalties and expenses related to or arising from such claim(s), including, costs and expenses but not including attorney's fees. Notwithstanding anything to the contrary contained herein or otherwise, Contractor's indemnity obligations for infringement, misuse or similar claims shall only apply to the extent the County uses Contractor's goods and services in accordance with Contractor's instructions.
- I. **Assignment:** The terms, covenants, and conditions contained herein shall apply to and bind the heirs, successors, executors, administrators and assigns of the parties. Furthermore, neither the performance of this Contract nor any portion thereof may be assigned by Contractor without the express written consent of County. Any attempt by Contractor to assign the performance or any portion thereof of this Contract without the express written consent of County shall be invalid and shall constitute a breach of this Contract.
- J. **Non-Discrimination:** In the performance of this Contract, Contractor agrees that it will comply with the requirements of Section 1735 of the California Labor Code and not engage nor permit any subcontractors to engage in discrimination in employment of persons because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons. Contractor acknowledges that a violation of this provision shall subject Contractor to penalties pursuant to Section 1741 of the California Labor Code.
- K. **Termination:** In addition to any other remedies or rights it may have by law, County has the right to immediately terminate this Contract without penalty for cause or after 30 days' written notice

without cause, unless otherwise specified. Cause shall be defined as any material breach of contract, any misrepresentation or fraud on the part of the Contractor. Exercise by County of its right to terminate the Contract shall relieve County of all further obligation.

- L. **Consent to Breach Not Waiver:** No term or provision of this Contract shall be deemed waived and no breach excused, unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. Any consent by any party to, or waiver of, a breach by the other, whether express or implied, shall not constitute consent to, waiver of, or excuse for any other different or subsequent breach.
- M. **Independent Contractor:** Contractor shall be considered an independent contractor and neither Contractor, its employees, nor anyone working under Contractor shall be considered an agent or an employee of County. Neither Contractor, its employees nor anyone working under Contractor shall qualify for workers' compensation or other fringe benefits of any kind through County.
- N. **Performance Warranty:** Contractor shall warrant all work under this Contract, taking necessary steps and precautions to perform the work to County's satisfaction. Contractor shall be responsible for the professional quality, technical assurance, timely completion and coordination of all documentation and other goods/services furnished by the Contractor under this Contract. Contractor shall perform all work diligently, carefully, and in a good and workmanlike manner; shall furnish all necessary labor, supervision, machinery, equipment, materials, and supplies, shall at its sole expense obtain and maintain all permits and licenses required by public authorities, including those of County required in its governmental capacity, in connection with performance of the work. If permitted to subcontract, Contractor shall be fully responsible for all work performed by subcontractors.
- O. **Insurance Requirements:** Prior to the provision of services under this Contract, the Contractor agrees to purchase all required insurance at Contractor's expense, including all endorsements required herein, necessary to satisfy the County that the insurance provisions of this Contract have been complied with. Contractor agrees to keep such insurance coverage, Certificates of Insurance, and endorsements on deposit with the County during the entire term of this Contract. In addition, all subcontractors performing work on behalf of Contractor pursuant to this Contract shall obtain insurance subject to the same terms and conditions as set forth herein for Contractor.

Contractor shall ensure that all subcontractors performing work on behalf of Contractor pursuant to this Contract shall be covered under Contractor's insurance as an Additional Insured or maintain insurance subject to the same terms and conditions as set forth herein for Contractor. Contractor shall not allow subcontractors to work if subcontractors have less than the level of coverage required by County from Contractor under this Contract. It is the obligation of Contractor to provide notice of the insurance requirements to every subcontractor and to receive proof of insurance prior to allowing any subcontractor to begin work. Such proof of insurance must be maintained by Contractor through the entirety of this Contract for inspection by County representative(s) at any reasonable time.

All self-insured retentions (SIRs) shall be clearly stated on the Certificate of Insurance. Any self-insured retention (SIR) in an amount in excess of Fifty Thousand Dollars (\$50,000) shall specifically be approved by the County's Risk Manager, or designee, upon review of Contractor's current audited financial report. If Contractor's SIR is approved, Contractor, in addition to, and without limitation of, any other indemnity provision(s) in this Contract, agrees to all of the following:

- 1) In addition to the duty to indemnify and hold the County harmless against any and all liability, claim, demand or suit resulting from Contractor's, its agents, employee's or

- subcontractor’s performance of this Contract, Contractor shall defend the County at its sole cost and expense with counsel approved by Board of Supervisors against same; and
- 2) Contractor’s duty to defend, as stated above, shall be absolute and irrespective of any duty to indemnify or hold harmless; and
 - 3) The provisions of California Civil Code Section 2860 shall apply to any and all actions to which the duty to defend stated above applies, and the Contractor’s SIR provision shall be interpreted as though the Contractor was an insurer and the County was the insured.

If the Contractor fails to maintain insurance acceptable to the County for the full term of this Contract, the County may terminate this Contract.

Qualified Insurer

The policy or policies of insurance must be issued by an insurer with a minimum rating of A- (Secure A.M. Best's Rating) and VIII (Financial Size Category as determined by the most current edition of the **Best's Key Rating Guide/Property-Casualty/United States or ambest.com**). It is preferred, but not mandatory, that the insurer be licensed to do business in the state of California (California Admitted Carrier).

If the insurance carrier does not have an A.M. Best Rating of A-/VIII, the CEO/Office of Risk Management retains the right to approve or reject a carrier after a review of the company's performance and financial ratings.

The policy or policies of insurance maintained by the Contractor shall provide the minimum limits and coverage as set forth below:

<u>Coverage</u>	<u>Minimum Limits</u>
Commercial General Liability	\$1,000,000 per occurrence \$2,000,000 aggregate
Automobile Liability including coverage for owned, non-owned and hired vehicles	\$1,000,000 per occurrence
Workers Compensation	Statutory
Employers Liability Insurance	\$1,000,000 per occurrence

Required Coverage Forms

The Commercial General Liability coverage shall be written on Insurance Services Office (ISO) form CG 00 01, or a substitute form providing liability coverage at least as broad.

The Business Auto Liability coverage shall be written on ISO form CA 00 01, CA 00 05, CA 0012, CA 00 20, or a substitute form providing coverage at least as broad.

Required Endorsements

The Commercial General Liability policy shall contain the following endorsements, which shall accompany the Certificate of Insurance:

- 1) An Additional Insured endorsement using ISO form CG 20 26 04 13 or a form at least as broad naming the *County of Orange its elected and appointed officials, officers, agents*

and employees as Additional Insureds, or provide blanket coverage, which will state ***AS REQUIRED BY WRITTEN CONTRACT.***

- 2) A primary non-contributing endorsement using ISO form CG 20 01 04 13, or a form at least as broad evidencing that the Contractor's insurance is primary and any insurance or self-insurance maintained by the County of Orange shall be excess and non-contributing.

The Workers' Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against the ***County of Orange, its elected and appointed officials, officers, agents and employees*** or provide blanket coverage, which will state ***AS REQUIRED BY WRITTEN CONTRACT.***

All insurance policies required by this Contract shall waive all rights of subrogation against the County of Orange, its elected and appointed officials, officers, agents and employees when acting within the scope of their appointment or employment.

Contractor shall notify County in writing within thirty (30) days of any policy cancellation and ten (10) days for non-payment of premium and provide a copy of the cancellation notice to County. Failure to provide written notice of cancellation may constitute a material breach of the Contract, upon which the County may suspend or terminate this Contract.

The Commercial General Liability policy shall contain a severability of interests clause also known as a "separation of insureds" clause (standard in the ISO CG 0001 policy).

Insurance certificates should be forwarded to the agency/department address listed on the solicitation.

If the Contractor fails to provide the insurance certificates and endorsements within seven (7) days of notification by CEO/Procurement or the agency/department procurement division, award may be made to the next qualified vendor.

County expressly retains the right to require Contractor to increase or decrease insurance of any of the above insurance types throughout the term of this Contract. Any increase or decrease in insurance will be as deemed by County of Orange Risk Manager as appropriate to adequately protect County.

County shall notify Contractor in writing of changes in the insurance requirements. If Contractor does not deposit copies of acceptable Certificates of Insurance and endorsements with County incorporating such changes within thirty (30) days of receipt of such notice, this Contract may be in breach without further notice to Contractor, and County shall be entitled to all legal remedies.

The procuring of such required policy or policies of insurance shall not be construed to limit Contractor's liability hereunder nor to fulfill the indemnification provisions and requirements of this Contract, nor act in any way to reduce the policy coverage and limits available from the insurer.

- P. **Changes:** Contractor shall make no changes in the work or perform any additional work without the County's specific written approval.

- Q. **Change of Ownership/Name, Litigation Status, Conflicts with County Interests:**

Contractor agrees that if there is a change or transfer in ownership of Contractor's business prior to completion of this Contract, and the County agrees to an assignment of the Contract, the new owners shall be required under the terms of sale or other instruments of transfer to assume

Contractor's duties and obligations contained in this Contract, and complete them to the satisfaction of the County.

County reserves the right to immediately terminate the Contract in the event the County determines that the assignee is not qualified or is otherwise unacceptable to the County for the provision of services under the Contract.

In addition, Contractor has the duty to notify the County in writing of any change in the Contractor's status with respect to name changes that do not require an assignment of the Contract. The Contractor is also obligated to notify the County in writing if the Contractor becomes a party to any litigation against the County, or a party to litigation that may reasonably affect the Contractor's performance under the Contract, as well as any potential conflicts of interest between Contractor and County that may arise prior to or during the period of Contract performance. While Contractor will be required to provide this information without prompting from the County any time there is a change in Contractor's name, conflict of interest or litigation status, Contractor must also provide an update to the County of its status in these areas whenever requested by the County.

The Contractor shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with County interests. In addition to the Contractor, this obligation shall apply to the Contractor's employees, agents, and subcontractors associated with the provision of goods and services provided under this Contract. The Contractor's efforts shall include, but not be limited to establishing rules and procedures preventing its employees, agents, and subcontractors from providing or offering gifts, entertainment, payments, loans or other considerations which could be deemed to influence or appear to influence County staff or elected officers in the performance of their duties.

- R. **Force Majeure:** Contractor shall not be assessed with liquidated damages or unsatisfactory performance penalties during any delay beyond the time named for the performance of this Contract caused by any act of God, war, civil disorder, employment strike or other cause beyond its reasonable control, provided Contractor gives written notice of the cause of the delay to County within ten (10) business days of the start of the delay and Contractor avails himself of any available remedies.
- S. **Confidentiality:** Contractor agrees to maintain the confidentiality of all County and County-related records and information pursuant to all statutory laws relating to privacy and confidentiality that currently exist or exist at any time during the term of this Contract. All such records and information shall be considered confidential and kept confidential by Contractor and Contractor's staff, agents and employees.
- T. **Compliance with Laws:** Contractor represents and warrants that services to be provided under this Contract shall fully comply, at Contractor's expense, with all standards, laws, statutes, restrictions, ordinances, requirements, and regulations (collectively "laws"), including, but not limited to those issued by County in its governmental capacity and all other laws applicable to the services at the time services are provided to and accepted by County. Contractor acknowledges that County is relying on Contractor to ensure such compliance, and pursuant to the requirements of **article "Z"** below, Contractor agrees that it shall defend, indemnify and hold County and County INDEMNITEES harmless from all liability, damages, costs and expenses arising from or related to a violation of such laws.
- U. **Freight:** Prior to the County's express acceptance of delivery of products. Contractor assumes full responsibility for all transportation, transportation scheduling, packing, handling, insurance, and other services associated with delivery of all products deemed necessary under this Contract.

- V. **Severability:** If any term, covenant, condition or provision of this Contract is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions hereof shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby.
- W. **Attorney Fees:** In any action or proceeding to enforce or interpret any provision of this Contract, each party shall bear their own attorney's fees, costs and expenses.
- X. **Interpretation:** This Contract has been negotiated at arm's length and between persons sophisticated and knowledgeable in the matters dealt with in this Contract. In addition, each party had been represented by experienced and knowledgeable independent legal counsel of their own choosing or has knowingly declined to seek such counsel despite being encouraged and given the opportunity to do so. Each party further acknowledges that they have not been influenced to any extent whatsoever in executing this Contract by any other party hereto or by any person representing them, or both. Accordingly, any rule or law (including California Civil Code Section 1654) or legal decision that would require interpretation of any ambiguities in this Contract against the party that has drafted it is not applicable and is waived. The provisions of this Contract shall be interpreted in a reasonable manner to effect the purpose of the parties and this Contract.
- Y. **Employee Eligibility Verification:** The Contractor warrants that it fully complies with all Federal and State statutes and regulations regarding the employment of aliens and others and that all its employees performing work under this Contract meet the citizenship or alien status requirement set forth in Federal statutes and regulations. The Contractor shall obtain, from all employees performing work hereunder, all verification and other documentation of employment eligibility status required by Federal or State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986, 8 U.S.C. §1324 et seq., as they currently exist and as they may be hereafter amended. The Contractor shall retain all such documentation for all covered employees for the period prescribed by the law. The Contractor shall indemnify, defend with counsel approved in writing by County, and hold harmless, the County, its agents, officers, and employees from employer sanctions and any other liability which may be assessed against the Contractor or the County or both in connection with any alleged violation of any Federal or State statutes or regulations pertaining to the eligibility for employment of any persons performing work under this Contract.
- Z. **Indemnification:** Contractor agrees to indemnify, defend with counsel approved in writing by County, and hold County, its elected and appointed officials, officers, employees, agents and those special districts and agencies which County's Board of Supervisors acts as the governing Board ("County Indemnitees") harmless from any claims, demands or liability of any kind or nature, brought by a third party including but not limited to personal injury or property damage, arising from or related to the services, products or other performance provided by Contractor pursuant to this Contract. If judgment is entered against Contractor and County by a court of competent jurisdiction because of the concurrent active negligence of County or County Indemnitees, Contractor and County agree that liability will be apportioned as determined by the court. Neither party shall request a jury apportionment.
- AA. **Audits/Inspections:** Contractor agrees to permit the County's Auditor-Controller or the Auditor-Controller's authorized representative (including auditors from a private auditing firm hired by the County) access during normal working hours to all books, accounts, records, reports, files, financial records, supporting documentation, including payroll and accounts payable/receivable records, and other papers or property of Contractor for the purpose of auditing or inspecting any aspect of performance under this Contract. The inspection and/or audit will be confined to those matters connected with the performance of the Contract including, but not limited to, the costs of administering the Contract. The County will provide reasonable notice of such an audit or inspection.

The County reserves the right to audit and verify the Contractor's records before final payment is made.

Contractor agrees to maintain such records for possible audit for a minimum of three years after final payment, unless a longer period of records retention is stipulated under this Contract or by law. Contractor agrees to allow interviews of any employees or others who might reasonably have information related to such records. Further, Contractor agrees to include a similar right to the County to audit records and interview staff of any subcontractor related to performance of this Contract.

Should the Contractor cease to exist as a legal entity, the Contractor's records pertaining to this Contract shall be forwarded to the County's project manager.

BB. Contingency of Funds: Contractor acknowledges that funding or portions of funding for this Contract may be contingent upon state budget approval; receipt of funds from, and/or obligation of funds by, the state of California to County; and inclusion of sufficient funding for the services hereunder in the budget approved by County's Board of Supervisors for each fiscal year covered by this Contract. If such approval, funding or appropriations are not forthcoming, or are otherwise limited, County may immediately terminate or modify this Contract without penalty.

CC. Expenditure Limit: The Contractor shall notify the County of Orange assigned Deputy Purchasing Agent in writing when the expenditures against the Contract reach 75 percent of the dollar limit on the Contract. The County will not be responsible for any expenditure overruns and will not pay for work exceeding the dollar limit on the Contract unless a change order to cover those costs has been issued.

DD. SECURITY REQUIREMENTS SHERIFF'S FORENSIC FACILITY:

The County operates and provides water treatment to Sherriff Department Facilities. Contractors and their employees who perform services in this facility will be required to pass a security screening process and to adhere to strict operation policies. These policies have been designed with the primary purpose of ensuring a safe and secure environment for all involved.

A. Background Checks:

1. All personnel to be employed in performance of the work under this Contract shall be subject to security clearance, Clearance must be updated and renewed every twelve (12) months from original date of clearance.
2. No person, who is required to enter a secured facility of the Sheriff, shall be assigned to perform work under this contract that has not received prior clearance from the Sheriff-Coroner Department.
3. Within fifteen (15) days of the effective date of this Contract, Contractor shall prepare and submit a complete and accurate "Contractor Security Clearance" information form for all Contractor's employee who will be working on or who will need access to the Sheriff-Coroner's facilities to perform work covered by this Contract. County project manager shall provide form(s) to Contractor's project manager. Contractor is also responsible for ensuring that anytime an employee is assigned to work on Sheriff-Coroner's facilities under this contract that a Security Clearance form is submitted and approved prior to that employee requiring access to such premises for providing services under this contract.

4. Contractor shall inform employees assigned to perform work within secured facilities of the Sheriff-Coroner that the employee is required to inform Contractor if/when any information provided on the security clearance form changes. Contractor shall submit an updated security clearance form whenever there is a change in information provided by an employee. Contractor shall be responsible for ensuring to submit Security Clearance forms in order to renew the Security Clearance(s) every twelve months. Renewal forms shall be submitted at least ten (10) County working days prior to the expiration of an existing clearance; a security clearance is valid for 12 months from the date of issuance. If Contractor is submitting an updated form due to a change in information, said form shall be submitted within in 10 county working days of the employer becoming aware of the updated information.
5. Contractor Security Clearance information forms will be provided by County Project Manager upon request and will be screened by the Sheriff-Coroner's Department.
6. Contractor Security Clearance information forms shall be thoroughly and accurately completed. Omissions or false statements, regardless of the nature or magnitude, may be grounds for denying clearance.
7. County will not give Contractor the reason an individual's clearance is denied, but will provide explanation to individual affected via U.S. Mail.

B. All Facilities:

Contractor shall ensure that:

1. All vehicles parked on site shall be locked and thoroughly secured at all times.
2. All tools and materials shall remain in possession of the user at all times and shall never be left unattended.
3. All lost or misplaced tools shall be reported immediately to the security staff or escort personnel.
4. All materials, especially those materials that could be used to inflict injury such as nails, wire, wood, and any other objects or weapons of convenience, shall be continuously cleaned up and removed from the work site as work progresses.

C. Workmen shall:

1. Have no contact, either verbal or physical, with internees in the facility.

Specifically:

- a) Do not give names or addresses to internees.
- b) Do not receive any names or addresses from internees.
- c) Do not disclose the identity of any internee to anyone outside the facility.
- d) Do not give any materials to internees, especially cigarettes, matches, tools, or any other items that can be considered contraband.
- e) Failure to comply with these requirements is a criminal act and can result in prosecution.

2. Plan their activities to minimize the number of times they must enter and exit a facility. i.e., transport all tools, equipment and materials needed for the day at the start of work and restrict all breaks to the absolute minimum.
3. Arrive at the site no more than fifteen (15) minutes prior to the scheduled time or no more than fifteen (15) minutes after the scheduled time.
4. If delay or cancellation is necessary, immediately contact the designated on-site Building Coordinator and/or the County's Project Manager.
5. Report to the Control Desk or on-site Building Coordinator and sign-in log, name, date and time upon arrival at the job site. Control will ensure that the work area is clear and ready for work to begin. Follow any special security requirements issued by the County's Project Manager.
6. Report to the Control Desk or the on-site site Building Coordinator and sign-out name and time when leaving the facility, either temporarily or at the end of the workday.
7. Immediately report all accidents, spills, damage, unusual conditions and/or unusual activities to the Control Desk or the on-site Building Coordinator.

Securely close and check all gates and doors to ensure that they are tightly closed and locked

EE. SECURITY REQUIREMENTS FOR PROBATION FACILITIES:

A. Background checks:

All Contractor personnel to be employed in performance of work under this Contract shall be subject to background checks and clearance prior to working in Probation facility per the Vendor Clearance Process detailed in Attachment D.

B. Performance Requirements:

All Contractor vehicles parked on site shall be locked and thoroughly secured at all times. All tools and materials shall remain in Contractor's possession at all times and shall never be left unattended. All lost or misplaced tools or materials shall be reported immediately to the security staff or Control in youth detention facilities or to the escort or Control in the Sheriff's facilities. All materials, large or small, from removal operations or new construction (especially those materials that could be used to inflict injury, such as nails, wire, wood, and any other objects or weapons of convenience) shall be continuously cleaned up as work progresses. All work areas shall be secured prior to the end of each work period. Workers shall have no contact, either verbal or physical, with inmates in the facilities.

C. Contractor's employees shall not:

1. Give names or addresses to inmates;
2. Receive any names or addresses from inmates (including materials to be passed to another individual or inmate);
3. Disclose the identity of any inmate to anyone outside the facility;
4. Give any materials to inmates;
5. Receive any materials from inmates (including materials to be passed to another individual or inmate); or

6. Smoke or use profanity or other inappropriate language while on site. Contractor's employees shall not enter the facility while under the influence of alcohol, drugs or other intoxicants and shall not have such materials in their possession. Contractor's employees shall plan their activities to minimize the number of times they must enter and exit a facility.

D. Contractor's personnel shall:

1. Comply with the written schedule provided by the County which shall clearly show the specific start and end times for each work day.
2. Arrive at the site no more than 15 minutes prior to the scheduled time or no more than 15 minutes after the scheduled time.
3. Report to the control desk and sign-in log, name, date and time upon arrival at the job site.
4. Report to the control desk and sign-out, name, and time when leaving the facility.
5. Control will ensure that the work area is clear and ready for work to begin. If a Contractor's employee is delayed or cancellation is necessary, the designated on-site coordinator or the County's Project Manager or his designee should be contacted immediately. Repeat problems will be grounds for remedial action which may include Contract termination.
6. Immediately report all accidents, spills, damage, unusual conditions and/or unusual activities to the Control Desk.
7. Securely close and check all gates and doors to ensure that they are tightly closed and locked.
8. Restrict all activities to the immediate work site and adjacent assigned areas.
9. Remain with the assigned escort at all times, unless otherwise directed by the onsite coordinator.
10. Transport all tools, equipment and materials needed for the day at the start of the work period and restrict all breaks to the absolute minimum.
11. Failure to comply with these requirements is a criminal act and can result in prosecution.

Amendment No. 6

FF. **LEVINE ACT REQUIREMENTS:** Contractor agrees to comply with Government Code Section 84308. Contractor further agrees to disclose to the County any contribution made to any members of the Board of Supervisors or County Agency Officers by Contractor, Contractor's agent or lobbyist, or, if applicable, any subcontractor(s) for the twelve (12) months prior to and twelve (12) months following the approval, renewal, or extension of this Contract.

Additional Terms and Conditions:

1. **Scope of Contract:** This Contract specifies the contractual terms and conditions by which the County will procure Water Treatment Chemicals and Related Services from Contractor as further detailed in the Scope of Work, identified and incorporated herein by this reference as “Attachment A”.
2. **Term of Contract:** This Contract shall commence upon execution of all necessary signatures and continue for three (3) calendar years from that date, unless otherwise terminated by County. This Contract may be renewed as set forth in article 3 below.

Amendment No. 4

Contract shall be renewed for one (1) year from May 19, 2023 through May 18, 2024, unless otherwise terminated as provided herein.

Amendment No. 6

Contract shall be renewed for one (1) year from May 19, 2024 through May 18, 2025, unless otherwise terminated as provided herein.

3. **Renewal:** This Contract may be renewed by mutual written agreement of both Parties for two (2) additional one (1) year terms. The County does not have to give reason if it elects not to renew. Renewal periods shall be subject to approval by the County of Orange Board of Supervisors
4. **Adjustments – Scope of Work:** No adjustments made to the Scope of Work will be authorized without prior written approval of the County assigned Deputy Purchasing Agent.
5. **Breach of Contract:** The failure of the Contractor to comply with any of the provisions, covenants or conditions of this Contract shall be a material breach of this Contract. In such event the County may, and in addition to any other remedies available at law, in equity, or otherwise specified in this Contract:
 - a) Terminate the Contract immediately, pursuant to Section K herein;
 - b) Afford the Contractor written notice of the breach and ten (10) calendar days or such shorter time that may be specified in this Contract within which to cure the breach;
 - c) Discontinue payment to the Contractor for and during the period in which the Contractor is in breach; and
 - d) Offset against any monies billed by the Contractor but yet unpaid by the County those monies disallowed pursuant to the above.
6. **Civil Rights:** Contractor attests that services provided shall be in accordance with the provisions of Title VI and Title VII of the Civil Rights Act of 1964, as amended, Section 504 of the Rehabilitation Act of 1973, as amended; the Age Discrimination Act of 1975 as amended; Title II of the Americans with Disabilities Act of 1990, and other applicable State and federal laws and regulations prohibiting discrimination on the basis of race, color, national origin, ethnic group identification, age, religion, marital status, sex or disability.
7. **Conflict of Interest – Contractor’s Personnel:** The Contractor shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with the best interests of the County. This obligation shall apply to the Contractor; the Contractor’s employees, agents, and subcontractors associated with accomplishing work and services hereunder. The Contractor’s

efforts shall include, but not be limited to establishing precautions to prevent its employees, agents, and subcontractors from providing or offering gifts, entertainment, payments, loans or other considerations which could be deemed to influence or appear to influence County staff or elected officers from acting in the best interests of the County.

8. **Conflict of Interest – County Personnel:** The County of Orange Board of Supervisors policy prohibits its employees from engaging in activities involving a conflict of interest. The Contractor shall not, during the period of this Contract, employ any County employee for any purpose.
9. **Contractor’s Project Manager and Key Personnel:** Contractor shall appoint a Project Manager to direct the Contractor’s efforts in fulfilling Contractor’s obligations under this Contract. This Project Manager shall be subject to approval by the County and shall not be changed without the written consent of the County’s Project Manager, which consent shall not be unreasonably withheld.

The Contractor’s Project Manager shall be assigned to this project for the duration of the Contract and shall diligently pursue all work and services to meet the project time lines. Contractor shall notify County’s Project Manager in the event the Contractor’s Project Manager is changed for any reason. The County’s Project Manager shall have the right to require the removal and replacement of the Contractor’s Project Manager from providing services to the County under this Contract. The County’s Project manager shall notify the Contractor in writing of such action. The Contractor shall accomplish the removal within five (5) business days after written notice by the County’s Project Manager. The County’s Project Manager shall review and approve the appointment of the replacement for the Contractor’s Project Manager. The County is not required to provide any additional information, reason or rationale in the event it requires the removal of Contractor’s Project Manager from providing further services under the Contract.

10. **Contractor Personnel – Reference Checks:** The Contractor warrants that all persons employed to provide service under this Contract have satisfactory past work records indicating their ability to adequately perform the work under this Contract. Contractor’s employees assigned to this project must meet character standards as demonstrated by background investigation and reference checks, coordinated by the agency/department issuing this Contract.
11. **Contractor’s Expense:** The Contractor will be responsible for all costs related to photo copying, telephone communications, fax communications, and parking while on County sites during the performance of work and services under this Contract. The County will not provide free parking for any service in the County Civic Center.
12. **Contractor Personnel – Uniform/Badges/Identification:** The Contractor warrants that all persons employed to provide service under this Contract have satisfactory past work records indicating their ability to accept the kind of responsibility under this Contract.

All Contractor’s employees shall be required to wear uniforms, badges, or other means of identification which are to be furnished by the Contractor and must be worn at all times while working on County property. The assigned Deputy Purchasing Agent must be notified in writing, within seven (7) days of notification of award of Contract of the uniform and/or badges and/or other identification to be worn by employees prior to beginning work and notified in writing seven (7) days prior to any changes in this procedure.

13. **Contractor’s Records:** The Contractor shall keep true and accurate accounts, records, books and data which shall correctly reflect the business transacted by the Contractor in accordance with generally accepted accounting principles. These records shall be stored in Orange County for a period of three (3) years after final payment is received from the County. Storage of records in

another county will require written approval from the County of Orange assigned Deputy Purchasing Agent.

14. **Conditions Affecting Work:** The Contractor shall be responsible for taking all steps reasonably necessary to ascertain the nature and location of the work to be performed under this Contract and to know the general conditions which can affect the work or the cost thereof. Any failure by the Contractor to do so will not relieve Contractor from responsibility for successfully performing the work without additional cost to the County. The County assumes no responsibility for any understanding or representations concerning the nature, location(s) or general conditions made by any of its officers or agents prior to the execution of this Contract, unless such understanding or representations by the County are expressly stated in the Contract.
15. **Data – Title To:** All materials, documents, data or information obtained from the County data files or any County medium furnished to the Contractor in the performance of this Contract will at all times remain the property of the County. Such data or information may not be used or copied for direct or indirect use by the Contractor after completion or termination of this Contract without the express written consent of the County. All materials, documents, data or information, including copies, must be returned to the County at the end of this Contract.
16. **Default – Reprocurement Costs:** In case of Contract breach by Contractor, resulting in termination by the County, the County may procure the goods and/or services from other sources. If the cost for those goods and/or services is higher than under the terms of the existing Contract, Contractor will be responsible for paying the County the difference between the Contract cost and the price paid, and the County may deduct this cost from any unpaid balance due the Contractor. The price paid by the County shall be the prevailing market price at the time such purchase is made. This is in addition to any other remedies available under this Contract and under law.
17. **Disputes – Contract:**
- A. The parties shall deal in good faith and attempt to resolve potential disputes informally. If the dispute concerning a question of fact arising under the terms of this Contract is not disposed of in a reasonable period of time by the Contractor’s Project Manager and the County’s Project Manager, as specified in Article 26. “Notices,” such matter shall be brought to the attention of the County Deputy Purchasing Agent by way of the following process:
1. The Contractor shall submit to the agency/department assigned Deputy Purchasing Agent a written demand for a final decision regarding the disposition of any dispute between the parties arising under, related to, or involving this Contract, unless the County, on its own initiative, has already rendered such a final decision.
 2. The Contractor’s written demand shall be fully supported by factual information, and, if such demand involves a cost adjustment to the Contract, the Contractor shall include with the demand a written statement signed by a senior official indicating that the demand is made in good faith, that the supporting data are accurate and complete, and that the amount requested accurately reflects the Contract adjustment for which the Contractor believes the County is liable.
- B. Pending the final resolution of any dispute arising under, related to, or involving this Contract, the Contractor agrees to diligently proceed with the performance of this Contract, including the delivery of goods and/or provision of services. The Contractor’s failure to diligently proceed shall be considered a material breach of this Contract.

Any final decision of the County shall be expressly identified as such, shall be in writing, and shall be signed by the County Deputy Purchasing Agent or his designee. If the County fails to render a decision within 90 days after receipt of the Contractor’s demand, it shall be deemed a final decision

adverse to the Contractor's contentions. County's final decision shall be conclusive and binding regarding the dispute unless Contractor commences action in a court of competent jurisdiction to contest such decision within 90 days following the date of County's final decision or one year following the accrual of the cause of action, whichever is later. Nothing in this section shall be construed as affecting the County's right to terminate the Contract for cause or termination for convenience as stated in section K herein

18. **Drug-Free Workplace:** The Contractor hereby certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The Contractor will:
1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a)(1).
 2. Establish a drug-free awareness program as required by Government Code Section 8355(a)(2) to inform employees about all of the following:
 - a. The dangers of drug abuse in the workplace;
 - b. The organization's policy of maintaining a drug-free workplace;
 - c. Any available counseling, rehabilitation and employee assistance programs; and
 - d. Penalties that may be imposed upon employees for drug abuse violations.
 3. Provide as required by Government Code Section 8355(a)(3) that every employee who works under this Contract:
 - a. Will receive a copy of the company's drug-free policy statement; and
 - b. Will agree to abide by the terms of the company's statement as a condition of employment under this Contract.

Failure to comply with these requirements may result in suspension of payments under the Contract or termination of the Contract or both, and the Contractor may be ineligible for award of any future County contracts if the County determines that any of the following has occurred:

1. The Contractor has made false certification, or
 2. The Contractor violates the certification by failing to carry out the requirements as noted above.
19. **EDD Independent Contractor Reporting Requirements:** Effective January 1, 2001, the County of Orange is required to file in accordance with subdivision (a) of Section 6041A of the Internal Revenue Code for services received from a "service provider" to whom the County pays \$600 or more or with whom the County enters into a contract for \$600 or more within a single calendar year. The purpose of this reporting requirement is to increase child support collection by helping to locate parents who are delinquent in their child support obligations.

The term “service provider” is defined in California Unemployment Insurance Code Section 1088.8, subarticle B.2 as “an individual who is not an employee of the service recipient for California purposes and who received compensation or executes a contract for services performed for that service recipient within or without the state.” The term is further defined by the California Employment Development Department to refer specifically to independent Contractors. An independent Contractor is defined as “an individual who is not an employee of the ... government entity for California purposes and who receives compensation or executes a contract for services performed for that ... government entity either in or outside of California.”

The reporting requirement does not apply to corporations, general partnerships, limited liability partnerships, and limited liability companies.

Additional information on this reporting requirement can be found at the California Employment Development Department web site located at

http://www.edd.ca.gov/Employer_Services.htm

20. **Emergency/Declared Disaster Requirements:** In the event of an emergency or if Orange County is declared a disaster area by the County, state or federal government, this Contract may be subjected to unusual usage. The Contractor shall service the County during such an emergency or declared disaster under the same terms and conditions that apply during non-emergency/disaster conditions. The pricing quoted by the Contractor shall apply to serving the County’s needs regardless of the circumstances. If the Contractor is unable to supply the goods/services under the terms of the Contract, then the Contractor shall provide proof of such disruption and a copy of the invoice for the goods/services from the Contractor’s supplier(s). Additional profit margin as a result of supplying goods/services during an emergency or a declared disaster shall not be permitted. In the event of an emergency or declared disaster, emergency purchase order numbers will be assigned. All applicable invoices from the Contractor shall show both the emergency purchase order number and the Contract number.
21. **Errors and Omissions:** All reports, files and other documents prepared and submitted by Contractor shall be complete and shall be carefully checked by the professional(s) identified by Contractor as project manager and key personnel attached hereto, prior to submission to the County. Contractor agrees that County review is discretionary and Contractor shall not assume that the County will discover errors and/or omissions. If the County discovers any errors or omissions prior to approving Contractor’s reports, files and other written documents, the reports, files or documents will be returned to Contractor for correction. Should the County or others discover errors or omissions in the reports, files or other written documents submitted by the Contractor after County approval thereof, County approval of Contractor’s reports, files or documents shall not be used as a defense by Contractor in any action between the County and Contractor, and the reports, files or documents will be returned to Contractor for correction.
22. **Equal Employment Opportunity:** The Contractor shall comply with U.S. Executive Order 11246 entitled, “Equal Employment Opportunity” as amended by Executive Order 11375 and as supplemented in Department of Labor regulations (41 CFR, Part 60) and applicable state of California regulations as may now exist or be amended in the future. The Contractor shall not discriminate against any employee or applicant for employment on the basis of race, color, national origin, ancestry, religion, sex, marital status, political affiliation or physical or mental condition.

Regarding handicapped persons, the Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to provide equal opportunity to handicapped persons in employment or in advancement in employment or otherwise treat qualified handicapped individuals without discrimination based upon their physical

or mental handicaps in all employment practices such as the following: employment, upgrading, promotions, transfers, recruitments, advertising, layoffs, terminations, rate of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to comply with the provisions of Sections 503 and 504 of the Rehabilitation Act of 1973, as amended, pertaining to prohibition of discrimination against qualified handicapped persons in all programs and/or activities as detailed in regulations signed by the Secretary of the Department of Health and Human Services effective June 3, 1977, and found in the Federal Register, Volume 42, No. 68 dated May 4, 1977, as may now exist or be amended in the future.

Regarding Americans with disabilities, Contractor agrees to comply with applicable provisions of Title 1 of the Americans with Disabilities Act enacted in 1990 as may now exist or be amended in the future.

23. **News/Information Release:** The Contractor agrees that it will not issue any news releases in connection with either the award of this Contract or any subsequent amendment of or effort under this Contract without first obtaining review and written approval of said news releases from the County through the County's Project Manager.
24. **Notices:** Any and all notices, requests demands and other communications contemplated, called for, permitted, or required to be given hereunder shall be in writing with a copy provided to the assigned Deputy Purchasing Agent (DPA), except through the course of the parties' project managers' routine exchange of information and cooperation during the terms of the work and services. Any written communications shall be deemed to have been duly given upon actual in-person delivery, if delivery is by direct hand, or upon delivery on the actual day of receipt or no greater than four (4) calendar days after being mailed by US certified or registered mail, return receipt requested, postage prepaid, whichever occurs first. The date of mailing shall count as the first day. All communications shall be addressed to the appropriate party at the address stated herein or such other address as the parties hereto may designate by written notice from time to time in the manner aforesaid.

Amendment No. 6

Contractor: ~~Nalco U.S. 2 Inc. dba~~ Nalco Company LLC
 Attn: ~~Robert Snell~~ Evan Johnson
 10521 Humbolt St.
 Los Alamitos, CA 90720
 Phone: ~~858-232-3087~~ 323-243-2125
 Email: ~~rsnell@ecolab.com~~ Evan.Johnson@ecolab.com

cc: Nalco Company LLC
 1601 W. Diehl Road
 Naperville, IL 60563
 Attn: General Counsel

County's Project Manager: OC Public Works/Facilities Maintenance & CUF
 Attn: Nate Smith
 525 N. Flower St.
 Santa Ana, CA 92703
 Phone: 714-667-1647
 Email: Nathaniel.Smith@ocpw.ocgov.com

~~cc: OC Public Works/Procurement Section~~
~~Attn: Roy Aragon, County DPA~~

~~300 North Flower Street, Suite 861~~
~~Santa Ana, CA 92703~~
~~Phone: 714-667-9747~~
~~Email: Roy.Aragon@ocpw.ocgov.com~~

cc: OC Public Works/Procurement Services
 Attn: Richard Nguyen, DPA
 601 N. Ross St.
 Santa Ana, CA 92701
 Phone: 714-667-9633
 Email: Richard.Nguyen@ocpw.ocgov.com

25. **Precedence:** The Contract documents consist of this Contract and its exhibits and attachments. In the event of a conflict between or among the Contract documents, the order of precedence shall be the provisions of the main body of this Contract, i.e., those provisions set forth in the recitals and articles of this Contract, and then the exhibits and attachments.
26. **Termination – Orderly:** After receipt of a termination notice from the County of Orange, the Contractor may submit to the County a termination claim, if applicable. Such claim shall be submitted promptly, but in no event later than 60 days from the effective date of the termination, unless one or more extensions in writing are granted by the County upon written request of the Contractor. Upon termination County agrees to pay the Contractor for all services performed prior to termination which meet the requirements of the Contract, provided, however, that such compensation combined with previously paid compensation shall not exceed the total compensation set forth in the Contract. Upon termination or other expiration of this Contract, each party shall promptly return to the other party all papers, materials, and other properties of the other held by each for purposes of performance of the Contract.
27. **Usage:** No guarantee is given by the County to the Contractor regarding usage of this Contract. Usage figures, if provided, are approximations. The Contractor agrees to supply services and/or commodities requested, as needed by the County of Orange, at rates/prices listed in the Contract, regardless of quantity requested.
28. **Usage Reports:** The Contractor shall submit usage reports on an annual basis to the assigned Deputy Purchasing Agent of the County of Orange user agency/department. The usage report shall be in a format specified by the user agency/department and shall be submitted 90 days prior to the expiration date of the contract term, or any subsequent renewal term, if applicable.
29. **Subcontracting:** No performance of this Contract or any portion thereof may be subcontracted by the Contractor without the express written consent of the County. Any attempt by the Contractor to subcontract any performance of this Contract without the express written consent of the County shall be invalid and shall constitute a breach of this Contract.

In the event that the Contractor is authorized by the County to subcontract, this Contract shall take precedence over the terms of the Contract between Contractor and subcontractor, and shall incorporate by reference the terms of this Contract. The County shall look to the Contractor for performance and indemnification and not deal directly with any subcontractor. All work performed by a subcontractor must meet the approval of the County of Orange.

30. **Prevailing Wage: (Labor Code §1773):** Pursuant to the provisions of Section 1773 of the Labor Code of the state of California, the contractor shall comply with the general prevailing rates of per diem wages and the general prevailing rates for holiday and overtime wages in this locality for each craft, classification, or type of worker needed to execute this contract. The rates are available from

the Director of the Department of Industrial Relations at the following website: <http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm>. The contractor shall post a copy of such wage rates at the job site and shall pay the adopted prevailing wage rates. The Contractor shall comply with the provisions of Sections 1775 and 1813 of the Labor Code.

31. **Payroll Records:** Contractor and any Subcontractor(s) shall comply with the requirements of Labor Code Section 1776. Such compliance includes the obligation to furnish the records specified in Section 1776 directly to the Labor Commissioner in an electronic format, or other format as specified by the Commissioner, in the manner provided by Labor Code Section 1771.4.

The requirements of Labor Code Section 1776 provide in part:

- i. Contractor and any Subcontractor(s) performing any portion of the work under this Contract shall keep an accurate record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by Contractor or any Subcontractor(s) in connection with the work.
- ii. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:
 - (A) The information contained in the payroll record is true and correct.
 - (B) The employer has complied with the requirements of Labor Code Sections 1771, 1811, and 1815 for any work performed by his or her employees in connection with the Contract.
- iii. The payroll records shall be certified and shall be available for inspection at the principal office of Contractor on the basis set forth in Labor Code Section 1776.
- iv. Contractor shall inform County of the location of the payroll records, including the street address, city and county, and shall, within five working days, provide a notice of any change of location and address of the records.
- v. Pursuant to Labor Code Section 1776, Contractor and any Subcontractor(s) shall have 10 days in which to provide a certified copy of the payroll records subsequent to receipt of a written notice requesting the records described herein. In the event that Contractor or any Subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to County forfeit \$100, or a higher amount as provided by Section 1776, for each calendar day, or portion thereof, for each worker to whom the noncompliance pertains, until strict compliance is effectuated. Contractor acknowledges that, without limitation as to other remedies of enforcement available to County, upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement of the California Department of Industrial Relations, such penalties shall be withheld from progress payments then due Contractor. Contractor is not subject to a penalty assessment pursuant to this section due to the failure of a Subcontractor to comply with this section.

Contractor and any Subcontractor(s) shall comply with the provisions of Labor Code Sections 1771 et seq., and shall pay workers employed on the Contract not less than the general prevailing rates of per diem wages and holiday and overtime

wages as determined by the Director of Industrial Relations. Contractor shall post a copy of these wage rates at the job site for each craft, classification, or type of worker needed in the performance of this Contract, as well as any additional job site notices required by Labor Code Section 1771.4(b). Copies of these rates are on file at the principal office of County's representative, or may be obtained from the State Office, Department of Industrial Relations ("DIR") or from the DIR's website at www.dir.ca.gov. If the Contract is federally funded, Contractor and any Subcontractor(s) shall not pay less than the higher of these rates or the rates determined by the United States Department of Labor.

32. **Registration of Contractors:** All contractors and subcontractors must comply with the requirements of Labor Code Section 1771.1(a), pertaining to registration of contractors pursuant to Section 1725.5. Bids cannot be accepted from unregistered contractors except as provided in Section 1771.1. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. After award of the contract, Contractor and each Subcontractor shall furnish electronic payroll records directly to the Labor Commissioner in the manner specified in Labor Code Section 1771.4.


JR

County of Orange, OC Public Works
Nalco Company LLC

MA-080-20010727

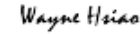
IN WITNESS WHEREOF, the Parties hereto have executed this Amendment on the date first above written.

NALCO COMPANY LLC*

	Matt Branson	VP and GM Nalco Water	10/6/2023
Signature	Name	Title	Date

Signature	Name	Title	Date
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COUNTY OF ORANGE, A political subdivision of the State of California
COUNTY AUTHORIZED SIGNATURE:

	Wayne Hsiao	Deputy Purchasing Agent	10/6/2023
Signature	Name	Title	Date

* If the contracting party is a corporation, (2) two signatures are required: one (1) signature by the Chairman of the Board, the President or any Vice President; and one (1) signature by the Secretary, any Assistant Secretary, the Chief Financial Officer or any Assistant Treasurer. The signature of one person alone is sufficient to bind a corporation, as long as he or she holds corporate offices in each of the two categories described above. For County purposes, proof of such dual office holding will be satisfied by having the individual sign the instrument twice, each time indicating his or her office that qualifies under the above described provision. In the alternative, a single corporate signature is acceptable when accompanied by a corporate resolution demonstrating the legal authority of the signator to bind the corporation.

~~ATTACHMENT A~~ ~~SCOPE OF WORK~~

Amendment No. 6

~~I.—OVERVIEW:~~

~~The County of Orange operates a Central Utility Facility (CUF) which produces Chilled Water, Steam and Electricity for the Santa Ana Downtown Civic Center. The plant consists of two gas turbines driving generators which generate 5.6 mw of power, the turbines exhaust into Heat Recovery Steam Generators which are capable of producing 65 mlbhr of 260 psig steam. The plant also consists of 6 chillers (4 Refrigeration and 2 absorption), a large cooling tower and Boiler Feed Water (BFW) treatment facility. The CUF is also charged with monitoring and water treatment responsibilities for several County Building Cooling Towers. On-call service requests involving repairs and/or alterations shall not exceed \$60,000.~~

~~The County is seeking a full-service contractor in four areas of work scope which include:~~

- ~~• Water Treatment Chemicals and Service for CUF location (Supply chemicals for BFW treatment, cooling tower treatment, closed water loop treatment (hot and cold) for the CUF Facility).~~
- ~~• Water Treatment Chemicals and Services for Outside routes (Supply chemicals for BFW treatment, cooling tower treatment, closed water loop treatment (hot and cold) for other Outlying County Buildings (Outside Route)).~~
- ~~• Supply Ion Exchange bottles for periodic treatment of water for washing gas turbines. Preventative Maintenance RO Systems and Service Deionization Tank Exchange~~
- ~~• Water Safety Protocol for Cooling Towers, which includes development and execution of a water safety management program which will meet or exceed industry standards and best practices for the prevention of water borne pathogens.~~

~~The details on the scope of work can be found below.~~

~~II.—CONTRACTOR MINIMUM QUALIFICATIONS:~~

~~A.— Contractor shall have at least a minimum of ten (10) years in the water treatment business.~~

~~B.— Contractor/Facility Certifications:~~

- ~~i.— At minimum, be Elite Certified by the Centers for Disease Control and prevention for Legionella testing and analysis. Include other certifications, if any, in your response.~~
- ~~ii.— Chemical manufacturing facilities must be ISO certified~~

~~C.— Contractor Licenses:~~

- ~~i.— Have a valid Pesticide Business license in their name and include a copy of their Qualified Applicator License (QAL) with their proposal. All licenses shall be issued by the proper authorities in compliance with current Federal, State, and Local regulations. QAL must be registered in the County of Orange.~~

~~D.— Contractor shall operate an analytical laboratory (Contracted-out laboratory work is not acceptable unless approved by the County CUF Manager or designee in writing) with the capability of performing a wide array of analytical work to facilitate monitoring, control,~~

~~and troubleshooting of our systems including microbiological analysis, including but not limited to complete organism identification.~~

- ~~i. Laboratory services which shall include corrosion coupon analysis, water analysis, deposit analysis, microbiological analysis, ion exchange resin analysis, cartridge analysis, fuel oil analysis, and metallurgical analysis.~~
- ~~ii. Water analysis and corrosion results must be available in seven (7) days to the County CUF Supervisor in charge. In case of an emergency three (3) day turnaround is expected.~~

~~E. Contractor shall employ the following staff with the following experience:~~

- ~~i. Degreed Chemists / Chemical Engineer, Microbiologist and Metallurgists~~
- ~~ii. Chemist or Chemical Engineer and Microbiologist shall have at least five (5) years of experience in water treatment, spectrophotometric procedures and testing, heating and cooling water, thermal energy storage systems.~~
- ~~iii. Metallurgists shall have at least five (5) years of experience in testing and reviewing metal degradation in water systems.~~
- ~~iv. Field service staff shall be degreed Chemists and or Chemical Engineer and shall have at least five (5) years of experience in water treatment, spectrophotometric procedures and testing, heating and cooling water, thermal energy storage systems and be proficient in the operation, maintenance and troubleshooting of all equipment used at the CUF for water treatment.~~
- ~~v. All delivery specialists shall have Department of Transportation and Hazmat certifications.~~
- ~~vi. All field staff must be safety trained and certified in chemical handling with water treatment.~~
- ~~vii. Contractor's manufacturing facilities and labs have a valid ISO certification.~~
- ~~viii. Elite Certified by the Centers for Disease Control and prevention for Legionella testing and analysis.~~

~~F. Contractor shall provide an Administration Notebook (hard copy and electronic). The notebook must contain an outline of the chemical program, all chemical control test procedures and frequencies, Log Sheets, Product Bulletins, Material Safety Data Sheets, Feed and Control Equipment Specifications and an electronic Service Reports log.~~

- ~~i. Administration Notebook will include a complete list of chemicals, reagents, and test kits that applicable and used by each system and building:—~~
 - ~~a) Closed loop water systems~~
 - ~~b) Cooling tower systems~~
 - ~~c) BFW systems~~
 - ~~d) Make Up Water systems~~
 - ~~e) Steam Systems~~

~~G. At all times, Contractor shall be required to obtain and maintain on the CUF premises in the on-site Program Administration manual, Safety Data Sheets (SDS) sheets and product data sheets on all products brought to the premises or intended to be installed or used in the premises.~~

~~i. SDS sheets shall be included with all first-time orders.~~

~~ii. SDS sheets for each product provided which shall include the percent of active ingredients of each constituent in each product to be supplied, and product densities in Pounds per Gallon (lb./gal). Bid must include SDS, failure to comply shall be considered non-responsive.~~

~~iii. New chemical proposals shall include the approval of County Safety/Risk Technician to ensure that chemical can be used safely and minimal risk as compared to current chemicals~~

~~H. Contractor shall be responsible for maintenance costs arising from incompatibility of chemicals or from failure of chemicals to provide required treatment on an effective basis.~~

~~I. In the event there is a requirement for a product change due to any United States Food and Drug Administration (USFDA) ruling, change in law, Occupational Safety and Health Administration (OSHA) regulation, or any condition which the County determines that a product change is necessary, the Contractor shall submit a proposal for making such change. The proposal shall describe the recommended substitute product, product price; product feed rate, and product residual level to be maintained. The proposal will be evaluated by the County which may approve the proposal in whole or in part or may elect to purchase the substitute product from another source.~~

Amendment No. 3

~~J. Contractor shall assign one of its Industry Technical Consultants, David Petrash, to oversee the field service staff and act as a consultant for County.~~

III. WATER TREATMENT CHEMICALS AND SERVICE FOR CUF LOCATION:

1. BACKGROUND:

~~OC Public Works / OC Facilities Maintenance & CUF (Central Utility Facility) operates a CUF which services critical facilities and is operational 24/7/365 days per year.~~

~~The information below is the current water treatment contract requirements. If the responding contractor is proposing changes to the existing program, it will be documented with reasons for change proposed. If changed, the contractor will include the same detailed and comparative information provided in the information below in the scope of the work. This information is provided for contractors to understand the current scope of work and to help them make proposed changes to the program, if any.~~

~~The County is currently using but not limited to the following chemicals:~~

Chemical	Form	Estimated Monthly Amount	Product / Supplier
HRSG / Boiler			
Scale / corrosion inhibitor (1)	liquid	65 gallons	3DT231 3DT230
Naleo			
Scale / corrosion inhibitor	liquid	65 gallons	1820 Naleo

Steam Boiler Deposit Control	liquid	47 gallons	22310	Naleo
Steam Boiler Deposit Control	liquid	47 gallons	22305	Naleo
Steam Boiler O2 Scavenger	liquid	13 gallons	1720	Naleo
Closed System Inhibitor (4)	powder	as needed	C 4710	Naleo
Nalperse (De-oiler)	liquid	as needed	7308	Naleo
<u>Cooling Tower / Condenser Water</u>				
Bioicide	liquid	20 gallons	7330	Naleo
Bioicide DBNPA 20%	liquid	as needed	7320	Naleo
Dispersant (1)	liquid	as needed	3DT190	Naleo
Antifoam	liquid	as needed	7468	Naleo
Antifoam (1)	liquid	as needed	3DT198	Naleo
Chlorine bleach (2)(3)	liquid	220 gallons	HP	LA Chem.
Sulfuric Acid	liquid	350 gallons	CCI	CCI
Salt	solid	12,000 pounds	StepSaver	StepSaver

NOTE: Chlorine, Sulfuric Acid and Salt supplied by others, shown here to inform proposers of chemicals currently in use.

(1) ~~3D Trasar product~~

(2) ~~The County uses either Naleo ST070 or the Chlorine Bleach, not both~~

(3) ~~Sodium Hypochlorite 12.5%~~

(4) ~~4710 is primary treatment so this is used only as a supplement, as needed~~

If a different product is proposed, proposer must:

- ~~— Compare MSDS and include a technical explanation on how product is comparable if there are any differences in the product makeup or active ingredient concentration.~~
- ~~— Include costs of proposed chemicals and quantity of use difference.~~
- ~~— Include plan to convert and switch to new chemicals including running off current chemical inventory, system draining, flushing and initial product dosing, etc.~~
- ~~— If new chemicals are proposed, include approval of County Safety/Risk technician to ensure new chemicals do not pose increased risk. If applicable, please contact the County DPA for County Safety and Risk Technician contact information~~
- ~~— Provide pick up service of any proposed product, which includes components that could require special handling and or special disposal due to as received concentration.~~
- ~~— Compare control system and automation in writing in comparison to current or proposed Outside Route Automation system operations~~

2. SCOPE OF SERVICES:

~~Contractor shall provide Water Treatment Chemicals and related services for cooling tower systems and closed-loop systems. Chemicals will be ordered on an "as needed" basis as determined by the County. The chemical systems shall include automatic continuous monitoring and feeding where applicable and shall utilize bulk storage tanks to minimize drum and pail purchases~~

~~A. Contractor shall identify and provide at least two members of its company to represent the company in dealings with County. It is anticipated one would be the assigned as the field service representative servicing the account. The second would be a supervisor over the field service representative.~~

~~i. Contractor representatives shall be full-time employees of the Contractor. Only these individuals will represent the Contractor regarding services for this Contract unless otherwise specifically authorized by the CUF Plant Manager.~~

- ~~ii. Contractor representatives must live within 1 hour driving distance (60 mi.) of the County CUF. A representative must be available for calls on specific problems should they occur. The representatives shall be available to us on 24-hour basis, and under emergency circumstances, should be able to respond within at least the next business day after being notified, at no additional cost to the County.~~
- ~~iii. The field service representative shall inspect CUF a minimum of once monthly. During these monthly visits the representative shall at a minimum:

 - ~~a) Inspect all chemical areas for issues not identified by CUF staff~~
 - ~~b) Take and process separate analysis for comparison to CUF staff analysis~~
 - ~~c) Inspect CUF readings for excursions and or issues~~
 - ~~d) Provide training as needed for new employees and or refresher training, as needed. This can be scheduled during a separate trip, as needed~~
 - ~~e) Report out in writing any deficiencies observed or found and deliver to the CUF Plant Manager~~~~
- ~~iv. Provide representation during County's routine inspections of HRSG's, boiler, condenser tubes, tube sheets, and various equipment receiving water treatment to verify existing condition and measure performance of Contractors product.

 - ~~a) Whenever possible, Contractor will be notified two (2) days in advance of the anticipated inspection date and time but will be given short notice in an emergency.~~~~

~~B. Testing:~~

- ~~i. As part of this Contract and at no cost to the County, the Contractor shall provide all means necessary to monitor chemical levels. This includes but is not limited to test kits, reagents, chemicals and instruments. Instruments provided should electronic and portable and have a digital display.~~
- ~~ii. As part of this Contract and at no additional cost to the County, the Contractor shall provide corrosion coupons for copper and mild steel for all cooling tower, steam, condenser water and closed water systems. Each coupon should be weighed and analyzed at the end of each coupon trail period which will be approximately quarterly on condenser systems and chilled loop systems. Provide the CUF Plant Manager or designee a full written report of the corrosion rate in Mils Per Year (MPY).

 - ~~a) The analysis shall be performed by the Contractors laboratory and included as part of this Contract. Contracted out laboratory work is not acceptable unless approved by the County CUF Plant Manager or designee in writing.~~
 - ~~b) Water analysis and corrosion results must be available in seven (7) days to the CUF Plant Manager or designee in charge. In case of emergency three (3) day turnaround is expected.~~~~
- ~~iii. Two hundred (200) biocides per year will be provided at no cost to the County for on site microbial analysis.~~
- ~~iv. Test methods requiring color comparisons shall be converted to the Hatch DR 2400 and or spectrophotometer.~~

~~C.—System Monitoring:~~

~~i.—Contractor shall install, maintain and monitor real time monitoring equipment. This equipment shall provide real time:~~

- ~~a) 24/7/365 remote monitoring and alarms~~
- ~~b) Corrosion monitoring and control~~
- ~~c) Scale inhibitor control~~

~~D.—Contractor shall provide and maintain on the CUF premises an Administration Notebook (hard copy and electronic). The notebook must contain an outline of the chemical program, all chemical control test procedures and frequency, Log Sheets, Product Bulletins, Safety Data Sheets, Feed and Control Equipment Specifications and an electronic Service Reports log:~~

~~i.—Administration Notebook will include a complete list of chemicals, reagents, and test kits which are applicable and used by each system:—~~

- ~~a) Boiler and condensate systems~~
- ~~b) Closed loop water systems~~
- ~~c) Cooling tower systems~~

~~ii.—Safety Data Sheets (SDS) sheets and product data sheets on all products brought to the premises or intended to be installed or used in the premise:~~

~~a) SDS sheets shall be included with all first time orders.~~

~~iii.—SDS sheets for each product provided which shall include the percent of active ingredients of each constituent in each product to be supplied, and product densities in Pounds per Gallon (lb. /gal). Proposal must include SDS, failure to comply shall be considered non responsive.~~

~~E.—Delivery:~~

~~i.—F.O.B destination, freight prepaid.~~

~~ii.—All deliveries shall be made directly into the bulk storage tanks or if in drums or pails with lift gate trucks. Deliveries shall be provided at no extra cost to the County and Contractor will be responsible for off loading from truck.~~

~~iii.—All deliveries shall be made within 7 calendar days of order. Individual containers shall not be larger than 5 gallons for biocides; cooling tower inhibitor; cooling tower anti-foam. Closed loop dry product in 40# or less containers. NO EXCEPTIONS!~~

~~iv.—All items shall be delivered to:~~

~~OC Public Works/OC Facilities Maintenance & CUF
525 North Flower Street
Santa Ana, CA 92701
Attn: CUF Plant Manager~~

~~F.—Provide pick up service:~~

- ~~i. Upon the County stockpiling 10 empty containers, the Contractor or his agent shall be required to remove the containers within five (5) County working days. For all chemical containers/drums delivered by the Contractor, not able to be disposed of in a normal trash pick-up, the Contractor or his agent will be required to pick-up, after use for proper disposal as required by all statutes, at no additional charge to the County.~~
- ~~ii. Of any product supplied by the Contractor no longer used by the County which includes components that could require special handling and or special disposal due to as received concentration.~~

~~G. Contractor shall be responsible for maintenance costs arising from incompatibility of chemicals or from failure of chemicals to provide required treatment on an effective basis.~~

~~H. In the event there is a requirement for a product change due to any United States Food and Drug Administration (USFDA) ruling, change in law, Occupational Safety and Health Administration (OSHA) regulation, or any condition which the County determines that a product change is necessary, the Contractor shall submit a proposal for making such change. The proposal shall describe the recommended substitute product, product price, product feed rate, and product residual level to be maintained. The proposal will be evaluated by the County which may approve the proposal in whole or in part or may elect to purchase the substitute product from another source.~~

~~3. WATER TREATMENT SPECIFICATIONS:~~

~~Equipment will be operating 24 hours per day, 7 days per week. This contract is intended to cover all chemicals required to protect all heating and air conditioning equipment maintained by the County. This is to include waterside protection against corrosion, scale and microbiological contamination of equipment (HRSG's, Boiler, Chillers, Closed Water Systems, and Cooling Towers). Unless otherwise noted, identified limits are industry standard as per ASME Volume 1, Chapter 19, water treatment. All deviations must be reviewed and approved in writing by the CUF Plant Manager, prior to implementation. All chemicals must be compatible with County owned equipment. Including stainless steel cooling tower components. Chemicals will be ordered on an "as needed" basis as determined by the County.~~

~~A. Contractor shall refer to all products by their generic names in the contract, and in all written correspondence.~~

~~B. Where possible, chemistries provided as part of this contract for treatment of water systems should be liquid.~~

~~C. Closed Water Systems (includes HRSG and Boilers):~~

- ~~i. OC Public Works/Facilities Operation personnel will make multiple daily checks of the closed water system to determine the effectiveness of the treatment unless there is an issue which requires more frequent testing.~~
- ~~ii. All closed systems shall be treated against all types of corrosion with a non-toxic, Borate, Nitrite product, non-caustic, non-metallic corrosion inhibitor. Product shall not contain chromates, zinc, amines, or phosphates. The product shall contain a minimum of 1.0 percent of Tolyltriazole or Benzotriazole.~~

- ~~iii. Current system control limits (based on best practices and current product use):~~
- ~~a) Conductivity: 2,800 to 3,200 mmhos~~
 - ~~b) Ph: 10.5 TO 11.5~~
 - ~~c) P Alkalinity: 400 to 700 ppm~~
 - ~~d) M Alkalinity: 600 to 800 ppm~~
 - ~~e) OH Alkalinity: 250 to 600 ppm~~
 - ~~f) TRASAR Polymer: 300 to 400 ppm~~
 - ~~g) Sulfite: 30 to 50 ppm~~
 - ~~h) Sodium Nitrite @ 550 PPM for chill water loop systems and 800 ppm for heating hot water systems~~

~~D. Cooling Tower:~~

- ~~i. OC Public Works/Facilities Operation personnel will make a twice weekly check of the cooling tower water to determine the effectiveness of the treatment to control scale, algae, fungi and bacteria free operation and equipment corrosion protection, unless there is an issue which requires more frequent testing. Tests include PH, total hardness, total alkalinity, conductivity, free and total halogen and inhibitor levels.~~
- ~~ii. Equipment and chemical protection against scale and corrosion shall contain all of the following:~~
 - ~~a) PBTC/HEDP Phosphonate (to provide anodic and cathodic mild steel corrosion protection)~~
 - ~~b) Benzotriazole or Tolyltriazole (TT or BZT) (to provide copper corrosion protection)~~
 - ~~c) High Stress Polymer (to provide calcium, iron and silt control), Polymer shall be non foaming and non Ionic~~
 - ~~d) Fluoresced inert and active trace element (to facilitate ease of testing). Product shall not contain any molybdenum (due to the County's desire for no heavy metal discharge)~~
- ~~iii. Current system control limits (based on best practices and current product use):~~
 - ~~a) Conductivity: 2,200 to 2,600 mmhos~~
 - ~~b) Cycles (Tower to City): 4.5 to 6.0~~
 - ~~c) pH: 8.2 to 8.4~~
 - ~~d) Total Alkalinity: 150 to 300 ppm~~
 - ~~e) Calcium Hardness: < 1,000 ppm~~
 - ~~f) TRASAR Inhibitor: 90 to 110 ppm~~
 - ~~g) Free Chlorine: 0.2 to 0.5 ppm~~
 - ~~h) Dipslide: < 10⁴~~
 - ~~i) Corrosion level 2 MPY or less on mild steel and 0.1 MPY or less on copper/bronze.~~
- ~~iv. Biocides: Microbiological control performed by the County shall be maintained by periodic treatment with alternating oxidizing and non oxidizing micro biocides.~~
- ~~v. Minimum Inhibitor Residual Levels to be maintained~~

- a) ~~Traced Element: 30 to 35 ppm~~
- b) ~~PBTC Phosphonate: 5 PPM as PO4~~
- c) ~~Tolyltriazole (TT) or Benzotriazole ingredient: 2 ppm as TT~~
- d) ~~High Stress Polymer: 10 PPM as Polymer~~

vi. ~~Stabilized Bromine:~~

- a) ~~Must be at least 6% active halogen and 9% sodium bromide~~
- b) ~~Isothiazoline—5-chloro-2-methyl-4-isothiazolin-3-one 1.1%~~
- c) ~~2-methyl-4-isothiazolin-3-one 0.4%~~
- d) ~~Dibromo-nitrolopropinamide (DBNPA Bromine) 20%~~

vii. ~~Calculate Biocide usage based on a 90 ppm dose fed three times per week.~~

- a) ~~Calculate non-oxidizing biocide usage based on one (1) tablet per 500 gallons of system volume per month. Non-oxidizing biocide shall be dosed to treat total of seven hundred and fifty (750) thousand gallons of cooling water tower.~~
- b) ~~Oxidizing biocide shall be dosed to treat a total of two (2) million gallons of cooling tower water.~~

~~IV. WATER TREATMENT CHEMICALS AND SERVICE FOR OUTSIDE ROUTES:~~

~~1. BACKGROUND:~~

~~OC Public Works / OC Facilities Maintenance & CUF (Central Utility Facility) staff currently service Heating, Ventilation and Air Conditioning systems at 35 County buildings outside of the CUF generally referred to as the “outside route” (Attachment C).~~

~~This list indicates the facility and the services at particular facilities.~~

~~2. SCOPE OF SERVICES:~~ ~~Contractor shall provide Water Treatment program which includes 3D TRASAR Solid Controller Program (or other similar program) for treatment of equipment indicated in Attachment C., This includes:~~

~~Note: If a different product or service is proposed, proposer must:~~

- ~~— Compare MSDS and include a technical explanation on how product is comparable if there are any differences in the product makeup or active ingredient concentration.~~
- ~~— Include costs of proposed chemicals and quantity of use difference.~~
- ~~— Include plan to convert and switch to new chemicals including running off current chemical inventory, system draining, flushing and initial product dosing, etc.~~
- ~~— If new chemicals are proposed, include approval of County Safety/Risk technician to ensure new chemicals to not pose increased risk.~~
- ~~— Provide pick up service of any proposed product, which includes components that could require special handling and or special disposal due to as received concentration.~~
- ~~— Compare control system and automation with 3D TRASAR Solid Control~~

~~A. Data Transmission and Collection for Trending~~

~~B. Biocide Feed Confirmation Reports Weekly~~

~~C. Remote Alarming for critical Functions~~

~~D. All chemicals to limits established below which is anticipated annual use:~~

- ~~i. 3DTS88 — Proprietary blend of phosphorus containing compounds with a multifunctional dispersant to inhibit scale. Azole for copper corrosion. Total Qty 28, included in agreement~~
- ~~ii. 7346 TAB — Broad spectrum oxidizing biocide. Total Qty 21, included in agreement~~
- ~~iii. SOLID BIONOX — organic based, non-oxidizing biocide used to control bacteria Total Qty 7, included in agreement~~
- ~~iv. Note See Pricing additional chemicals if required beyond the above~~

~~E. Reagents~~

~~F. Pumps~~

~~G. Control Equipment related to the program, aside from bleed line solenoid/replacements.~~

~~H. System Assurance Monitoring: 24/7/365 Monitoring. 100 Chemical Engineers responding and troubleshooting alarms and resolving system upsets quickly.~~

~~I. Total Care Service: Includes deployment and on-going services such as Standard Installation, General Repairs, Decommissioning, and Preventative maintenance. Standard installation requires:~~

- ~~i. Adequate footprint space~~
- ~~ii. Sample line and City water within 3 feet of installation area~~
- ~~iii. Sufficient Power~~
- ~~iv. Previous system uninstallation~~

~~J. Program to include cooling towers, closed loops, and boilers.~~

~~K. Quarterly review by Contractor on chemical treatments generation of a report showing status of treatment and exceptions; sent to CUF Plant Manager Quarterly.~~

~~L. Contractor will teach outside Route Operators new routines and sample for new chemical treat processes as they are installed without additional cost to County.~~

~~3. AUTOMATION:~~

~~A. 3D TRASAR Technology (or Similar) shall be installed on 7 cooling towers. This contract shall be expandable for any additions outside route equipment. Contractor shall develop a quote and have it approved by CUF Plant Manager for addition of equipment and services added to this contract.~~

~~B. Contractor shall identify and provide at least two members of its company to represent the company in dealings with County. It is anticipated one would be the assigned field service~~

~~representative servicing the account. The second would be a supervisor over the field service representative.~~

- ~~i. Contractor representatives shall be full time employees of the Contractor. Only these individuals will represent the Contractor regarding services for this Contract unless otherwise specifically authorized by the CUF Plant Manager.~~
- ~~ii. The field service representative shall inspect all outside route facilities a minimum of four times annually.~~
- ~~iii. When requested, within 24 hours during normal business hours, the Contractor is to furnish qualified personnel to assist solving any problems at job sites, which may result from the use of the Contractor's products, at no additional cost to the County.~~
- ~~iv. Provide representation during County's routine inspections of condenser tubes, tube sheets, and various equipment receiving water treatment to verify existing condition and measure performance of Contractors product.

 - ~~a) Whenever possible, Contractor will be notified two (2) days in advance of the anticipated inspection date and time but will be given short notice in an emergency.~~~~
- ~~v. Contractor representatives must live within 1 hour driving distance (60 mi.) of the County CUF. A representative shall visit the site a minimum of weekly. The representatives must be available for calls on specific problems should they occur. The representatives shall be available to the County on 24 hour notice, and under emergency circumstances, should be able to respond within one (1) hour after being notified.~~

~~4. TESTING:~~

- ~~A. As part of this Contract, at no cost to the County, the Contractor shall provide test kits and reagents to monitor chemical levels.~~
- ~~B. As part of this Contract, at no cost to the County, the Contractor shall provide corrosion coupons for copper and mild steel for all cooling water and closed water systems, where coupons are installed. Have each coupon weighed and analyzed at the end of each coupon trial period (approximately every 3 months for cooling systems and 6 months for closed water systems) and give the CUF Plant Manager or designee a full written report of the corrosion rate in Mils Per Year (MPY). The analysis shall be performed by the Contractors laboratory and included as part of this Contract. Contracted out laboratory work is not acceptable unless approved by the County CUF Manager or designee in writing.

 - ~~a) Water analysis and corrosion results must be available in seven (7) days to the CUF Plant Manager or designee in charge. In case of emergency three (3) day turnaround is expected.~~~~
- ~~C. One hundred (100) biocides per year will be provided at no cost to the County for on-site microbial analysis (8 sites @ 1 Test/Month)~~

~~5. DELIVERY:~~

- ~~A. F.O.B destination, freight prepaid.~~

- ~~B. All deliveries shall be made with lift gate trucks. Deliveries shall be provided at no extra cost to the County and Contractor is required to off load from truck.~~
- ~~C. All deliveries shall be made within 7 calendar days of order. Individual containers shall not be larger than 5 gallons cooling tower inhibitor, cooling tower anti foam. Other chemicals will be supplied in the form of chemical blocks. NO EXCEPTIONS!~~
- ~~D. All items shall be delivered to:~~

~~OC Public Works/OC Facilities Maintenance & CUF
525 North Flower Street
Santa Ana, CA 92701
Attn: CUF Plant Manager~~

~~6. PICK-UP SERVICE:~~

- ~~A. Upon the County stockpiling 10 empty containers, the Contractor or his agent shall be required to remove the containers within five (5) County working days. For all chemical containers/drums delivered by the Contractor, not able to be disposed of in a normal trash pick-up, the Contractor or his agent will be required to pick-up, after use for proper disposal as required by all statutes, at no additional charge to the County.~~
- ~~B. Of any product supplied by the Contractor no longer used by the County which includes components that could require special handling and or special disposal due to as received concentration.~~

~~7. WATER TREATMENT SPECIFICATIONS:~~

~~Contract is intended to cover all chemicals required to protect all heating and air conditioning equipment maintained by the County. This is to include waterside protection against corrosion, scale and microbiological contamination of equipment (Boilers, Chillers, Closed Water Systems, and Cooling Towers). Unless otherwise noted, identified limits are industry standard as per ASME Volume 1, Chapter 19, water treatment. All deviations must be reviewed and approved in writing by the CUF Plant manager prior to implementation. Chemicals will be ordered on an "as needed" basis as determined by the County.~~

- ~~A. Contractor shall refer to all products by their generic names in the contract, and in all written correspondence.~~
- ~~B. Where possible, chemistries provided as part of this contract for treatment of water systems should be liquid.~~
- ~~C. Control limits which are to be maintained:
 - ~~i. Closed Water Systems:
 - ~~a) OC Public Works/Facilities Operation personnel will make a monthly check of the closed water system to determine the effectiveness of the treatment unless there is an issue which requires more frequent testing.~~
 - ~~b) Sodium Nitrite @ 550 PPM for chill water loop systems and 800 ppm for heating hot water systems.~~~~~~

- ~~c) All closed systems shall be treated against all types of corrosion with a non-toxic, Borate, Nitrite product, non-caustic, non-metallic corrosion inhibitor. Product shall not contain chromates, zinc, amines, or phosphates. The product shall contain a minimum of 1.0 percent of Tolyltriazole or Benzotriazole.~~
- ~~ii. Open Water Systems / Cooling Towers:~~
- ~~a) Physical conditions:~~
- ~~1) All tower make-up water is hard.~~
 - ~~2) 2.5 cycles shall be used for Cooling Tower Cycles based on total hardness.~~
 - ~~3) Cooling tower equipment will be operating 24 hours per day, 7 days per week.~~
 - ~~4) All chemicals must be compatible with County owned equipment. Including stainless steel cooling tower components.~~
- ~~b) OC Public Works/Facilities Operation personnel will make a twice weekly check of the cooling tower water to determine the effectiveness of the treatment to control scale, algae, fungi and bacteria free operation and equipment corrosion protection, unless there is an issue which requires more frequent testing.~~
- ~~1) Tests include PH, total hardness, total alkalinity, conductivity, free and total halogen, and inhibitor levels.~~
- ~~c) Equipment and chemical protection against scale and corrosion shall contain all of the following:~~
- ~~1) PBTC/HEDP Phosphonate (to provide anodic and cathodic mild steel corrosion protection.)~~
 - ~~2) Benzotriazole or Tolyltriazole (TT or BZT) (to provide copper corrosion protection)~~
 - ~~3) High Stress Polymer (to provide calcium, iron and silt control), Polymer shall be non-foaming and non-Ionic~~
 - ~~4) Fluoresced inert and active trace element (to facilitate ease of testing). Product shall not contain any molybdenum (due to the County's desire for no heavy metal discharge).~~
- ~~d) Current system control limits (based on best practices and current product use):~~
- ~~1) Corrosion level 2 MPY or less on mild steel and 0.1 MPY or less on copper/bronze.~~
 - ~~2) Total hardness <1000 PPM~~
 - ~~3) Minimum Inhibitor Residual Levels to be maintained:~~
 - ~~a. Traced Element 30-35 PPM~~
 - ~~b. PBTC Phosphonate 5 PPM as PO4~~

- ~~c. Tolytriazole (TT) or
Benzotriazole ingredient 2 PPM as TT~~
- ~~d. High Stress Polymer 10 PPM as Polymer~~

~~4) Biocides: Microbiological control performed by the County shall be maintained by periodic treatment with alternating oxidizing and non oxidizing microbiocides. The Micro biocides are listed below:~~

- ~~a. Stabilized Bromine—Must be at least 6% active halogen and 9% sodium bromide st70~~
- ~~b. 1 bromo 3chloro 5,5 dimethylhydantoin 7346 tab~~
- ~~c. Isothiazoline—5 chloro 2 methyl 4 isothiazolin 3 one 1.1% 7330~~
- ~~d. Sodium Dichloro S Triazinetrione Dihydrate ale ox~~
- ~~e. Dibromo nitrolopropinamide (DBNPA Bromine) 20% 7639s or solidbionox~~

~~5) Calculate Biocide usage based on a 90 ppm dose fed three times per week. Calculate non oxidizing biocide usage based on one (1) tablet per 500 gallons of system volume per month. Oxidizing biocide shall be dosed to treat a total of two (2) million gallons of cooling tower water; non oxidizing biocide shall be dosed to treat total of seven hundred and fifty (750 thousand gallons of cooling water tower.~~

~~V. PREVENTATIVE MAINTENANCE RO SYSTEMS AND SERVICE DEIONIZATION TANK EXCHANGE:~~

~~1. BACKGROUND:~~

~~Contractor shall furnish all staffing, labor and Deionization Tank Exchange equipment to condition Santa Ana potable water to achieve the requirements of Solar Turbine specification ES9 98 for water used for injector cleaning.~~

~~2. LOCATION:~~

~~Central Utility Facility
525 North Flower Street
Santa Ana CA 92703~~

~~3. SOLAR TURBINE ES9 98 WATER REQUIREMENTS:~~

~~PH 6.0—8.5, Chlorine 40 ppmw, Fluorine 1.9 ppmw, Lead .70ppmw, Sodium + Potassium 1.9 ppmw, Vanadium .35ppmw, Suspended solids \leq 2.6mg/l, Dissolved Silica .1mg/l, Maximum particle size 10 Microns, Electrical Conductivity 5 us/cm, Iron, tin, silicon, aluminum copper, manganese, phosphorus 3.8 ppmw.~~

~~4. CONTRACTOR REQUIREMENTS:~~

- ~~A. Contractor shall perform all necessary testing to prove deionization system has achieved compliance with the above specifications upon contract / system startup and once per contract year thereafter.~~
- ~~B. Contractor to perform additional testing upon request from the County Project Manager. Cost of the additional testing will be as per Attachment B, Section III., Contractor Pricing.~~
- ~~C. Deionization tanks to be replaced on an as needed basis only.~~
- ~~D. Contractor to provide conductivity tester on deionization system~~
- ~~E. Deliveries are required within 24 hours of order, Monday through Sunday. This contract to include any incidentals required for system and service of the system. Cost will be as per Attachment B Section III., Contractor Pricing.~~

~~VI. WATER SAFETY PROTOCOL FOR COOLING TOWERS:~~

~~1. BACKGROUND:~~

~~OC Public Works / OC Facilities Maintenance & CUF (Central Utility Facility) staff currently service and monitor 8 Cooling Towers, One at CUF and 7 in various buildings within the County. This Contract is to develop a water management program and execute the program to bring these cooling towers to industry standards in regard to water management to minimize the chances of Legionella Disease.~~

~~The CUF Cooling Tower is located at 525 N flower Santa Ana CA.~~

~~The (Seven) 7 County Building Cooling Towers are in the locations indicated on Attachment D.~~

~~Note: This contract shall be expandable for any additions outside route equipment. shall develop a quote and have it approved by the CUF Plant Manager for addition of equipment and services added to this contract.~~

~~2. SCOPE OF SERVICES:~~

- ~~A. Contractor will develop a Risk Management Plan per ANSI/ASHRAE Standard 188-2018 which establishes the minimum Legionella Risk Management requirements for cooling tower water systems, which is industry best practice. Contractor shall indicate Contractor's responsibilities and the County responsibilities in execution of this Legionella Risk Management Plan and each of the requirements within the plan to achieve a County Legionella Program which meets industry standards and ANSI/ASHRAE Standard 188-2018.~~
- ~~B. Included in this Risk Management Plan are the CUF Cooling Tower and 8 outlying Cooling Towers (Expandable). This plan will include, but not be limited to:

 - ~~i. A Written Water Management Program shall be developed in accordance ANSI/SHRAE Standard 188-2018. The general elements of the program:

 - ~~a) Program Team The County shall identify person(s) responsible for the program development and implementation.~~
 - ~~b) Describe and Evaluate Cooling Tower Systems The County shall assist Contractor to describe the cooling tower systems during an on-site walkthrough to confirm system information provided by the County. The~~~~~~

~~County is responsible for providing a simple system schematic of sufficient detail to illustrate the general flow and process steps of the system. Schematics do not need to be detailed engineering drawings or P+ID.~~

- ~~e) Description of Potential System Hazards Contractor will provide a general description for the potential hazardous conditions that may occur in the systems and determine where control measures can be applied.~~
- ~~d) Control Measures Contractor will identify locations where control measures can be applied and maintained in order to maintain the control measures within established control limits.~~
- ~~e) Monitoring and Corrective Actions Contractor will provide recommended best practice procedures for monitoring control measures to confirm a control measure is operating within established limits and if not, to define corrective actions necessary to correct the condition when the test results occur outside of the control limits. The program shall include a schedule for routine bacteriological analysis (dip slide or Equivalent). The plan shall also include a schedule for Legionella testing in the case of certain system events.~~
- ~~f) Confirmation The program will establish procedures to confirm that:

 - ~~1) Initially and on an on-going basis that the program is being implemented as designed~~
 - ~~2) Initially and on an on-going basis, that the program, when implemented as designed, effectively controls the hazardous conditions throughout the water system (validate)~~~~
- ~~g) Documentation the program will specify required documentation and communication procedures.~~
- ~~h) Contractor will provide one on-site visit by Contractor Representative to complete the On-site walkthrough~~
- ~~i) Contractor shall confirm with County Operating Engineers familiar with the systems relevant operational, maintenance or other practices related to the water systems as part of the on-site walk through~~
- ~~j) Contractor will photograph to document the systems~~
- ~~k) No systems testing is included with the walk-down of system.~~
- ~~l) Specifically, the application of halogens (chlorine or bromine) to maintain a free Chlorine residual of .5-1.0 ppm (as cl₂) sampled at various location of the system.~~
- ~~m) Recommended Water Stagnation minimization plan presented to County~~

- ~~n) Scale and Corrosion Inhibitor control to minimize overall microbiological activity and tower cleanliness~~
- ~~o) Periodic Cooling Tower Inspection as required to meet and defend ANSI/ASHRAE Standard 188-2018 minimum 4 times per year (once a Quarter)~~
- ~~p) Disinfection such as Halogen Oxidizers to minimize overall microbiological activity and optimal control, periodic hyper-halogenation to a minimum of 5ppm free halogen residual for at least 6 hours for online disinfection when:

 - ~~1) Heavy biofouling is present~~
 - ~~2) Stagnant systems for long duration~~
 - ~~3) Total aerobic bacteria counts are regularly >10,000 CFU/ml.~~
 - ~~4) Legionella test results >25 CFU/ml~~~~
- ~~q) Mechanical Cleaning of Tower as required~~
- ~~r) Legionella Testing/Schedule Minimum Twice a year and as needed to confirm effectiveness of cleaning/disinfecting following instances of legionella test results >25 CFU/ml~~
- ~~s) Prevention including sample and control heterotrophic bacteria with a target value of <10,000 CFU/ml.~~
- ~~t) Other as recommended.~~

~~ii. Program Manual~~

- ~~a) Contractor will prepare the program manual within 30 days after the on-site walk-down. Contractor cannot make recommendations that are inconsistent with accepted industry guidelines or standards.~~
- ~~b) The County will have 14 days to review the Program Manual and provide any corrections.~~
- ~~c) Contractor will provide the Program Manual as an electronic file only via email or other electronic means. Hard copies are the responsibility of the County of Orange.~~
- ~~d) All communications to be provided in English.~~

~~iii. Description~~

- ~~a) Contractor will provide the following documentation and certifications~~

- ~~1) Contractor Representative will perform a general system inspection every 90 days while the system is in operation, up to four times per year.~~
- ~~2) Contractor will provide for one system certification per year, per tower.~~

~~C. Offline cleaning and disinfections of Cooling Towers Scope of Work~~

~~i. The Contractor shall conduct Mechanical Cleaning and Disinfection of the towers once per year. The Contractor will determine and evaluate if mechanical cleaning will be effective for the Legionella Risk Management Plan prior to cleaning vs. replacement of cooling tower packing or other components (is packing too fouled to clean effectively). If the tower is too fouled to get effective cleaning, Contractor will notify the CUF Plant Manager who will instruct Facility Operations of needed repairs on the tower prior to cleaning. Contractor will work with Facility Operations in determining the sequence for cleaning and disinfection when this occurs. The intent is not to wash cooling tower and foul quickly again.~~

~~ii. Description~~

- ~~a) Contractor will inspect and recommend any repairs including packing replacement prior to cleaning of the cooling tower. The inspection should determine if cleaning will be effective with the current tower condition, if not Contractor will notify the CUF Plant Manager to execute repairs as required prior to cleaning.~~
- ~~b) Contractor Technical Specification for cleaning and disinfection of cooling water systems will be based on industry best practices. Frequency of offline cleaning will be described in the Management Plan. Minimum once per year.~~
- ~~c) Contractor will provide all chemicals, equipment and labor necessary to complete the cleaning and disinfection.~~
- ~~d) Contractor Service Technicians shall be trained and Certified proper safety and cleaning and disinfection protocols. They will also follow required Cal OSHA guidelines in proper use of personnel protection equipment including but not limited to fall protection, Tyvek suits, hardhats, gloves, rubber boots, and respirators with appropriate cartridges and other required PPE. Contractor will complete confined space entry permits as required and follow Lock Out Tag Out Procedures.~~

~~iii. General Offline Cleaning and Disinfection Process~~

- ~~a) Pre-clean disinfection for the reduction of biological contaminants~~
- ~~b) Mechanical cleaning by use of pressure washers to wash what is reasonably accessible to remove deposits~~

- ~~c) Special care will be taken to remove deposits without damage to fill packing.~~
- ~~d) Deposits will be removed by Contractor for disposal~~

~~iv. Post clean disinfection~~

- ~~a) The system will be disinfected using an oxidizing biocide such as chlorine or equivalent~~
- ~~b) Following recharge of water Contractor will assist in re-establishment of standard water treatment program. Blow down will be turned up for 24 hours following treatment and cleaning if required.~~

~~v. County will provide:~~

- ~~a) Safe unrestricted access to the systems for duration of service~~
- ~~b) Parking and offloading area in close proximity of area.~~
- ~~c) Supervision for site requirements and LOTO~~
- ~~d) Proper paperwork for confined space entry~~
- ~~e) Operational; requirements of the facility that may affect ability to conduct work safely~~
- ~~f) Assistance to isolate the cooling tower cells and or turn off circulation pumps and fans before cleaning~~
- ~~g) Removal and clean any strainers at conclusion of service~~
- ~~h) Necessary lighting in the event of night work~~
- ~~i) Assistance for draining the tower and or sump after completion of first step~~
- ~~j) A 15A 110V 60 Hz single phase electrical supply within 100 ft of the working area~~
- ~~k) Access to a standard 3/4" male NFP garden hose potable water connection within 100 Ft of working area.~~

~~vi. Service Contingencies~~

- ~~a) Two (2) weeks' notice is required before service can be scheduled.~~
- ~~b) Contractor will include in proposal any cancellation fees.~~
- ~~c) In work is delayed due to inclement weather, there will be no additional charges to the County to reschedule, due to weather.~~

- ~~d) Quote may include 3rd party services arranged by the Contractor, additional service charges may apply for 3rd party services with zero mark-up and the Contractor will provide the County with a copy of the 3rd party service invoice.~~

~~D. Legionella Culture Testing Scope of Work~~

~~i. Description~~

- ~~a) Legionella Culture Testing is a reference method to detect enumerate viable Legionella. Culturing and testing procedures require up to 14 days for confirmation of test results.~~

~~ii. Testing Process~~

- ~~a) Contractor will specify all testing companies and protocols in the proposal. Legionella testing will be performed per the International Organization of Standardization ISO method 11731:1988(E) entitled Water Quality Detection and Enumeration of Legionella.~~
- ~~b) Contractor will provide test kits.~~
- ~~c) Test reports of Analytical results be reported electronically via email to designated Customer contact spelled out in this Contract.~~

~~E. Online Disinfection of Cooling Towers~~

~~i. Description~~

- ~~a) Contract Technical specifications for disinfection of cooling water systems will be based on industry best practice. This practice is recommended once per year midway through the operating season. Service shall include a certificate for documenting and reporting compliance.~~
- ~~b) Contractor shall provide all chemicals, equipment and labor required to complete the disinfection. Contractor reserves the right (with CUF Plant Manager approval) to make modifications to the clean and disinfection protocol based on site, system or regulatory requirements.~~

~~ii. Health and Safety~~

- ~~a) Contractor service technicians will be trained under a standardized Certification Program (Professional, Pathogen, Protection and Performance), which specifies proper safety and cleaning and disinfection protocols. Contractor Service technicians will follow the necessary Cal OSHA guidelines in proper use of personal protective equipment when it is required.~~

~~iii. General Online cleaning Process~~

- ~~a) The following guidelines will be used for on-line disinfection of cooling water systems:~~
- ~~1) The system will be prepared for disinfection.~~
 - ~~2) The system will be disinfected using an oxidizing biocide such as chlorine or equivalent chemistry.~~
 - ~~3) The dispersant will be added to help remove organic deposits and enhance disinfection.~~
 - ~~4) The standard water treatment program, including biocide treatment, will be resumed following the disinfection period.~~
 - ~~5) System blow-down will be turned on for at least 24 hours post disinfection to allow the system to release biofilms and other solids that may remain suspended in the system.~~
 - ~~6) All equipment shall be returned to normal operations by the County after the required blow-down period.~~
 - ~~7) The disinfection service will be documented with a service report and certificate for a record of due diligence. Documentation supports a site risk reduction program for control of Legionella in cooling water systems.~~
 - ~~8) Certain modifications may be required depending on the system design, operation, or like. All Stages in the disinfection process shall require assistance from the County such as operating engineers who are familiar with the system.~~

**ATTACHMENT A
SCOPE OF WORK**

I. OVERVIEW:

The County of Orange operates a Central Utility Facility (CUF) which produces Chilled Water, Steam and Electricity for the Santa Ana Downtown Civic Center. The plant consists of two gas turbines driving generators which generate 5.6 mw of power, the turbines exhaust into Heat Recovery Steam Generators which are capable of producing 65 mlbhr of 260 psig steam. The plant also consists of 6 chillers (4 Refrigeration and 2 absorption), a large cooling tower and Boiler Feed Water (BFW) treatment facility. The CUF is also charged with monitoring and water treatment responsibilities for several County Building Cooling Towers. On-call service requests involving repairs and/or alterations shall not exceed \$60,000.

The County is seeking a full-service contractor in four areas of work scope which include:

- Water Treatment Chemicals and Service for CUF location (Supply chemicals for BFW treatment, cooling tower treatment, closed water loop treatment (hot and cold) for the CUF Facility).
- Water Treatment Chemicals and Services for Outside routes (Supply chemicals for BFW treatment, cooling tower treatment, closed water loop treatment (hot and cold) for other Outlying County Buildings (Outside Route).
- Supply Ion Exchange bottles for periodic treatment of water for washing gas turbines. Preventative Maintenance-RO Systems and Service Deionization Tank Exchange
- Water Safety Protocol for Cooling Towers, which includes development and execution of a water safety management program which will meet or exceed industry standards and best practices for the prevention of water borne pathogens.

The details on the scope of work can be found below.

II. CONTRACTOR MINIMUM QUALIFICATIONS:

A. Contractor shall have at least a minimum of ten (10) years in the water treatment business.

B. Contractor/Facility Certifications:

- iii. At minimum, be Elite Certified by the Centers for Disease Control and prevention for Legionella testing and analysis. Include other certifications, if any, in your response.
- iv. Chemical manufacturing facilities must be ISO certified

C. Contractor Licenses:

- ii. Have a valid Pesticide Business license in their name and include a copy of their Qualified Applicator License (QAL) with their proposal. All licenses shall be issued by the proper authorities in compliance with current Federal, State, and Local regulations. QAL must be registered in the County of Orange.

D. Contractor shall operate an analytical laboratory (Contracted out laboratory work is not acceptable unless approved by the County CUF Manager or designee in writing) with the capability of performing a wide array of analytical work to facilitate monitoring, control, and troubleshooting of our systems including microbiological analysis, including but not limited to complete organism identification.

- iii. Laboratory services which shall include corrosion coupon analysis, water analysis, deposit analysis, microbiological analysis, ion exchange resin analysis, cartridge analysis, fuel oil analysis, and metallurgical analysis.
- iv. Water analysis and corrosion results must be available in seven (7) days to the County CUF Supervisor in charge. In case of an emergency three (3) day turnaround is expected.

E. Contractor shall employ the following staff with the following experience:

- ix. Degreed Chemists / Chemical Engineer, Microbiologist and Metallurgists
- x. Chemist or Chemical Engineer and Microbiologist shall have at least five (5) years of experience in water treatment, spectrophotometric procedures and testing, heating and cooling water, thermal energy storage systems.
- xi. Metallurgists shall have at least five (5) years of experience in testing and reviewing metal degradation in water systems.
- xii. Field service staff shall be degreed Chemists and or Chemical Engineer and shall have at least five (5) years of experience in water treatment, spectrophotometric procedures and testing, heating and cooling water, thermal energy storage systems and be proficient in the operation, maintenance and troubleshooting of all equipment used at the CUF for water treatment.
- xiii. All delivery specialists shall have Department of Transportation and Hazmat certifications.
- xiv. All field staff must be safety trained and certified in chemical handling with water treatment.
- xv. Contractor's manufacturing facilities and labs have a valid ISO certification.
- xvi. Elite Certified by the Centers for Disease Control and prevention for Legionella testing and analysis.

F. Contractor shall provide an Administration Notebook (hard copy and electronic). The notebook must contain an outline of the chemical program, all chemical control test procedures and frequencies, Log Sheets, Product Bulletins, Material Safety Data Sheets, Feed and Control Equipment Specifications and an electronic Service Reports log.

- ii. Administration Notebook will include a complete list of chemicals, reagents, and test kits that applicable and used by each system and building:
 - f) Closed loop water systems
 - g) Cooling tower systems
 - h) BFW systems
 - i) Make Up Water systems
 - j) Steam Systems

G. At all times, Contractor shall be required to obtain and maintain on the CUF premises in the on-site Program Administration manual, Safety Data Sheets (SDS) sheets and product

data sheets on all products brought to the premises or intended to be installed or used in the premises.

- iv. SDS sheets shall be included with all first-time orders.
- v. SDS sheets for each product provided which shall include the percent of active ingredients of each constituent in each product to be supplied, and product densities in Pounds per Gallon (lb. /gal). Bid must include SDS, failure to comply shall be considered non-responsive.
- vi. New chemical proposals shall include the approval of County Safety/Risk Technician to ensure that chemical can be used safely and minimal risk as compared to current chemicals

H. Contractor shall be responsible for maintenance costs arising from incompatibility of chemicals or from failure of chemicals to provide required treatment on an effective basis.

I. In the event there is a requirement for a product change due to any United States Food and Drug Administration (USFDA) ruling, change in law, Occupational Safety and Health Administration (OSHA) regulation, or any condition which the County determines that a product change is necessary, the Contractor shall submit a proposal for making such change. The proposal shall describe the recommended substitute product, product price; product feed rate, and product residual level to be maintained. The proposal will be evaluated by the County which may approve the proposal in whole or in part or may elect to purchase the substitute product from another source.

J. Contractor shall assign one of its Industry Technical Consultants, David Petrash, to oversee the field service staff and act as a consultant for County.

III. WATER TREATMENT CHEMICALS AND SERVICE FOR CUF LOCATION:

1. BACKGROUND:

OC Public Works / OC Facilities Maintenance & CUF (Central Utility Facility) operates a CUF which services critical facilities and is operational 24/7/365 days per year.

The information below is the current water treatment contract requirements. If the responding contractor is proposing changes to the existing program, it will be documented with reasons for change proposed. If changed, the contractor will include the same detailed and comparative information provided in the information below in the scope of the work. This information is provided for contractors to understand the current scope of work and to help them make proposed changes to the program, if any.

The County is currently using but not limited to the following chemicals:

Chemical	Form	Estimated Monthly Amount	Product / Supplier
<u>HRSG / Boiler</u>			
Scale / corrosion inhibitor (1)	liquid	65 gallons	3DT230 Nalco
Scale / corrosion inhibitor	liquid	65 gallons	1820 Nalco
Steam Boiler Deposit Control	liquid	47 gallons	22310 Nalco
Steam Boiler Deposit Control	liquid	47 gallons	22305 Nalco
Steam Boiler O2 Scavenger	liquid	13 gallons	1720 Nalco
Closed System Inhibitor (4)	powder	as needed	C-4710 Nalco

Nalperse (De-oiler)	liquid	as needed	7308	Nalco
<u>Cooling Tower / Condenser Water</u>				
Biocide	liquid	20 gallons	7330	Nalco
Biocide - DBNPA – 20%	liquid	as needed	7320	Nalco
Dispersant (1)	liquid	as needed	3DT190	Nalco
Antifoam	liquid	as needed	7468	Nalco
Antifoam (1)	liquid	as needed	3DT198	Nalco
Chlorine bleach (2)(3)	liquid	220 gallons	HP	LA Chem.
Sulfuric Acid	liquid	350 gallons		CCI
Salt	solid	12,000 pounds		StepSaver

NOTE: Chlorine, Sulfuric Acid and Salt supplied by others, shown here to inform proposers of chemicals currently in use.

(1) 3D Trasar product

(2) The County uses either Nalco ST070 or the Chlorine Bleach, not both

(3) Sodium Hypochlorite 12.5%

(4) 4710 is primary treatment so this is used only as a supplement, as needed

If a different product is proposed, proposer must:

- Compare MSDS and include a technical explanation on how product is comparable if there are any differences in the product makeup or active ingredient concentration.
- Include costs of proposed chemicals and quantity of use difference.
- Include plan to convert and switch to new chemicals including running off current chemical inventory, system draining, flushing and initial product dosing, etc.
- If new chemicals are proposed, include approval of County Safety/Risk technician to ensure new chemicals do not pose increased risk. If applicable, please contact the County DPA for County Safety and Risk Technician contact information
- Provide pick-up service of any proposed product, which includes components that could require special handling and or special disposal due to as received concentration.
- Compare control system and automation in writing in comparison to current or proposed Outside Route Automation system operations

2. SCOPE OF SERVICES:

Contractor shall provide Water Treatment Chemicals and related services for cooling tower systems and closed loop systems. Chemicals will be ordered on an "as needed" basis as determined by the County. The chemical systems shall include automatic continuous monitoring and feeding where applicable and shall utilize bulk storage tanks to minimize drum and pail purchases

A. Contractor shall identify and provide at least two members of its company to represent the company in dealings with County. It is anticipated one would be the assigned as the field service representative servicing the account. The second would be a supervisor over the field service representative.

- i. Contractor representatives shall be full-time employees of the Contractor. Only these individuals will represent the Contractor regarding services for this Contract unless otherwise specifically authorized by the CUF Plant Manager.
- ii. Contractor representatives must live within 1 hour driving distance (60 mi.) of the County CUF. A representative must be available for calls on specific problems should they occur. The representatives shall be available to us on 24-hour basis, and under emergency circumstances, should be able to respond within at least the next business day after being notified, at no additional cost to the County.

- iii. The field service representative shall inspect CUF a minimum of once monthly. During these monthly visits the representative shall at a minimum:
 - a) Inspect all chemical areas for issues not identified by CUF staff
 - b) Take and process separate analysis for comparison to CUF staff analysis
 - c) Inspect CUF readings for excursions and or issues
 - d) Provide training as needed for new employees and or refresher training, as needed. This can be scheduled during a separate trip, as needed
 - e) Report out in writing any deficiencies observed or found and deliver to the CUF Plant Manager
- iv. Provide representation during County's routine inspections of HRSG's, boiler, condenser tubes, tube sheets, and various equipment receiving water treatment to verify existing condition and measure performance of Contractors product.
 - a) Whenever possible, Contractor will be notified two (2) days in advance of the anticipated inspection date and time but will be given short notice in an emergency.

B. Testing:

- i. As part of this Contract and at no cost to the County, the Contractor shall provide all means necessary to monitor chemical levels. This includes but is not limited to test kits, reagents, chemicals and instruments. Instruments provided should be electronic and portable and have a digital display.
- ii. As part of this Contract and at no additional cost to the County, the Contractor shall provide corrosion coupons for copper and mild steel for all cooling tower, steam, condenser water and closed water systems. Each coupon should be weighed and analyzed at the end of each coupon trail period which will be approximately quarterly on condenser systems and chilled loop systems. Provide the CUF Plant Manager or designee a full written report of the corrosion rate in Mils Per Year (MPY).
 - a) The analysis shall be performed by the Contractors laboratory and included as part of this Contract. Contracted out laboratory work is not acceptable unless approved by the County CUF Plant Manager or designee in writing.
 - b) Water analysis and corrosion results must be available in seven (7) days to the CUF Plant Manager or designee in charge. In case of emergency three (3) day turnaround is expected.
- iii. Two hundred (200) biocides per year will be provided at no cost to the County for on-site microbial analysis.
- iv. Test methods requiring color comparisons shall be converted to the Hatch DR 2400 and or spectrophotometer.

C. System Monitoring:

- i. Contractor shall install, maintain and monitor real time monitoring equipment. This equipment shall provide real time:
 - a) 24/7/365 remote monitoring and alarms

- b) Corrosion monitoring and control
- c) Scale inhibitor control

D. Contractor shall provide and maintain on the CUF premises an Administration Notebook (hard copy and electronic). The notebook must contain an outline of the chemical program, all chemical control test procedures and frequency, Log Sheets, Product Bulletins, Safety Data Sheets, Feed and Control Equipment Specifications and an electronic Service Reports log.

- iv. Administration Notebook will include a complete list of chemicals, reagents, and test kits which are applicable and used by each system:
 - a) Boiler and condensate systems
 - b) Closed loop water systems
 - c) Cooling tower systems
- v. Safety Data Sheets (SDS) sheets and product data sheets on all products brought to the premises or intended to be installed or used in the premise.
 - b) SDS sheets shall be included with all first-time orders.
- vi. SDS sheets for each product provided which shall include the percent of active ingredients of each constituent in each product to be supplied, and product densities in Pounds per Gallon (lb. /gal). Proposal must include SDS, failure to comply shall be considered non-responsive.

E. Delivery:

- i. F.O.B destination, freight prepaid.
- ii. All deliveries shall be made directly into the bulk storage tanks or if in drums or pails with lift gate trucks. Deliveries shall be provided at no extra cost to the County and Contractor will be responsible for off-loading from truck.
- iii. All deliveries shall be made within 7 calendar days of order. Individual containers shall not be larger than 5 gallons for biocides; cooling tower inhibitor, cooling tower anti-foam. Closed loop dry product in 40# or less containers. NO EXCEPTIONS!
- iv. All items shall be delivered to:

OC Public Works/OC Facilities Maintenance & CUF
525 North Flower Street
Santa Ana, CA 92701
Attn: CUF Plant Manager

F. Provide pick-up service:

- i. Upon the County stockpiling 10 empty containers, the Contractor or his agent shall be required to remove the containers within five (5) County working days. For all chemical containers/drums delivered by the Contractor, not able to be disposed of in a normal trash pick-up, the Contractor or his agent will be required to pick-up, after use for proper disposal as required by all statutes, at no additional charge to the County.

- ii. Of any product supplied by the Contractor no longer used by the County which includes components that could require special handling and or special disposal due to as received concentration.

G. Contractor shall be responsible for maintenance costs arising from incompatibility of chemicals or from failure of chemicals to provide required treatment on an effective basis.

H. In the event there is a requirement for a product change due to any United States Food and Drug Administration (USFDA) ruling, change in law, Occupational Safety and Health Administration (OSHA) regulation, or any condition which the County determines that a product change is necessary, the Contractor shall submit a proposal for making such change. The proposal shall describe the recommended substitute product, product price, product feed rate, and product residual level to be maintained. The proposal will be evaluated by the County which may approve the proposal in whole or in part or may elect to purchase the substitute product from another source.

3. WATER TREATMENT SPECIFICATIONS:

Equipment will be operating 24 hours per day, 7 days per week. This contract is intended to cover all chemicals required to protect all heating and air conditioning equipment maintained by the County. This is to include waterside protection against corrosion, scale and microbiological contamination of equipment (HRSG's, Boiler, Chillers, Closed Water Systems, and Cooling Towers). Unless otherwise noted, identified limits are industry standard as per ASME Volume 1, Chapter 19, water treatment. All deviations must be reviewed and approved in writing by the CUF Plant Manager, prior to implementation. All chemicals must be compatible with County owned equipment. Including stainless steel cooling tower components. Chemicals will be ordered on an "as needed" basis as determined by the County.

- A. Contractor shall refer to all products by their generic names in the contract, and in all written correspondence.
- B. Where possible, chemistries provided as part of this contract for treatment of water systems should be liquid.
- C. Closed Water Systems (includes HRSG and Boilers):

- i. OC Public Works/Facilities Operation personnel will make multiple daily checks of the closed water system to determine the effectiveness of the treatment unless there is an issue which requires more frequent testing.
- ii. All closed systems shall be treated against all types of corrosion with a non-toxic, Borate, Nitrite product, non-caustic, non-metallic corrosion inhibitor. Product shall not contain chromates, zinc, amines, or phosphates. The product shall contain a minimum of 1.0 percent of Tolyltriazole or Benzotriazole.
- iii. Current system control limits (based on best practices and current product use):
 - a) Conductivity: 2,800 to 3,200 mmhos
 - b) Ph: 10.5 TO 11.5
 - c) P Alkalinity: 400 to 700 ppm
 - d) M Alkalinity: 600 to 800 ppm
 - e) OH Alkalinity: 250 to 600 ppm
 - f) TRASAR Polymer: 300 to 400 ppm
 - g) Sulfito: 30 to 50 ppm
 - h) Sodium Nitrite @ 550 PPM for chill water loop systems and 800 ppm for heating hot water systems

D. Cooling Tower:

- i. OC Public Works/Facilities Operation personnel will make a twice weekly check of the cooling tower water to determine the effectiveness of the treatment to control scale, algae, fungi and bacteria free operation and equipment corrosion protection, unless there is an issue which requires more frequent testing. Tests include PH, total hardness, total alkalinity, conductivity, free and total halogen and inhibitor levels.
- ii. Equipment and chemical protection against scale and corrosion shall contain all of the following:
 - a) PBTC/HEDP Phosphonate (to provide anodic and cathodic mild steel corrosion protection)
 - b) Benzotriazole or Tolyltriazole (TT or BZT) (to provide copper corrosion protection)
 - c) High Stress Polymer (to provide calcium, iron and silt control), Polymer shall be non-foaming and non-Ionic
 - d) Fluoresced inert and active trace element (to facilitate ease of testing). Product shall not contain any molybdenum (due to the County's desire for no heavy metal discharge)
- iii. Current system control limits (based on best practices and current product use):
 - a) Conductivity: 2,200 to 2,600 mmhos
 - b) Cycles (Tower to City): 4.5 to 6.0
 - c) pH: 8.2 to 8.4
 - d) Total Alkalinity: 150 to 300 ppm
 - e) Calcium Hardness: < 1,000 ppm
 - f) TRASAR Inhibitor: 90 to 110 ppm
 - g) Free Chlorine: 0.2 to 0.5 ppm
 - h) Dipslide: < 10⁴
 - i) Corrosion level 2 MPY or less on mild steel and 0.1 MPY or less on copper/bronze.
- iv. Biocides: Microbiological control performed by the County shall be maintained by periodic treatment with alternating oxidizing and non-oxidizing micro-biocides.
- v. Minimum Inhibitor Residual Levels to be maintained
 - a) Traced Element: 30 to 35 ppm
 - b) PBTC Phosphonate: 5 PPM as PO₄
 - c) Tolyltriazole (TT) or Benzotriazole ingredient: 2 ppm as TT
 - d) High Stress Polymer: 10 PPM as Polymer
- vi. Stabilized Bromine:
 - a) Must be at least 6% active halogen and 9% sodium bromide
 - b) Isothiazoline – 5-chloro-2-methyl-4-isothiazolin-3-one 1.1%
 - c) 2-methy-4-isothiazolin-3-one 0.4%
 - d) Dlbromo-nitrolopropinamide (DBNPA Bromine) 20%

vii. Calculate Biocide usage based on a 90-ppm dose fed three times per week.

- a) Calculate non-oxidizing biocide usage based on one (1) tablet per 500 gallons of system volume per month. Non-oxidizing biocide shall be dosed to treat total of seven-hundred and fifty (750) thousand gallons of cooling water tower.
- b) Oxidizing biocide shall be dosed to treat a total of two (2) million gallons of cooling tower water.

IV. WATER TREATMENT CHEMICALS AND SERVICE FOR OUTSIDE ROUTES:

1. BACKGROUND:

OC Public Works / OC Facilities Maintenance & CUF (Central Utility Facility) staff currently service Heating, Ventilation and Air Conditioning systems at 35 County buildings outside of the CUF generally referred to as the “outside route” (Attachment C).

This list indicates the facility and the services at particular facilities.

2. **SCOPE OF SERVICES:** Contractor shall provide Water Treatment program which includes 3D TRASAR Solid Controller Program (or other similar program) for treatment of equipment indicated in Attachment C., This includes:

Note: If a different product or service is proposed, proposer must:

- Compare MSDS and include a technical explanation on how product is comparable if there are any differences in the product makeup or active ingredient concentration.
- Include costs of proposed chemicals and quantity of use difference.
- Include plan to convert and switch to new chemicals including running off current chemical inventory, system draining, flushing and initial product dosing, etc.
- If new chemicals are proposed, include approval of County Safety/Risk technician to ensure new chemicals to not pose increased risk.
- Provide pick-up service of any proposed product, which includes components that could require special handling and or special disposal due to as received concentration.
- Compare control system and automation with 3D TRASAR Solid Control

A. Data Transmission and Collection for Trending

B. Biocide Feed Confirmation Reports Weekly

C. Remote Alarming for critical Functions

D. All chemicals to limits established below which is anticipated annual use:

- i. 3DTS88 – Proprietary blend of phosphorus-containing compounds with a multifunctional dispersant to inhibit scale. Azole for copper corrosion. Total Qty 28, included in agreement
- ii. 7346 TAB – Broad-spectrum oxidizing biocide. Total Qty 21, included in agreement
- iii. SOLID BIONOX – organic-based, non-oxidizing biocide used to control bacteria Total Qty 7, included in agreement

iv. Note See Pricing additional chemicals if required beyond the above

E. Reagents

F. Pumps

G. Control Equipment related to the program, aside from bleed line solenoid/replacements.

H. System Assurance Monitoring: 24/7/365 Monitoring. 100 Chemical Engineers responding and troubleshooting alarms and resolving system upsets quickly.

I. Total Care Service: Includes deployment and on-going services such as Standard Installation, General Repairs, Decommissioning, and Preventative maintenance. Standard installation requires:

i. Adequate footprint space

ii. Sample line and City water within 3 feet of installation area

iii. Sufficient Power

iv. Previous system uninstallation

J. Program to include cooling towers, closed loops, and boilers.

K. Quarterly review by Contractor on chemical treatments generation of a report showing status of treatment and exceptions; sent to CUF Plant Manager Quarterly.

L. Contractor will teach outside Route Operators new routines and sample for new chemical treat processes as they are installed without additional cost to County.

3. AUTOMATION:

A. 3D TRASAR Technology (or Similar) shall be installed on 7 cooling towers. This contract shall be expandable for any additions outside route equipment. Contractor shall develop a quote and have it approved by CUF Plant Manager for addition of equipment and services added to this contract.

B. Contractor shall identify and provide at least two members of its company to represent the company in dealings with County. It is anticipated one would be the assigned field service representative servicing the account. The second would be a supervisor over the field service representative.

i. Contractor representatives shall be full-time employees of the Contractor. Only these individuals will represent the Contractor regarding services for this Contract unless otherwise specifically authorized by the CUF Plant Manager.

ii. The field service representative shall inspect all outside route facilities a minimum of four times annually.

iii. When requested, within 24 hours during normal business hours, the Contractor is to furnish qualified personnel to assist solving any problems at job sites, which may result from the use of the Contractor's products, at no additional cost to the County.

- iv. Provide representation during County's routine inspections of condenser tubes, tube sheets, and various equipment receiving water treatment to verify existing condition and measure performance of Contractors product.
 - a) Whenever possible, Contractor will be notified two (2) days in advance of the anticipated inspection date and time but will be given short notice in an emergency.
- v. Contractor representatives must live within 1-hour driving distance (60 mi.) of the County CUF. A representative shall visit the site a minimum of weekly. The representatives must be available for calls on specific problems should they occur. The representatives shall be available to the County on 24-hour notice, and under emergency circumstances, should be able to respond within one (1) hour after being notified.

4. TESTING:

- A. As part of this Contract, at no cost to the County, the Contractor shall provide test kits and reagents to monitor chemical levels.
- B. As part of this Contract, at no cost to the County, the Contractor shall provide corrosion coupons for copper and mild steel for all cooling water and closed water systems, where coupons are installed. Have each coupon weighed and analyzed at the end of each coupon trail period (approximately every 3 months for cooling systems and 6 months for closed water systems) and give the CUF Plant Manager or designee a full written report of the corrosion rate in Mils Per Year (MPY). The analysis shall be performed by the Contractors laboratory and included as part of this Contract. Contracted out laboratory work is not acceptable unless approved by the County CUF Manager or designee in writing.
 - a) Water analysis and corrosion results must be available in seven (7) days to the CUF Plant Manager or designee in charge. In case of emergency three (3) day turnaround is expected.
- C. One hundred (100) biocides per year will be provided at no cost to the County for on-site microbial analysis (8 sites @ 1 Test/Month)

5. DELIVERY:

- A. F.O.B destination, freight prepaid.
- B. All deliveries shall be made with lift gate trucks. Deliveries shall be provided at no extra cost to the County and Contractor is required to off-load from truck.
- C. All deliveries shall be made within 7 calendar days of order. Individual containers shall not be larger than 5 gallons cooling tower inhibitor, cooling tower anti-foam. Other chemicals will be supplied in the form of chemical blocks. NO EXCEPTIONS!
- D. All items shall be delivered to:

OC Public Works/OC Facilities Maintenance & CUF
525 North Flower Street
Santa Ana, CA 92701
Attn: CUF Plant Manager

6. PICK-UP SERVICE:

- C. Upon the County stockpiling 10 empty containers, the Contractor or his agent shall be required to remove the containers within five (5) County working days. For all chemical containers/drums delivered by the Contractor, not able to be disposed of in a normal trash pick-up, the Contractor or his agent will be required to pick-up, after use for proper disposal as required by all statutes, at no additional charge to the County.
- D. Of any product supplied by the Contractor no longer used by the County which includes components that could require special handling and or special disposal due to as received concentration.

7. WATER TREATMENT SPECIFICATIONS:

Contract is intended to cover all chemicals required to protect all heating and air conditioning equipment maintained by the County. This is to include waterside protection against corrosion, scale and microbiological contamination of equipment (Boilers, Chillers, Closed Water Systems, and Cooling Towers). Unless otherwise noted, identified limits are industry standard as per ASME Volume 1, Chapter 19, water treatment. All deviations must be reviewed and approved in writing by the CUF Plant manager prior to implementation. Chemicals will be ordered on an "as needed" basis as determined by the County.

- A. Contractor shall refer to all products by their generic names in the contract, and in all written correspondence.
- B. Where possible, chemistries provided as part of this contract for treatment of water systems should be liquid.
- C. Control limits which are to be maintained:
 - i. Closed Water Systems:
 - a) OC Public Works/Facilities Operation personnel will make a monthly check of the closed water system to determine the effectiveness of the treatment unless there is an issue which requires more frequent testing.
 - b) Sodium Nitrite @ 550 PPM for chill water loop systems and 800 ppm for heating hot water systems.
 - c) All closed systems shall be treated against all types of corrosion with a non-toxic, Borate, Nitrite product, non-caustic, non-metallic corrosion inhibitor. Product shall not contain chromates, zinc, amines, or phosphates. The product shall contain a minimum of 1.0 percent of Tolyltriazole or Benzotriazole.
 - ii. Open Water Systems / Cooling Towers:
 - a) Physical conditions:
 - 1) All tower make-up water is hard.
 - 2) 2.5 cycles shall be used for Cooling Tower Cycles based on total hardness.
 - 3) Cooling tower equipment will be operating 24 hours per day, 7 days per week.

- 4) All chemicals must be compatible with County owned equipment. Including stainless steel cooling tower components.
- b) OC Public Works/Facilities Operation personnel will make a twice weekly check of the cooling tower water to determine the effectiveness of the treatment to control scale, algae, fungi and bacteria free operation and equipment corrosion protection, unless there is an issue which requires more frequent testing.
 - 1) Tests include PH, total hardness, total alkalinity, conductivity, free and total halogen, and inhibitor levels.
 - c) Equipment and chemical protection against scale and corrosion shall contain all of the following:
 - 1) PBTC/HEDP Phosphonate (to provide anodic and cathodic mild steel corrosion protection.)
 - 2) Benzotriazole or Tolyltriazole (TT or BZT) (to provide copper corrosion protection)
 - 3) High Stress Polymer (to provide calcium, iron and silt control), Polymer shall be non-foaming and non-Ionic
 - 4) Fluoresced inert and active trace element (to facilitate ease of testing). Product shall not contain any molybdenum (due to the County's desire for no heavy metal discharge).
 - d) Current system control limits (based on best practices and current product use):
 - 1) Corrosion level - 2 MPY or less on mild steel and 0.1 MPY or less on copper/bronze.
 - 2) Total hardness - <1000 PPM
 - 3) Minimum Inhibitor Residual Levels to be maintained:
 - a. Traced Element 30-35 PPM
 - b. PBTC Phosphonate 5 PPM as PO4
 - c. Tolyltriazole (TT) or Benzotriazole ingredient 2 PPM as TT
 - d. High Stress Polymer 10 PPM as Polymer
 - 4) Biocides: Microbiological control performed by the County shall be maintained by periodic treatment with alternating oxidizing and non-oxidizing microbiocides. The Micro-biocides are listed below:
 - a. Stabilized Bromine – Must be at least 6% active halogen and 9% sodium bromide st70
 - b. 1-bromo-3chloro-5,5-dimethylhydantoin 7346 tab
 - c. Isothiazoline – 5-chloro-2-methyl-4-isothiazolin-3-one 1.1% 7330

- d. Sodium Dichloro-S-Triazinetrione Dihydrate alc ox
- e. Dibromo-nitrolopropinamide (DBNPA Bromine) 20% 7639s or solidbionox

5) Calculate Biocide usage based on a 90 ppm dose fed three times per week. Calculate non-oxidizing biocide usage based on one (1) tablet per 500 gallons of system volume per month. Oxidizing biocide shall be dosed to treat a total of two (2) million gallons of cooling tower water; non-oxidizing biocide shall be dosed to treat total of seven-hundred and fifty (750 thousand gallons of cooling water tower.

V. PREVENTATIVE MAINTENANCE-RO SYSTEMS AND SERVICE DEIONIZATION TANK EXCHANGE:

1. BACKGROUND:

Contractor shall furnish all staffing, labor and Deionization Tank Exchange equipment to condition Santa Ana potable water to achieve the requirements of Solar Turbine specification ES9-98 for water used for injector cleaning.

2. LOCATION:

Central Utility Facility
525 North Flower Street
Santa Ana CA 92703

3. SOLAR TURBINE ES9-98 WATER REQUIREMENTS:

PH 6.0 – 8.5, Chlorine 40 ppmw, Fluorine 1.9 ppmw, Lead .70ppmw, Sodium + Potassium 1.9 ppmw, Vanadium .35ppmw, Suspended solids \leq 2.6mg/l, Dissolved Silica .1mg/l, Maximum particle size 10 Microns, Electrical Conductivity 5 us/cm, Iron, tin, silicon, aluminum copper, manganese, phosphorus 3.8 ppmw.

4. CONTRACTOR REQUIREMENTS:

- A. Contractor shall perform all necessary testing to prove deionization system has achieved compliance with the above specifications upon contract / system startup and once per contract year thereafter.
- B. Contractor to perform additional testing upon request from the County Project Manager. Cost of the additional testing will be as per Attachment B. Section III., Contractor Pricing.
- C. Deionization tanks to be replaced on an as needed basis only.
- D. Contractor to provide conductivity tester on deionization system
- E. Deliveries are required within 24 hours of order, Monday through Sunday.

This contract to include any incidentals required for system and service of the system. Cost will be as per Attachment B Section III., Contractor Pricing.

VI. WATER SAFETY PROTOCOL FOR COOLING TOWERS:

1. BACKGROUND:

OC Public Works / OC Facilities Maintenance & CUF (Central Utility Facility) staff currently service and monitor 8 Cooling Towers, One at CUF and 7 in various buildings within the County. This Contract is to develop a water management program and execute the program to bring these cooling towers to industry standards in regard to water management to minimize the chances of Legionella Disease.

The CUF Cooling Tower is located at 525 N flower Santa Ana CA.

The (Seven) 7 County Building Cooling Towers are in the locations indicated on Attachment D.

Note: This contract shall be expandable for any additions outside route equipment. shall develop a quote and have it approved by the CUF Plant Manager for addition of equipment and services added to this contract.

2. SCOPE OF SERVICES:

A. Contractor will develop a Risk Management Plan per ANSI/ASHARE Standard 188-2018 which establishes the minimum Legionella Risk Management requirements for cooling tower water systems, which is industry best practice. Contractor shall indicate Contractor's responsibilities and the County responsibilities in execution of this Legionella Risk Management Plan and each of the requirements within the plan to achieve a County Legionella Program which meets industry standards and ANSI/ASHARE Standard 188-2018.

B. Included in this Risk Management Plan are the CUF Cooling Tower and 8 outlying Cooling Towers (Expandable). This plan will include, but not be limited to:

i. A Written Water Management Program shall be developed in accordance ANSI/SHRAE Standard 188-2018. The general elements of the program:

- a) Program Team-The County shall identify person(s) responsible for the program development and implementation.
- b) Describe and Evaluate Cooling Tower Systems-The County shall assist Contractor to describe the cooling tower systems during an on-site walkthrough to confirm system information provided by the County. The County is responsible for providing a simple system schematic of sufficient detail to illustrate the general flow and process steps of the system. Schematics do not need to be detailed engineering drawings or P+ID.
- c) Description of Potential System Hazards- Contractor will provide a general description for the potential hazardous conditions that may occur in the systems and determine were control measures can be applied.
- d) Control Measures-Contractor will identify locations where control measures can be applied and maintained in order to maintain the control measures within established control limits.

- e) Monitoring and Corrective Actions-Contractor will provide recommended best practice procedures for monitoring control measures to confirm a control measure is operating within established limits and if not, to define corrective actions necessary to correct the condition when the test results occur outside of the control limits. The program shall include a schedule for routine bacteriological analysis (dip slide or Equivalent). The plan shall also include a schedule for Legionella testing in the case or certain system events.
- f) Confirmation-The program will establish procedures to confirm that:

- 1) Initially and on an on-going basis that the program is being implemented as designed
- 2) Initially and on an on-going basis, that the program, when implemented as designed, effectively controls the hazardous conditions throughout the water system (validate)

- g) Documentation- the program will specify required documentation and communication procedures.
- h) Contractor will provide one on site visit by Contractor Representative to complete the On-site walkthrough
- i) Contractor shall confirm with County Operating Engineers familiar with the systems relevant operational, maintenance or other practices related to the water systems as part of the on-site walk through
- j) Contractor will photograph to document the systems
- k) No systems testing is included with the walk-down of system.
- l) Specifically, the application of halogens (chlorine or bromine) to maintain a free Chlorine residual of .5-1.0 ppm (as cl₂) sampled at various location of the system.
- m) Recommended Water Stagnation minimization plan presented to County
- n) Scale and Corrosion Inhibitor control to minimize overall microbiological activity and tower cleanliness
- o) Periodic Cooling Tower Inspection as required to meet and defend ANSI/ASHARE Standard 188-2018 minimum 4 times per year (once a Quarter)
- p) Disinfection such as Halogen Oxidizers to minimize overall microbiological activity and optimal control, periodic hyper-halogenation to a minimum of 5ppm free halogen residual for at least 6 hours for online disinfection when:

- 1) Heavy biofouling is present
- 2) Stagnant systems for long duration
- 3) Total aerobic bacteria counts are regularly >10,000 CFU/ml.
- 4) Legionella test results >25 CFU/ml

- q) Mechanical Cleaning of Tower as required
- r) Legionella Testing/Schedule Minimum Twice a year and as needed to confirm effectiveness of cleaning/disinfecting following instances of legionella test results >25 CFU/ml
- s) Prevention including sample and control heterotrophic bacteria with a target value of <10,000 CFU/ml.
- t) Other as recommended.

ii. Program Manual

- a) Contractor will prepare the program manual within 30 days after the on-site walk down. Contractor cannot make recommendations that are inconsistent with accepted industry guidelines or standards.
- b) The County will have 14 days to review the Program Manual and provide any corrections.
- c) Contractor will provide the Program Manual as an electronic file only via email or other electronic means. Hard copies are the responsibility of the County of Orange.
- d) All communications to be provided in English.

iii. Description

- a) Contractor will provide the following documentation and certifications
 - 1) Contractor Representative will perform a general system inspection every 90 days while the system is in operation, up to four times per year.
 - 2) Contractor will provide for one system certification per year, per tower.

C. Offline cleaning and disinfections of Cooling Towers- Scope of Work

- i. The Contractor shall conduct Mechanical Cleaning and Disinfection of the towers once per year. The Contractor will determine and evaluate if mechanical cleaning will be effective for the Legionella Risk Management Plan prior to cleaning vs. replacement of cooling tower packing or other components (is packing to fouled

to clean effectively). If the tower is too fouled to get effective cleaning, Contractor will notify the CUF Plant Manager who will instruct Facility Operations of needed repairs on the tower prior to cleaning. Contractor will work with Facility Operations in determining the sequence for cleaning and disinfection when this occurs. The intent is not to wash cooling tower and foul quickly again.

ii. Description

- a) Contractor will inspect and recommend any repairs including packing replacement prior to cleaning of the cooling tower. The inspection should determine if cleaning will be effective with the current tower condition, if not Contractor will notify the CUF Plant Manager to execute repairs as required prior to cleaning.
- b) Contractor Technical Specification for cleaning and disinfection of cooling water systems will be based on industry best practices. Frequency of offline cleaning will be described in the Management Plan. Minimum once per year.
- c) Contractor will provide all chemicals, equipment and labor necessary to complete the cleaning and disinfection.
- d) Contractor Service Technicians shall be trained and Certified proper safety and cleaning and disinfection protocols. They will also follow required Cal OSHA guidelines in proper use of personnel protection equipment including but not limited to fall protection, Tyvek suits, hardhats, gloves, rubber boots, and respirators with appropriate cartridges and other required PPE. Contractor will complete confined space entry permits as required and follow Lock Out Tag Out Procedures.

iii. General Offline Cleaning and Disinfection Process

- a) Pre-clean disinfection for the reduction of biological contaminants
- b) Mechanical cleaning by use of pressure washers to wash what is reasonably accessible to remove deposits
- c) Special care will be taken to remove deposits without damage to fill packing.
- d) Deposits will be removed by Contractor for disposal

iv. Post clean disinfection

- a) The system will be disinfected using an oxidizing biocide such as chlorine or equivalent
- b) Following recharge of water Contractor will assist in re-establishment of standard water treatment program. Blow down will be turned up for 24 hours following treatment and cleaning if required.

v. County will provide:

- a) Safe unrestricted access to the systems for duration of service
- b) Parking and offloading area in close proximity of area.
- c) Supervision for site requirements and LOTO
- d) Proper paperwork for confined space entry
- e) Operational; requirements of the facility that may affect ability to conduct work safely
- f) Assistance to isolate the cooling tower cells and or turn off circulation pumps and fans before cleaning
- g) Removal and clean any strainers at conclusion of service
- h) Necessary lighting in the event of night work
- i) Assistance for draining the tower and or sump after completion of first step
- j) A 15A 110V 60 Hz single phase electrical supply within 100 ft of the working area
- k) Access to a standard ¾" male NFP garden hose potable water connection within 100 Ft of working area.

vi. Service Contingencies

- a) Two (2) weeks' notice is required before service can be scheduled.
- b) Contractor will include in proposal any cancellation fees.
- c) In work is delayed due to inclement weather, there will be no additional charges to the County to reschedule, due to weather.
- d) Quote may include 3rd party services arranged by the Contractor, additional service charges may apply for 3rd party services with zero mark-up and the Contractor will provide the County with a copy of the 3rd party service invoice.

D. Legionella Culture Testing-Scope of Work

i. Description

- a) Legionella Culture Testing is a reference method to detect enumerate viable Legionella. Culturing and testing procedures require up to 14 days for confirmation of test results.

ii. Testing Process

- a) Contractor will specify all testing companies and protocols in the proposal. Legionella testing will be performed per the International Organization of Standardization ISO method 11731:1988(E) entitled Water Quality-Detection and Enumeration of Legionella.
- b) Contractor will provide test kits.
- c) Test reports of Analytical results be reported electronically via email to designated Customer contact spelled out in this Contract.

E. Online Disinfection of Cooling Towers

i. Description

- a) Contract Technical specifications for disinfection of cooling water systems will be based on industry best practice. This practice is recommended once per year midway through the operating season. Service shall include a certificate for documenting and reporting compliance.
- b) Contractor shall provide all chemicals, equipment and labor required to complete the disinfection. Contractor reserves the right (with CUF Plant Manager approval) to make modifications to the clean and disinfection protocol based on site, system or regulatory requirements.

ii. Health and Safety

- a) Contractor service technicians will be trained under a standardized Certification Program (Professional, Pathogen, Protection and Performance), which specifies proper safety and cleaning and disinfection protocols. Contractor Service technicians will follow the necessary Cal OSHA guidelines in proper use of personal protective equipment when it is required.

iii. General Online cleaning Process

- a) The following guidelines will be used for on-line disinfection or cooling water systems.
 - 1) The system will be prepared for disinfection.
 - 2) The system will be disinfected using an oxidizing biocide such as chlorine or equivalent chemistry.
 - 3) The dispersant will be added to help remove organic deposits and enhance disinfection.
 - 4) The standard water treatment program, including biocide treatment, will be resumed following the disinfection period.

- 5) System blow down will be turned on for at least 24 hours post disinfection to allow the system to release biofilms and other solids that may remain suspended in the system.
- 6) All equipment shall be returned to normal operations by the County after the required blow down period.
- 7) The disinfection service will be documented with a service report and certificate for a record of due diligence. Documentation supports a site risk reduction program for control of Legionella in cooling water systems.
- 8) Certain modifications may be required depending on the system design, operation, or like. All Stages in the disinfection process shall require assistance from the County such as operating engineers who are familiar with the system.

ATTACHMENT B PAYMENT/COMPENSATION

Amendment No. 6

A. Compensation

~~The Contractor agrees to accept the specified compensation as set forth in the final negotiated contract as full payment for performing all services and furnishing all staffing and materials required, for any reasonably unforeseen difficulties which may arise or be encountered in the execution of the services until acceptance, for risks connected with the services, and for performance by the Contractor of all its duties and obligations hereunder. The Contractor shall only be compensated as set forth herein for work performed in accordance with the Scope of Work. The County shall have no obligation to pay any sum in excess of the Fixed Prices and Total Contract Amount specified herein unless authorized by amendment in accordance with Articles C and P of the County Contract Terms and Conditions, which may require approval by the County Board of Supervisors.~~

B. Fees and Charges

- ~~1. County will pay the following fees in accordance with the provisions of this Contract. Payment shall be as follows:~~

I. Water Treatment Chemicals and Services for CUF location:

~~A. The prices stated below shall include the following for Water Treatment Chemicals. Please include the cost of test reagents in the quotation. Assume monthly testing. For changes in chemicals shown below, supply the same information in the matrix.~~

Item No.	Form	Description	UOM	Delivered in Quantities	Supplier/MFG. Part Numbers	Unit Cost
1	liquid	Scale/corrosion inhibitor (1)	Gallon	55 Gallons	Naleco 3DT230	\$3.10 /gal \$3.35/lb
2	liquid	Scale/corrosion inhibitor	Gallon	55 Gallons	Naleco 1820	\$3.40 /gal \$3.67/lb
3	liquid	Steam Boiler Deposit Control	Gallon	55 Gallons	Naleco 22310 Naleco 22305	\$2.83 /gal \$3.06/lb
4	liquid	Steam Boiler O2 Scavenger	Gallon	55 Gallons	Naleco 1720	\$2.37 /gal \$2.56/lb
5	powder	Closed System Inhibitor (4)	Pounds/drums	300 lbs. Drums	Naleco C 4710	\$14.90 /gal \$16.09/lb
6	liquid	Nalsperse (De-oiler) (3)	Liquid	5	Naleco 7308	\$7.90 /gal \$8.53/lb
7	liquid	Biocide	Gallon	5	Naleco 7330	\$3.00 /gal \$3.24/lb

Amendment No. 6

8	liquid	Bioecide	Gallon	5	Naleo-7320	\$7.65 /gal \$8.26/lb.
9	liquid	Antifoam (3)	Gallon	5	Naleo-7468	\$4.96 /gal \$5.36/lb.
10	liquid	Antifoam (1)-(3)	Gallon	5	Naleo-3DT198	\$8.92 /gal \$9.63/lb.

- (1) ~~3D Trasar Product~~
- (2) ~~The County uses either Naleo ST070 or the Chlorine Bleach, not both~~
- (3) ~~Sodium Hypochlorite 12.25%~~
- (4) ~~4710 is primary treatment so this used only as a supplement as needed~~

~~H. Water Treatment Chemicals and Services for Outside Route:~~

~~A. County will pay the following fees in accordance with the provisions of this Contract. Payment shall be as follows:~~

~~i. The cost of the Automation and Chemistry Program as outlined above will be \$7,225.149 per cooling tower on an annual basis (7 X \$7,225.149 = \$50,576.04 per year). Naleo will invoice once per month for \$4,214.67, plus tax, which is one twelfth the total cost for Seven (7) cooling towers in this contract. Standard Installation for each 3D TRASAR System is \$2,150.00. This Translates to a one time cost of \$15,050.00 for the installation of Seven (7) 3D Solids Trasar Systems.~~

~~Amendment No. 2~~

~~The cost of the Automation and Chemistry Program as outlined above will be \$7,225.149 per cooling tower on an annual basis (10 x \$7,225.149 = \$72,251.49 per year). Naleo will invoice once per month for a total of \$602.10 plus tax for each cooling tower. Standard Installation for each 3D TRASAR System is \$2,150.00. This Translates to a one time cost of \$17,200 for the installation of eight (8) 3D Solids Trasar Systems.~~

~~ii. If future Cooling Towers are added to this contract, Contractor will supply a Quote (usually based on Tower Size) and have approved by CUF Plant Manager for inclusion in this contract.~~

~~iii. The prices stated below are for Water Treatment Chemicals for quantities above the ones shown in Work Scope for Water Treatment Chemicals for CUF. Naleo C 4710 is not included in the total quote for cooling towers and is purchased at the price shown below on an as needed basis.~~

~~Amendment No. 1~~

Item No.	Form	Description	UOM	Delivered in Quantities	Supplier/MFG. Part Numbers	Unit Cost
1.	Block	Scale/Corrosion Inhibitor (1)	Block	20 lbs	Naleo 3DTS88	\$669.00 \$ 33.45 / lb.
2	Block	Oxidizing Biocide (3)	Block	24 lbs	Naleo 7346 Tab	\$365.04 \$ 15.21 / lb.
3	Block	Solid Non-Oxidizing Biocide	Block	7 lbs	Naleo SOLIDBIONO X	\$518.00 \$ 74.00 / lb.
4	liquid	Non-Ox Biocide	Gallon	5	Naleo 7330	\$282.00 \$ 7.05 / lb.
5	powder	Closed-System Inhibitor (2)	Gallons	40 lbs.	Naleo C-4710	\$618.00 \$ 15.45 / lb.
6	Liquid	Scale / Corrosion Inhibitor (1)	Gallons	5-Gallons	3DT465	\$ 382.72 \$ 8.32 / lb
7	Liquid	Ox biocide (3)	Gallons	5-Gallons	ST70	\$ 452.65 \$ 8.23 / lb
8	Cannister /Solid	Alchemy Ox Biocide (3)	Block	Each 22 lbs	73650S.41Y	\$ 423.06 \$ 19.23 / lb.
9	Cannister /Solid	Alchemy Non-Ox biocide	Block	Each 15 lbs	7639S.41Y	\$ 851.00 \$ 56.74 / lb.

(1) — 3D Trasar Product

(2) — Includes 15 pounds per month used in the 15 closed loop only systems

(3) — 4710 is primary treatment so this used only as a supplement as needed

~~III. PREVENTATIVE MAINTENANCE REVERSE OSMOSIS SYSTEMS AND SERVICE DEIONIZATION TANK EXCHANGE:~~

~~A. County will pay the following fees in accordance with the provisions of this Contract. Payment shall be as follows:~~

Qty	Size	Volume	Type	Exchange Price EA.	Monthly Usage Fee EA
2	14"	3.6 cuft	Mixed Bed—Year 1	\$30.00	\$60.00
			Year 2	-\$30.00	\$60.00
			Year 3	-\$30.00	\$60.00

Qty	Description	Unit Price	Ext. Price
2	labor and material (include flex hoses, fitting, 200K quality light, Rusco Spin Filer (Post DI) and hose bib— Year 1	\$75.00	\$300.00
	Year 2	\$75.00	-\$300.00
	Year 3	\$75.00	-\$300.00

~~*County to provide ¾ city water feed line with threaded connection within 5ft of the tank location.~~

~~Notes:~~

- ~~1. Any work done outside of scope is not included in estimated contract total and will be billed at Naleo prevailing rates.~~
- ~~2. Changes in feedwater quality ca result in more frequent exchanges than detailed above.~~

~~IV. WATER SAFETY PROTOCOL FOR COOLING TOWERS:~~

- ~~A. County will pay the following fees in accordance with the provisions of this Contract. Payment shall be as follows~~
- ~~B. The prices stated below shall include the following for the services rendered to comply with this protocol:~~
- ~~C.~~

Amendment No. 2

Activity	CUF Tower	Outside Route Tower	Emergency Procedure Unplanned
Cooling Tower Water Management Plan Development of cooling tower maintenance program and plan in accordance with ANSI/ASHRAE standard 188-2018	\$2,475.00	\$4,400.00 for all 8 Towers \$5,500.00 for all 10 Towers in Attachment D	NA
Cooling Tower Inspection Service to include a cooling tower	\$250.00 per inspection	\$75.00 per inspection of each tower	NA

Amendment No. 2

inspection every 90 days while the system is in operation, up to 4 times a year			
Cooling Tower Cleaning and Disinfection (Offline) Service to include offline cooling tower cleaning and disinfection with documentation once per year.	\$19,570.00	\$11,710.00 For all (8) Towers \$14,637.50 For all (10) Towers	10% Upcharge to Normal Rate
Legionella Testing Nalco to perform Legionella culture testing per the frequency determined in the Maintenance Program and Plan, while the system is in operation minimum four times per year. Note: Testing as may be required in the case of certain events or retest are not included. Testing as may be required in case of certain events or retest are not included. Bids specs twice annually	\$185.00 Each Test	\$185.00 Each Test	\$250.00 Each Test
Online disinfection Service includes online disinfection once per year midway through the operating season with documentation	\$1,850.00 Each	\$1,850.00 Per Tower	\$1,850.00 Per Tower
Total Annual Investment Not including Tax	\$25,265.00	\$41,237.50	NA
Total CUF and Outside Route	\$61,535.00		NA

~~C. PARTS AND MATERIALS:~~

- ~~Parts and Materials purchased by the Contractor to complete the requested services will be charged at the actual cost of the parts (including all applicable taxes) plus the percentage stated above. County will pay for all freight charges. Parts and Materials purchases shall not exceed \$5,000, per item including tax, unless the following process is followed.~~

~~Parts and Materials ranging between \$5,000 and \$25,000, including tax, must be pre-approved by the County Project Manager or Designee prior to processing. The County will obtain price quotes from Contractor for all Miscellaneous Items purchased between \$5,000 and \$25,000. The Contractor shall provide the list price and discount price on all invoice(s) for all Miscellaneous Items.~~

~~D. **TOTAL CONTRACT AMOUNT NOT TO EXCEED:** \$ **1,137,000**~~

Amendment No.4

~~D. **FOR FIRST RENEWAL TERM, CONTRACT AMOUNT NOT TO EXCEED: \$379,000**~~

Amendment No.6

~~D. **FOR SECOND RENEWAL TERM, CONTRACT AMOUNT NOT TO EXCEED: \$379,000**~~

- ~~3. **Price Increase/Decreases:** No price increases will be permitted during the first period of the Contract. The County requires documented proof of cost increases on Contracts prior to any price adjustment. A minimum of 180-days advance notice in writing is required to secure such adjustment. No retroactive price adjustments will be considered. All price decreases will automatically be extended to the County of Orange. The County may enforce, negotiate, or cancel escalating price Contracts or take any other action it deems appropriate, as it sees fit. The net dollar amount of profit will remain firm during the period of the Contract. Adjustments increasing the Contractor's profit will not be allowed.~~
- ~~4. **Contractor's Expense:** The Contractor will be responsible for all costs related to photo copying, telephone communications and fax communications while on County sites during the performance of work and services under this Contract.~~
- ~~5. **Payment Terms—Payment in Arrears:** Invoices are to be submitted in arrears to the user department to the ship-to address, unless otherwise directed in this Contract. Contractor shall reference Contract number on invoice. Payment will be net 30 days after receipt of an invoice in a format acceptable to the County of Orange and verified and approved by the department and subject to routine processing requirements. The responsibility for providing an acceptable invoice rests with the Contractor.~~
- ~~Billing shall cover services and/or goods not previously invoiced. The Contractor shall reimburse the County of Orange for any monies paid to the Contractor for goods or services not provided or when goods or services do not meet the Contract requirements.~~
- ~~Payments made by the County shall not preclude the right of the County from thereafter disputing any items or services involved or billed under this Contract and shall not be construed as acceptance of any part of the goods or services.~~
- ~~6. **Taxpayer ID Number:** The Contractor shall include its taxpayer ID number on all invoices submitted to the County for payment to ensure compliance with IRS requirements and to expedite payment processing.~~

~~7. **Payment Invoicing Instructions:** The Contractor will provide an invoice on the Contractor's letterhead for goods delivered and/or services rendered. In the case of goods, the Contractor will leave an invoice with each delivery. Each invoice will have a number and will include the following information:~~

- ~~A. Contractor's name and address~~
- ~~B. Contractor's remittance address, if different from 1 above~~
- ~~C. Name of County /Department~~
- ~~D. Delivery/service address~~
- ~~E. Master Agreement (MA) or Purchase Order (PO) number~~
- ~~F. Department's Account Number~~
- ~~G. Purchase Authorization Number Provided by FACOPS~~
- ~~H. Work Order/Job number Provided by FACOPS~~
- ~~I. Date of invoice~~
- ~~J. Product/service description, quantity, and prices~~
- ~~K. Sales tax, if applicable~~
- ~~L. Freight/delivery charges, if applicable~~
- ~~M. Total~~

~~Invoices and support documentation are to be forwarded to:~~

~~OC Public Works/OC Facilities Design & Construction
Attn: CUF Contracts
601 N. Ross St, 4th Floor
Santa Ana, CA 92701~~

~~Contractor has the option of receiving payment directly to their bank account via an Electronic Fund Transfer (EFT) process in lieu of a check payment. Payment made via EFT will also receive Electronic Remittance Advice with the payment details via email. An email address will need to be provided to the County via an EFT Authorization Form. To request a form, please contact the DPA.~~

**ATTACHMENT B
PAYMENT/COMPENSATION**

1. Compensation

The Contractor agrees to accept the specified compensation as set forth in the final negotiated contract as full payment for performing all services and furnishing all staffing and materials required, for any reasonably unforeseen difficulties which may arise or be encountered in the execution of the services until acceptance, for risks connected with the services, and for performance by the Contractor of all its duties and obligations hereunder. The Contractor shall only be compensated as set forth herein for work performed in accordance with the Scope of Work. **The County shall have no obligation to pay any sum in excess of the Fixed Prices and Total Contract Amount specified herein unless authorized by amendment in accordance with Articles C and P of the County Contract Terms and Conditions, which may require approval by the County Board of Supervisors.**

2. Fees and Charges

A. County will pay the following fees in accordance with the provisions of this Contract. Payment shall be as follows:

I. Water Treatment Chemicals and Services for CUF location:

A. The prices stated below shall include the following for Water Treatment Chemicals. Please include the cost of test reagents in the quotation. Assume monthly testing. For changes in chemicals shown below, supply the same information in the matrix.

Item No.	Form	Description	UOM	Delivered in Quantities	Supplier/MF G. Part Numbers	Unit Cost
1	liquid	Scale /corrosion inhibitor (1)	Gallon	55 Gallons	Nalco 3DT230	\$3.35/lb
2	liquid	Scale /corrosion inhibitor	Gallon	55 Gallons	Nalco 1820	\$3.67/lb
3	liquid	Steam Boiler Deposit Control	Gallon	55 Gallons	Nalco 22310 Nalco 22305	\$3.06/lb
4	liquid	Steam Boiler O2 Scavenger	Gallon	55 Gallons	Nalco 1720	\$2.56/lb
5	powder	Closed System Inhibitor (4)	Pounds/drums	300 lbs. Drums	Nalco C-4710	\$16.09/lb
6	liquid	Nalsperse (De-oiler) (3)	Liquid	5	Nalco 7308	\$8.53/lb
7	liquid	Biocide	Gallon	5	Nalco 7330	\$3.24/lb

8	liquid	Biocide	Gallon	5	Nalco 7320	\$8.26/lb.
9	liquid	Antifoam (3)	Gallon	5	Nalco 7468	\$5.36/lb.
10	liquid	Antifoam (1) (3)	Gallon	5	Nalco 3DT198	\$9.63/lb.

- (1) 3D Trasar Product
- (2) The County uses either Nalco ST070 or the Chlorine Bleach, not both
- (3) Sodium Hypochlorite 12.25%
- (4) 4710 is primary treatment so this used only as a supplement as needed

II. Water Treatment Chemicals and Services for Outside Route:

A. County will pay the following fees in accordance with the provisions of this Contract. Payment shall be as follows:

- i. The cost of the Automation and Chemistry Program as outlined above will be \$7,225.149 per cooling tower on an annual basis (10 x \$7,225.149 = \$72,251.49 per year). Nalco will invoice once per month for a total of \$602.10 plus tax for each cooling tower. Standard Installation for each 3D TRASAR System is \$2,150.00. This Translates to a one-time cost of \$17,200 for the installation of eight (8) 3D Solids Trasar Systems.
- ii. If future Cooling Towers are added to this contract, Contractor will supply a Quote (usually based on Tower Size) and have approved by CUF Plant Manager for inclusion in this contract.
- iii. The prices stated below are for Water Treatment Chemicals for quantities above the ones shown in Work Scope for Water Treatment Chemicals for CUF. Nalco C-4710 is not included in the total quote for cooling towers and is purchased at the price shown below on an as needed basis.

Item No.	Form	Description	UOM	Delivered in Quantities	Supplier/MF G. Part Numbers	Unit Cost
1.	Block	Scale/Corrosion Inhibitor (1)	Block	20 lbs	Nalco 3DTS88	\$33.45 / lb
2	Block	Oxidizing Biocide (3)	Block	24 lbs	Nalco 7346 Tab	\$15.21 / lb.
3	Block	Solid Non-Oxidizing Biocide	Block	7 lbs	Nalco SOLIDBIONO X	\$74.00 / lb.
4	liquid	Non-Ox Biocide	Gallon	5	Nalco 7330	\$7.05 / lb.
5	powder	Closed System Inhibitor (2)	Gallons	40 lbs.	Nalco C-4710	\$15.45 / lb.

6	Liquid	Scale / Corrosion Inhibitor (1)	Gallons	5 Gallons	3DT465	\$8.32 / lb
7	Liquid	Ox-biocide (3)	Gallons	5 Gallons	ST70	\$8.23 / lb
8	Cannister /Solid	Alchemy Ox-Biocide (3)	Block	22 lbs	73650S.41Y	\$19.23 / lb.
9	Cannister /Solid	Alchemy Non-Ox biocide	Block	15 lbs	7639S.41Y	\$56.74 / lb.

- (1) 3D Trasar Product
- (2) Includes 15 pounds per month used in the 15 closed loop only systems
- (3) 4710 is primary treatment so this used only as a supplement as needed

III. PREVENTATIVE MAINTENANCE-REVERSE OSMOSIS SYSTEMS AND SERVICE DEIONIZATION TANK EXCHANGE:

A. County will pay the following fees in accordance with the provisions of this Contract. Payment shall be as follows:

Qty	Size	Volume	Type	Exchange Price EA.	Monthly Usage Fee EA
2	14"	3.6 cuft	Mixed Bed – Year 1	\$30.00	\$60.00
			Year 2	\$30.00	\$60.00
			Year 3	\$30.00	\$60.00

Qty	Description	Unit Price	Ext. Price
2	labor and material (includes flex hoses, fitting, 200K quality light, Rusco Spin Filer (Post DI) and hose bib – Year 1	\$75.00	\$300.00
	Year 2	\$75.00	\$300.00
	Year 3	\$75.00	\$300.00

***County to provide ¾ city water feed line with threaded connection within 5ft of the tank location.**

Notes:

- 1. Any work done outside of scope is not included in estimated contract total and will be billed at Nalco prevailing rates.**
- 2. Changes in feedwater quality ca result in more frequent exchanges than detailed above.**

IV. WATER SAFETY PROTOCOL FOR COOLING TOWERS:

- A. County will pay the following fees in accordance with the provisions of this Contract. Payment shall be as follows
- B. The prices stated below shall include the following for the services rendered to comply with this protocol:

Activity	CUF Tower	Outside Route Tower	Emergency Procedure Unplanned
Cooling Tower Water Management Plan-Development of cooling tower maintenance program and plan in accordance with ANSI/ASHRAE standard 188-2018	\$2,475.00	\$5,500.00 for all 10 Towers in Attachment D	NA
Cooling Tower Inspection Service to include a cooling tower inspection every 90 days while the system is in operation, up to 4 times a year	\$250.00 per Inspection	\$75.00 per inspection of each tower	NA
Cooling Tower Cleaning and Disinfection (Offline) Service to include offline cooling tower cleaning and disinfection with documentation once per year.	\$19,570.00	\$14,637.50 For all (10) Towers	10% Upcharge to Normal Rate
Legionella Testing Nalco to perform Legionella culture testing per the frequency determined in the Maintenance Program and Plan, while the system is in operation minimum four times per year. Note: Testing as may be required in the case of certain events or retest are not included. Testing as may be required in case of certain events or retest are not included. Bids specs twice annually	\$185.00 Each Test	\$185.00 Each Test	\$250.00 Each Test

Activity	CUF Tower	Outside Route Tower	Emergency Procedure Unplanned
Online disinfection Service includes online disinfection once per year midway through the operating season with documentation	\$1,850.00Each	\$1,850.00Per Tower	\$1,850.00 Per Tower
Total Annual Investment Not including Tax	\$25,265.00	\$41,237.50	NA
Total CUF and Outside Route	\$61,535.00		NA

C. PARTS AND MATERIALS:

1. Parts and Materials purchased by the Contractor to complete the requested services will be charged at the actual cost of the parts (including all applicable taxes) plus the percentage stated above. County will pay for all freight charges. Parts and Materials purchases shall not exceed \$5,000, per item including tax, unless the following process is followed.

Parts and Materials ranging between \$5,000 and \$25,000, including tax, must be pre-approved by the County Project Manager or Designee prior to processing. The County will obtain price quotes from Contractor for all Miscellaneous Items purchased between \$5,000 and \$25,000. The Contractor shall provide the list price and discount price on all invoice(s) for all Miscellaneous Items.

D. TOTAL CONTRACT AMOUNT NOT TO EXCEED:\$1,137,000

FOR FIRST RENEWAL TERM, CONTRACT AMOUNT NOT TO EXCEED: \$379,000

FOR SECOND RENEWAL TERM, CONTRACT AMOUNT NOT TO EXCEED: \$379,000

3. **Price Increase/Decreases:** No price increases will be permitted during the first period of the Contract. The County requires documented proof of cost increases on Contracts prior to any price adjustment. A minimum of 180-days advance notice in writing is required to secure such adjustment. No retroactive price adjustments will be considered. All price decreases will automatically be extended to the County of Orange. The County may enforce, negotiate, or cancel escalating price Contracts or take any other action it deems appropriate, as it sees fit. The net dollar amount of profit will remain firm during the period of the Contract. Adjustments increasing the Contractor's profit will not be allowed.
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- B. Contractor's remittance address, if different from 1 above
- C. Name of County /Department
- D. Delivery/service address
- E. Master Agreement (MA) or Purchase Order (PO) number
- F. Department's Account Number
- G. Purchase Authorization Number – Provided by FACOPS
- H. Work Order/Job number – Provided by FACOPS
- I. Date of invoice
- J. Product/service description, quantity, and prices
- K. Sales tax, if applicable
- L. Freight/delivery charges, if applicable
- M. Total

Invoices and support documentation are to be forwarded to:

OC Public Works/OC Facilities Design & Construction
Attn: CUF Contracts
601 N. Ross St, 4th Floor
Santa Ana, CA 92701

Contractor has the option of receiving payment directly to their bank account via an Electronic Fund Transfer (EFT) process in lieu of a check payment. Payment made via EFT will also receive Electronic Remittance Advice with the payment details via email. An email address will need to be provided to the County via an EFT Authorization Form. To request a form, please contact the DPA.

ATTACHMENT C
OUTSIDE ROUTE FACILITIES LIST

Amendment No. 2, 5, 6

Building Name	Address	CUF Name	Cooling Tower	Chilled Water loop	Boiler Close d loop
-	-	-	10-10	20	35-33
OCPL AT ALISO VIEJO #73	1 Journey Street, Aliso Viejo, CA 92656	Aliso Viejo Library	-	1	1
Community Service Agency	2020 West Walnut, Santa Ana, CA 92703	CSA SSA	1	1	1
CENTRAL REGIONAL OFFICE	2020 West Walnut, Santa Ana, CA 92703	SWSA (SSA Welfare Agency)	1	1	1
OCPL CYPRESS BRANCH LIBRARY #45	5331 Orange Ave., Cypress, CA 90630	Cypress Library	-	-	1
OCPL AT DANA POINT #13	33841 Niguel Rd., Dana Point, CA 92629	Dana Point Library	-	-	1
COUNTY DATA CENTER BLDG. D	1400 South Grand, Santa Ana, CA 92705	Data Center	1	1	1
-840 ECKHOFF	-840 Eckhoff Street, Orange, CA 92868	Eckhoff-SSA	1	1	1
OCPL AT LAKE FOREST #19	24672 Raymond Way, Lake Forest, CA 92630	El Toro Library	-	1	1

CLERK/RECORDER/HALL OF FINANCE (Bldg#12)	12 Civic Center Plaza, Santa Ana, CA 92701	Eng Admin	-	-	±
CLERK/RECORDER/HALL OF FINANCE (Bldg#11)	12 Civic Center Plaza, Santa Ana, CA 92701	Eng Finance	-	-	±
Foothill Library	17865 Santiago Blve, Villa Park	Foothill Library	-	-	±
Garden Grove Library	11200 Stanford Ave, Garden Grove	Garden Grove Library	-	-	±
COC-BLDG. A	1300 South Grand, Santa Ana, CA 92705	Grand Ave	±	±	±
COC-BLDG. B	1300 South Grand, Santa Ana, CA 92705	Grand Ave	-	-	-
COC-BLDG. C	1300 South Grand, Santa Ana, CA 92705	Grand Ave	-	-	-
ROBERT E. THOMAS HALL OF ADMINISTRATION-BLDG. 10	333 W. Santa Ana Blvd., Santa Ana, CA 92701	HOA	-	±	±
17TH ST. CLINIC	1725 W. 17th St., Santa Ana, CA 92706	HCA 17th	-	±	±
HEALTH CARE AGENCY HEADQUARTERS	405 W. 5th St., Santa Ana, CA 92701	HCA 405	±	±	±
PUBLIC HEALTH LABORATORY	1729 W. 17th St., Santa Ana, CA 92706	Health Lab	-	±	±

Old County Courthouse	211 W. Santa Ana Blvd. Santa Ana, CA 92701	Historic Courthouse	-	-	‡
BRAD-GATES BUILDING	320 N. Flower, Santa Ana, CA 92703	Hutton Gates	-	‡	‡
H. G. OSBORNE BUILDING	300 N. Flower, Santa Ana, CA 92703	Hutton Osborne	-	‡	‡
BETTYLOU LAMOREAUX JUVENILE JUSTICE FACILITY	341 City Drive South, Orange, CA 92868	Juvenile Hall	-	‡	‡
La Habra Library	La Habra Circle	La Habra Library	-	-	‡
Law Library (Bldg#32)	515 N Flower Street, Santa Ana	Law Library	-	‡	‡
-Manchester Office Bldg. (MOB)	301 The City Dr. South, Orange CA 92868	MOB	‡	‡	‡
-AUDITOR CONTROLLER	1770 N. Broadway, Santa Ana, CA 92706	Broadway	‡	-	‡
SANTA ANA FIELD SERVICES OFFICE	909 N. Main St., Santa Ana, CA 92701	Probation- Main	‡	‡	‡
PUBLIC DEFENDER HDQTRS	645 N. Ross, Santa Ana, CA 92701	Public Defenders	-	‡	‡
OCPL AT RANCHO SANTA MARGARITA #71	30902 La Promesa, Rancho Santa Margarita, CA 92688	Rancho Santa Margarita Library	-	‡	‡

	OCPL AT LOS ALAMITOS/ROSSMOOR #42	12700 Montecito Dr., Seal Beach, CA 90740	Rossmoor Library	-	-	+
	T & C Garage	445 Civic Center Drive	T & C Garage	-	-	+
	OCPL AT IRVINE/UNIVERSITY #20	4512 Sandburg Way, Irvine, CA 92612	University Library	-	-	+
	-	13th Street, Westminster	Westminster Library	-	-	+
	YOUTH GUIDANCE CENTER ADMIN	3030 N. Hesperian Way, Santa Ana, CA 92706	YGC	-	+	+
	Building 16	-	Building 16	-	+	+
	Animal Shelter	1630 Victory Rd, Tustin	Animal Shelter	-	-	+
Amendment No. 2						
Amendment No. 5	HCA 401 W. CIVIC CENTER	401 Civic Center Dr. Santa Ana CA 92701	HCA 401	+	+	+
	TUSTIN LIBRARY	345 E. Main Street, Tustin	Tustin Library	+		+
Amendment No. 6						
	Irvine Ranch Head Quarters Historic Park	13042 Old Myford Rd., Irvine	Irvine Ranch Headquarters			+
BELOW ARE FACILITIES THAT MAY BE ADDED TO LIST IN FUTURE						
	OCPL BREA BRANCH LIBRARY #63	#1 Civic Center Circle, Brea, CA 92821	Brea Library	-	-	-

Costa Mesa Library	1855 Park Avenue, Costa Mesa	Costa Mesa Library	-	-	-
OCPL AT LA PALMA #23	7842 Walker, La Palma, CA 90623	La Palma Library	-	-	-
Mesa Verde Library	2969 Mesa Verde Dr. Costa Mesa	Mesa Verde Library	-	-	-
San Clemente Library	242 Avenida Del Mar, San Clemente	San Clemente Library	-	-	-
San Juan Capistrano Library	31495 El Camino Real, San Juan Capistrano	San Juan Capistrano Library	-	-	-
Amendment No. 5					
Tustin Library	345 E. Main Street, Tustin	Tustin Library	±	-	±

Amendment No. 6

**ATTACHMENT C
OUTSIDE ROUTE FACILITIES LIST**

Building Name	Address	CUF Name	Cooling Tower	Chilled Water loop	Boiler Closed loop
			10	20	33
OCPL AT ALISO VIEJO #73	1 Journey Street, Aliso Viejo, CA 92656	Aliso Viejo Library		1	1
Community Service Agency	2020 West Walnut, Santa Ana, CA 92703	SSA	1	1	1
OCPL CYPRESS BRANCH LIBRARY #45	5331 Orange Ave., Cypress, CA 90630	Cypress Library			1
OCPL AT DANA POINT #13	33841 Niguel Rd., Dana Point, CA 92629	Dana Point Library			1
COUNTY DATA CENTER - BLDG. D	1400 South Grand, Santa Ana, CA 92705	Data Center	1	1	1
840 ECKHOFF	840 Eckhoff Street, Orange, CA 92868	Eckhoff - SSA	1	1	1
OCPL AT LAKE FOREST #19	24672 Raymond Way, Lake Forest, CA 92630	El Toro Library		1	1
Foothill Library	17865 Santiago Blve, Villa Park	Foothill Library			1
Garden Grove Library	11200 Stanford Ave, Garden Grove	Garden Grove Library			1
COC - BLDG. A	1300 South Grand, Santa Ana, CA 92705	Grand Ave	1	1	1

Building Name	Address	CUF Name	Cooling Tower	Chilled Water loop	Boiler Closed loop
COC - BLDG. B	1300 South Grand, Santa Ana, CA 92705	Grand Ave			
COC - BLDG. C	1300 South Grand, Santa Ana, CA 92705	Grand Ave			
17TH ST. CLINIC	1725 W. 17th St., Santa Ana, CA 92706	HCA 17th		1	1
HEALTH CARE AGENCY HEADQUARTERS	405 W. 5th St., Santa Ana, CA 92701	HCA 405	1	1	1
PUBLIC HEALTH LABORATORY	1729 W. 17th St., Santa Ana, CA 92706	Health Lab		1	1
Old County Courthouse	211 W. Santa Ana Blvd. Santa Ana, CA 92701	Historic Courthouse			1
BRAD GATES BUILDING	320 N. Flower, Santa Ana, CA 92703	Hutton Gates		1	1
H. G. OSBORNE BUILDING	300 N. Flower, Santa Ana, CA 92703	Hutton Osborne		1	1
BETTYLOU LAMOREAUX JUVENILE JUSTICE FACILITY	341 City Drive South, Orange, CA 92868	Juvenile Hall		1	1
La Habra Library	La Habra Circle	La Habra Library			1
Law Library (Bldg#32)	515 N Flower Street, Santa Ana	Law Library		1	1

Building Name	Address	CUF Name	Cooling Tower	Chilled Water loop	Boiler Closed loop
Manchester Office Bldg. (MOB)	301 The City Dr. South, Orange CA 92868	MOB	1	1	1
AUDITOR CONTROLLER	1770 N. Broadway, Santa Ana, CA 92706	Broadway	1		1
SANTA ANA FIELD SERVICES OFFICE	909 N. Main St., Santa Ana, CA 92701	Probation - Main	1	1	1
PUBLIC DEFENDER HDQTRS	645 N. Ross, Santa Ana, CA 92701	Public Defenders		1	1
OCPL AT RANCHO SANTA MARGARITA #71	30902 La Promesa, Rancho Santa Margarita, CA 92688	Rancho Santa Margarita Library		1	1
OCPL AT LOS ALAMITOS/ROSSMOOR #42	12700 Montecito Dr., Seal Beach, CA 90740	Rossmoor Library			1
T & C Garage	445 Civic Center Drive	T & C Garage			1
OCPL AT IRVINE/UNIVERSITY #20	4512 Sandburg Way, Irvine, CA 92612	University Library			1
	13th Street, Westminster	Westminster Library			1
YOUTH GUIDANCE CENTER ADMIN	3030 N. Hesperian Way, Santa Ana, CA 92706	YGC		1	1
Building 16		Building 16		1	1
Animal Shelter	1630 Victory Rd, Tustin	Animal Shelter			1

Building Name	Address	CUF Name	Cooling Tower	Chilled Water loop	Boiler Closed loop
HCA 401 W. CIVIC CENTER	401 Civic Center Dr. Santa Ana CA 92701	HCA 401	1	1	1
TUSTIN LIBRARY	345 E. Main Street, Tustin	Tustin Library	1		1
Irvine Ranch Head Quarters Historic Park	13042 Old Myford Rd., Irvine	Irvine Ranch Headquarters			1
BELOW ARE FACILITIES THAT MAY BE ADDED TO LIST IN FUTURE					
OCPL BREA BRANCH LIBRARY #63	#1 Civic Center Circle, Brea, CA 92821	Brea Library			
Costa Mesa Library	1855 Park Avenue, Costa Mesa	Costa Mesa Library			
OCPL AT LA PALMA #23	7842 Walker, La Palma, CA 90623	La Palma Library			
Mesa Verde Library	2969 Mesa Verde Dr. Costa Mesa	Mesa Verde Library			
San Clemente Library	242 Avenida Del Mar, San Clemente	San Clemente Library			
San Juan Capistrano Library	31495 El Camino Real, San Juan Capistrano	San Juan Capistrano Library			

ATTACHMENT D
(WATER SAFETY PROTOCOL FOR COOLING TOWERS)
— CUF AND COOLING TOWERS INCLUDED IN CONTRACT

Line #	Building Name	Address	CUF Name
1.	Central Utility Plant	525 N-flower Santa Ana Ca 92703	CUF
2.	COMMUNITY SERVICE AGENCY	2020 West Walnut, Santa Ana, CA 92703	SWSA (SSA Welfare Agency)
3.	COUNTY DATA CENTER— BLDG. D	1400 South Grand, Santa Ana, CA 92705	Data Center
4.	-840 ECKHOFF	-840 Eckhoff Street, Orange, CA 92868	Eckhoff—SSA
5.	COC—BLDG. A	1300 South Grand, Santa Ana, CA 92705	Grand Ave
6.	HEALTH CARE AGENCY HEADQUARTERS	405 W. 5th St., Santa Ana, CA 92701	HCA-405
7.	Manchester Office Bldg. (MOB)	301 The City Dr. South, Orange CA 92868	MOB
8.	-AUDITOR CONTROLLER	1770 N. Broadway, Santa Ana, CA 92706	-Broadway
9.	SANTA ANA FIELD SERVICES OFFICE	909 N. Main St., Santa Ana, CA 92701	Probation—Main
10	HCA 401 W. CIVIC CENTER	401 Civic Center Dr. Santa Ana CA 92701	HCA 401
11	TUSTIN LIBRARY	345 E. Main Street, Tustin	Tustin Library

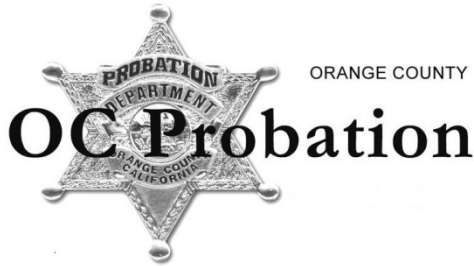
Amendment No. 2, 5

Amendment No. 6

**ATTACHMENT D
(WATER SAFETY PROTOCOL FOR COOLING TOWERS)
CUF AND COOLING TOWERS INCLUDED IN CONTRACT**

Line	Building Name	Address	CUF Name
1	Central Utility Plant	525 N flower Santa Ana Ca 92703	CUF
2	COMMUNITY SERVICE AGENCY	2020 West Walnut, Santa Ana, CA 92703	SWSA (SSA Welfare Agency)
3	COUNTY DATA CENTER - BLDG. D	1400 South Grand, Santa Ana, CA 92705	Data Center
4	840 ECKHOFF	840 Eckhoff Street, Orange, CA 92868	Eckhoff – SSA
5	COC - BLDG. A	1300 South Grand, Santa Ana, CA 92705	Grand Ave
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10	HCA 401 W. CIVIC CENTER	401 Civic Center Dr. Santa Ana CA 92701	HCA 401
11	TUSTIN LIBRARY	345 E. Main Street, Tustin	Tustin Library

ATTACHMENT E
PROBATION—VENDOR CLEARANCE PROCESS



ORANGE COUNTY



STEVEN J. SENTMAN
CHIEF PROBATION
OFFICER
TELEPHONE: (714) 569-
2000
1055 N. MAIN STREET, 5TH
FLOOR SANTA ANA, CA
92704

MAILING ADDRESS:
P.O. BOX 10260
SANTA ANA, CA 92711-0260

**VENDOR BACKGROUND APPOINTMENT
INFORMATION 1535 EAST ORANGEWOOD
AVE.
ANAHEIM, CA. 92805**

All individuals who perform work in Probation Department facilities or on Probation Department property are required to undergo and pass a security clearance that includes being fingerprinted.

NOTE: A number of situations will prevent you from clearing this process, including, but not limited to: current or recent grant of probation or parole; active warrant for your arrest; or pending criminal matters, use of false or altered documents, or dishonesty when providing requested information.

On the day of your appointment, report to:

**Orange County Probation Department—North County Field Services
Office 1535 EAST ORANGEWOOD AVE., ANAHEIM CA. 92805**

Please use the stairs adjacent to the ramp in the front of the building to enter. You may bypass the “Do Not Enter” sign posted on the door. You do not need to wait in the weapons screening line on the ramp. Please provide a photo ID to the Sheriff’s Special Officer and explain you are here for a background appointment with PSD. Once inside the building, please also check in with reception and ask for **Erin Ontiveros 714-937-4714**.

Bring the following required documents with you to your appointment:

- ~~California driver’s license or ID; **no copies will be accepted.**~~
- ~~Social Security Card; **no copies will be accepted.**~~
- ~~Documents that establish employment authorization (**whichever applies below**):~~
 - ~~If born in the U.S., bring original birth certificate or U.S. passport; **no copies, abstracts, or hospital-issued certificates will be accepted; no passports from U.S. Territories: American Samoa, Swain Islands, and Northern Mariana Islands will be accepted.**~~
 - ~~If you became an American Citizen, bring original U.S. Certificate of Naturalization or U.S. passport; **no copies will be accepted.**~~
- ~~_____~~

~~• If you are **not** an American Citizen, **bring original and valid** U.S. Permanent Resident Card (Green Card) or **original and valid** Employment Authorization Document (Work Permit); **no copies will be accepted.**~~

~~**Please bring employer's business card to the appointment.**~~

~~**All documents need to be original and valid. Only the documents listed above will be accepted.**~~

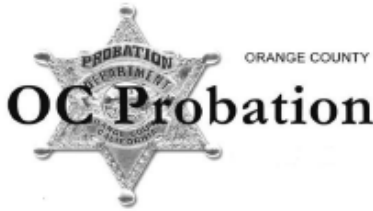
~~**If you do not have the required documents, you will not be permitted to proceed with the clearance process.**~~

~~**The results will be provided to your employer once the background is complete.**~~

03/18/ee

~~•~~

ATTACHMENT E
PROBATION – VENDOR CLEARANCE PROCESS



DANIEL HERNANDEZ
CHIEF PROBATION OFFICER

TELEPHONE: (714) 569-2000

1055 N. MAIN STREET, 5TH FLOOR
SANTA ANA, CA 92701

MAILING ADDRESS:
P.O. BOX 10260
SANTA ANA, CA 92711-0260

VENDOR BACKGROUND APPOINTMENT INFORMATION
1535 EAST ORANGEWOOD AVE.
ANAHEIM, CA. 92805

All individuals who perform work in Probation Department facilities or on Probation Department property are required to undergo and pass a security clearance that includes being fingerprinted.

NOTE: A number of situations will prevent you from clearing this process, including, but not limited to: current or recent grant of probation or parole; active warrant for your arrest; or pending criminal matters, use of false or altered documents, or dishonesty when providing requested information.

On the day of your appointment, report to:

Orange County Probation Department – North County Field Services Office
1535 EAST ORANGEWOOD AVE., ANAHEIM CA. 92805

Entering the Building – use the stairs adjacent to the ramp in front of the building. Provide a photo ID to the security officer and explain you are here for a background clearance appointment. To ensure a rapid security screening do not bring any weapons and/or tools that may be deemed as weapons to your appointment. Once inside the building, check in with the receptionist and ask for Adriana Montanez at 714-937-4714, Vera Jackson at 714-937-4733 or Pina Cairns at 714-937-4715.

Bring the following **required** documents with you to your appointment:

- California driver's license or ID; **no copies will be accepted.**
- Social Security Card; **no copies will be accepted.**
- Documents that establish employment authorization (**whichever applies below**):
 - **If born in the U.S.**, bring original birth certificate or U.S. passport; **no copies, abstracts, or hospital-issued certificates will be accepted; no passports from U.S. Territories: American Samoa, Swain Islands, and Northern Mariana Islands will be accepted.**
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Please bring employer's business card to the appointment.

All documents need to be original and valid. Only the documents listed above will be accepted.

If you do not have the required documents, you will not be permitted to proceed with the clearance process.

The results will be provided to your employer once the background is complete.

07/22 vj

**ATTACHMENT F
STAFFING PLAN**

Name	Classification/Designation	Years of Experience
Robert Snell	District Manager	23
Adam Gaddis	Route Manager	4
Niklas Grunder	District Representative	4
Brett Reyes	Field Service Technician	3

The Contractor understands that the personnel represented as assigned to the Contract must remain working on the Contract throughout the duration of the Contract unless otherwise requested or approved by the County. Substitution or addition of key personnel in any given category or classification shall be allowed only with prior written approval of the County Building Manager. *Note: The written approval of substituted Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works.*

Contractor may reserve the right to involve other personnel, as their services are required. The specific individuals will be assigned based on the need and timing of the service/classification required. Assignment of additional key personnel shall be subject to County Building Manager written approval. *Note: The written approval of additional Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works.* County reserves the right to have any personnel removed from providing services to County under this Contract. County is not required to provide any reason for the request for removal of any personnel

**ATTACHMENT F
STAFFING PLAN**

Name	Classification/Designation	Years of Experience
Evan Johnson	District Manager	7
Adam Gaddis	Route Manager	4
Niklas Grunder	District Representative	4
Brett Reyes	Field Service Technician	3
David Petrash	Industry Technical Consultant	30

The Contractor understands that the personnel represented as assigned to the Contract must remain working on the Contract throughout the duration of the Contract unless otherwise requested or approved by the County. Substitution or addition of key personnel in any given category or classification shall be allowed only with prior written approval of the County Building Manager. ***Note: The written approval of substituted Key Personnel is for departmental use only and shall not be used for auditing purposes outside OC Public Works.***

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