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CITY OF BIRMINGHAM

FINANCE DEPARTMENT

PURCHASING DIVISION

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December 4, 2015

INVITATION TO BID #15-77

Sealed bids for water chemical treatment program for cooling towers, steam or hot water boilers, open and closed loop systems and fountains at various location for the City of Birmingham for a period of three (3) years and month to month thereafter upon mutual consent of both parties, will be received by the Purchasing Agent, P-100 First Floor City Hall, Birmingham, Alabama until 2:00 p.m., January 4, 2016 at which time and place they will be publicly opened and read.

Bidders wishing to bid can download the complete solicitation including the specifications and bid forms via the internet at www.birminghamal.gov (go to link titled **Bidding Opportunities**), or by visiting the Purchasing Office at the address shown above, or by calling (205) 254-2265, fax (205) 254-2484 and requesting a copy be mailed to you. Any addenda will be available on the internet. Bidder is responsible for checking the website for addenda until bid opening date. Addenda will be mailed to only those vendors who were provided a copy in person or by mail.

Bids are to be submitted on the bid form provided and all quotations are to be f.o.b. Birmingham, Alabama delivered.

A **mandatory** pre-bid conference and site survey to review and discuss the service required will be held at 10:00 a.m. C.S.T., December 21, 2015 in the Purchasing Conference Room, P-101 First Floor, City Hall, 710 North 20th Street, Birmingham, AL 35203.

Anyone who wishes to submit a bid **must attend** the pre-bid conference and site survey scheduled for 10:00 a.m., December 21, 2015. The site survey, which will be conducted for all potential bidders, will be crucial for a thorough understanding of the work to be performed. **ATTENDANCE WILL BE MANDATORY.** Any bid received from a contractor who did not attend the pre-bid conference and site survey will not be considered for award.

Any bid submitted will be construed as evidence that the bidder has made an on-site inspection and made himself aware of existing conditions and requirement that may affect the price of his bid.

The bidder submits with his bid either a certified check, a cashier's check, or a bid bond payable to the City of Birmingham in amount of \$1,000.00. In order for any bid award to be considered, your bid must have been accompanied by an acceptable bid bond or check. Bid bond checks will be returned to all unsuccessful bidders after the formal award is made and to the successful bidder after acceptance of award. Should the successful bidder fail to accept the award, the bid bond or check shall be forfeited.

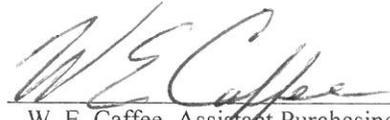
The City follows a policy of nondiscrimination. No contractor with the City should discriminate on the basis of race, sex, religion, or national origin. Failure by the Vendor to carry out these requirements is a material breach of its obligations, which may result in its termination or such other remedy as the City deems appropriate.

No bid may be withdrawn for a period of sixty (60) days after the date of the bid opening.

The City reserves the right to reject any or all bids submitted, in whole or part, and to waive any informalities.

Bids must be submitted in a sealed envelope marked, “**SEALED BID –WATER CHEMICAL TREATMENT PROGRAM– 2:00 P.M. 01/04/16.**” Bids may be hand delivered to Room P-100 First Floor City Hall, Birmingham, Alabama or mailed to City of Birmingham, P.O. Box 11295, Birmingham, Alabama 35202-1295. (**DO NOT MAIL BIDS TO ROOM P-100 1ST FLOOR CITY HALL**). However, bids sent by any express carrier (i.e. Federal Express, UPS, Airborne, etc.) must be mailed to 710 North 20th Street, and specify delivery to Room P-100, 1st Floor City Hall.

It is the bidder’s responsibility to make sure that his bid is in the possession of the Purchasing Agent on or before 2:00 p.m., January 4, 2016. Bids received after this time will not be considered.


W. E. Caffee, Assistant Purchasing Agent

a.m.
B.N. 12/13/15

**THE CITY OF BIRMINGHAM
THREE (3) YEAR CONTRACT
WATER TREATMENT**

INTRODUCTION

The City of Birmingham wishes to extend this invitation to bid to all qualified vendors to establish a three (3) year contract and month to month thereafter upon mutual consent of both parties with a single vendor to provide a water chemical treatment program. Bids for periods greater than one year require a "Funding Out" or "Non-appropriation of Funds" clause. This program shall provide chemical compounds and on-site services for all cooling towers, steam or hot water boilers, open and closed loop systems and fountains located on the City of Birmingham facilities.

1.0 PURPOSE OF INVITATION TO BID

- A. Establish water treatment program to provide chemical compounds and on-site services for water treatment that will minimize product cost and labor.
- B. Provide protection for City of Birmingham equipment against scale deposit formation, corrosion, and control biological growth in the City's water system.
- C. Provide on-site services to ensure proper maintenance of equipment and testing of water to maximize efficiency and maintain acceptable levels of water quality.
- D. Provide detailed written service reports with results of testing performed at each service call.
- E. Provide on-site classroom training for all involved City operating personnel.

2.0 GENERAL

- 2.1 The City intends to acquire this program from a single vendor whose bid is determined to be the lowest responsive, responsible bid submitted for the combined three year total. The life of the contract shall exist with the provision that no price increase in the original bid prices shall be allowed.
- 2.2 The City of Birmingham requires all prospective vendors to attend the mandatory pre-bid conference and on-site inspection scheduled, 10:00 a.m., December 21, 2015. All interested parties MUST meet in the Purchasing Division Conference Room P-101 1st Floor City Hall, 710 North 20th Street, Birmingham, AL 35203. All interested parties should note the on-site inspection may require two or more days to complete. All interested parties are required to be present for the entire pre-bid conference and on-site inspection. It is the responsibility of the vendor to identify any conditions that will affect their water treatment program prior to bid submittals. Failure to attend the entire pre-bid conference and on-site inspection will eliminate your bid from consideration.
- 2.3 Successful bidder(s) shall not assign this contract to any other party without prior written approval of the City of Birmingham. Contract shall not be assigned to an unsuccessful bidder who was rejected because he was not a responsive bidder.
- 2.4 Failure to adhere to any or all terms, conditions and specifications as set forth in the contract may result in the immediate termination of the contract. Should termination occur, the holder of the contract may be declared a "non-responsible vendor". This declaration may result in the rejection of any future bids submitted by the vendor for a period of time to be determined by the City.
- 2.5 The City will issue purchase order(s) to the successful bidder for the goods and/or services (bid items) that are the subject of the bid. Unless otherwise agreed in a writing that is signed by both parties, the entire agreement between the City and the successful bidder concerning the bid items is comprised of the terms, conditions, specifications and requirements stated in (a) the contemplated purchase order(s), (b) this Invitation to Bid and Specifications and (c) your bid (collectively, the "Contract Requirements"). These writings supersede all former proposals, offers, negotiations, representations or agreements, either written or oral, concerning the provision of vendor's goods and/or services. By acceptance of the City's purchase order(s), the successful vendor agrees to abide by and perform its responsibilities related to the bid items in compliance with the Contract Requirements.
- 2.6 The contract(s) shall become effective from the date noted in the Notification of Award Letter, which will be mailed to the successful bidder(s).

- 2.7 The City's standard payment term is Net-30 Days from acceptance. Exception may be allowed for discounted early payment, such as 2%-10, Net 30 Days. The reference date for all such discounted early payment terms will be the date the invoice is received or the date the goods are received, whichever is later. In the event of a dispute the City's records shall prevail. **The City will not consider any bids requiring C.O.D. payments.**
- 2.8 Bids may be solicited for any product included in this contract where an immediate/emergency need exists, including large quantities. The decision of the Purchasing Agent as to what constitutes a biddable situation shall be final and shall not be construed as a breach of contract.
- 2.9 Contract award to purchase the material covered in this bid document shall be construed under and governed by the laws of the State of Alabama and each party hereto irrevocably agrees to be subject to the jurisdiction of the courts of the State of Alabama.
- 2.10 All purchase orders issued by the City of Birmingham indicate an invoice mailing address based on the Department for whom the purchase order was issued. In order for timely payment to be received, it is imperative that vendors mail invoice copies to the so indicated address. Failure to do so will result in delayed payments. **Do not mail invoices to the Accounts Payable Division.**
- 2.11 The City of Birmingham must have itemized invoice(s) to make payment(s). Delivery tickets and statements will not serve as an invoice.
- 2.12 Any questions concerning these specifications should be addressed to the Purchasing Division, Phone: (205) 254-2265 - Fax: (205) 254-2484, between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday.
- 2.13 Specify all terms and conditions of warranties associated with you products.
- 2.14 **Liability Insurance:** For the duration of the contract and for limits not less than stated below, the Contractor shall carry (i) general liability insurance (either primary or a combination of primary and umbrella coverage) with limits of not less than \$1,000,000.00 for each occurrence and shall include, but not be limited to, personal injury, property damage, vandalism, property loss and theft; (ii) comprehensive automobile liability insurance concerning owned and rented vehicles operated by the Contractor with limits of not less than \$1,000,000.00 bodily injury per occurrence, \$1,000,000.00 property damage or combined single limit of \$1,000,000.00; and (iii) Workman's Compensation coverage in an amount adequate to comply with the statutory requirements. The City's bid number (15-77) must appear on any/all copies of the certificate of insurance.

All such insurance shall be provided by a policy or policies issued by a company or companies qualified by law to engage in the insurance business in the State of Alabama with a rating of B+ or better according to the most current edition of Best's Insurance reports. Bidder is to provide written documentation of the company's rating with their bid.

The Contractor may use umbrella or excess liability insurance to achieve the required coverages, provided that such umbrella or excess insurance results in the same type of coverage as required for the individual policies. These insurance requirements are in addition to and do not affect any indemnification obligation of the Contractor herein.

City Additional Named Insured: Except for Worker's Compensation coverage, all coverages shall contain endorsements naming the City, and its officers, employees and agents as additional named insured with respect to liabilities that arise out of and result from the operations of the Contractor or the performance of its work.

The additional named insured endorsement shall not limit the scope of coverage to the City to vicarious liability, but shall allow coverage for the City to the fullest extent provided by the policies. Such additional insured coverage shall be at least as broad as Additional Insured endorsement from ISO, CG 2010.1185.

Policies Primary: All insurance policies required herein are to be primary and non-contributory with any insurance or self-insurance program administered by the City.

Waiver of Subrogation: Contractor shall require the carriers of the above-required insurance coverage to waive all rights of subrogation against the City, and its officers, employees, agents, contractors and subcontractors. Further, Contractor hereby waives any rights of subrogation against the City. All general or automotive liability coverage provided herein shall not prohibit the Contractor or its employees, agents or representatives from waiving the right of subrogation prior to loss or claim.

Proof of Coverage: Before the commencement of services or work hereunder, the Contractor shall provide the City a certificate(s) of insurance and endorsements (including the additional insured endorsements) evidencing compliance with the requirements in this section. Evidence of insurance will not be accepted on a per event basis. These certificates shall provide that such insurance shall not be terminated or expire without thirty (30) days advance notice to the City. In the event that the City is not notified that any of the coverage required herein is to be cancelled or changed in such a manner as not to comply with the requirements of this Contract, the Contractor shall, within fifteen (15) days prior to the effective date of such cancellation or change, obtain and provide the City with binder(s) of insurance evidencing the re-establishment of the insurance coverage required herein.

- 2.15 **Indemnification:** Vendor(s) shall defend, indemnify, hold harmless the City of Birmingham, and its agents, employees and officials (hereinafter the "Indemnitees") from and against all demands, actions, damages, judgments, expenses (including but not limited to attorneys' fees, expert fees, court costs and other litigation costs), losses, and claims (including those for bodily injury, sickness, disease or death, or to injury to, destruction or loss of use of tangible property) (collectively hereinafter "Claims") by any third parties (including any employee, subcontractor or representative of the Vendor, hereafter a "Vendor Representative") that arises out of, relates to, results from, or is attributable to any of the following: (a) Vendor's performance or failure to perform its obligations hereunder; (b) any conditions in or about the work sites that the Vendor or any Vendor Representative may encounter; or (c) the use or occupancy of the work sites by Vendor or any Vendor Representatives. This indemnification obligation includes Claims that are caused in part by the negligence of an Indemnitee(s); provided nothing herein shall obligate Vendor to indemnify any of the Indemnitee(s) for Claims resulting from the sole negligence or from the willful misconduct of the Indemnitee(s).
- 2.16 **Safety:** The successful vendor(s) ("Vendor") warrants that it has inspected or will inspect the work sites before performing the services and work contemplated hereunder ("services"). Vendor(s) further warrants that it has not identified any condition or hazard that will prevent it from performing the services in a manner that does not endanger persons or property. Vendor(s) is exclusively responsible for performing the services in a safe manner that does not put at risk the safety of persons (including its own employees or representatives) or endanger property. Vendor(s) shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to: (i) all its employees and all other persons who may be affected by the services; (ii) all the services and all materials and equipment to be incorporated therein, whether in storage on or off the work sites, or under the care, custody or control of the Vendor(s) or any of its subcontractors; and (iii) other property at the work sites or adjacent thereto. Vendor further agrees to comply with all provisions and requirements set forth in applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction over safety of persons or property or to protect them from damage, injury or loss.
- 2.17 All bids submitted are to be f.o.b. Birmingham, AL delivered.
- 2.18 **The successful bidder(s) will be required to furnish a performance bond in the amount of 100% of the amount bid for the first year to guarantee performance of contract on a surety company approved and duly authorized to do business in the State of Alabama. Bond must be presented to the City within ten (10) days after date of notice of award and prior to the commencement of any work. Bond must be maintained current and in force for the full term of the contract – for all three years.**
- 2.19 Vendor (and its employees, agents and any subcontractors) shall not discriminate on the basis of race, color, national origin, or sex in the performance of the services contemplated hereunder. Failure by the Vendor to carry out these requirements is a material breach of its obligations, which may result in its termination or such other remedy as the City deems appropriate.
- 2.20 Vendor acknowledges and agrees that, consistent with federal law and City's public policy, it will encourage disadvantaged business enterprise (DBE) participation to the extent permitted by law. A "disadvantaged business enterprise" is a for-profit small business concern (i) at least 51% owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51% of the stock is owned by one or more such individuals; and (ii) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it. In accordance with federal law, a "socially and economically disadvantaged individual" includes African-Americans, Hispanic Americans, Native Americans, Asian-Americans, women, and any additional groups designated as socially and economically disadvantaged by the Federal Small Business Administration.
- 2.21 **Successful bidder acknowledges and agrees that the City has the right to deduct from total amount of consideration to be paid, if any, to the successful bidder under this agreement all unpaid, delinquent, or overdue license fees, taxes, fines, penalties and other amounts due the City from the successful bidder.**

- 2.22 The City of Birmingham must have a copy of the successful bidder's current City of Birmingham business license prior to formal award of contract. Each bidder may submit a copy of his/her license along with his/her bid. However, bidder must provide a copy of his/her current business license no later than seven (7) working days of receipt of notice of intent to award. Failure to submit the requested information will result in the notice of intent to award being revoked.
- 2.23 Any successful bidder who is not currently set up as a vendor in the City of Birmingham vendor file will be required to submit a completed W-9 tax form prior to any award. The W-9 tax form may be submitted with your bid or no later than seven (7) working days of receipt of notice of intent to award.
- 2.24 Successful Vendor (located in the State of Alabama or located outside of the State of Alabama, but employs one or more employees within the State of Alabama) represents and warrants that it does not knowingly employ, hire for employment, or continue to employ an "unauthorized alien", as defined by the Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535 (H.B.56) of the Alabama Legislature, as amended from time to time (the "Act") and that, during the performance of this contract, Vendor shall participate in the E-Verify program as required under the term of the Act. Vendor agrees to comply with all applicable provisions of the Act. As a condition for the award of any contract, Vendor shall provide documentation establishing that the Vendor is enrolled in the E-Verify program, or a signed, written statement that the Vendor does not have a presence (one or more employees) in the State of Alabama. Vendor may submit applicable documentation with his/her bid or no later than seven (7) working days of receipt of notice of intent to award.
- 2.25 Bidders shall check (✓) each and every paragraph in the appropriate column provided on the right hand edge of the page as to compliance or non-compliance with specifications. Exceptions will be allowed to items that are not listed as (No Exception), if they are equal to or superior to that specified and provided they are listed and fully explained on the exceptions page. **Bids taking total exception to the specifications will not be accepted.** The products will be inspected upon delivery for compliance with specifications. Deviations will not be tolerated and will be cause for rejection of the products unless they were originally listed in the bidder's proposal and deemed acceptable.

3.0 SCOPE OF SERVICE

3.1 Provide the services of two (2) qualified field representatives, with a minimum of five (5) years of experience in the water treatment industry. A biographical sketch of each vendor representative including qualifications, location, years with company, and phone/fax number must be included in vendor's bid response. These representatives must be available to perform scheduled visits, testing, and service. Also, these representatives must be available within a two (2) hour period for emergencies on a 24/7 basis. The City reserves the right to approve or disapprove the individuals assigned to service this contract. Personnel changes deemed excessive by the City may result in the cancellation of this contract.

3.2 Testing for Legionnaire's Disease Bacteria (*Legionella Pneumophila*) shall be performed each year. The tests must be performed by a fully equipped, licensed third party laboratory, staffed with a chemist or a chemical engineer. The laboratory must be capable of running tests to include legionella and spectrophotometry in addition to the normal wet analysis. Vendor shall include the name of the laboratory with their bid.

3.3 Provide site visits to acquire a sampling of all systems at the designated locations (see page 12, section 5.13) and as locations may be subsequently added (see page 13, section 5.14), at approximately two (2) week intervals. Vendor must visit different sites each time to ensure all sites are included in the sampling during the contract period. Vendor is to coordinate schedule of site visits with the City. Vendor will have access to sites for routine visits from 7:00 a.m. – 3:30 p.m. Visits to be more frequent during startup and training periods. Vendor must contact Mr. Victor Morris, Chief Building Maintenance at (205) 254-2063 or as directed by Public Works personnel, prior to each site visit. Service calls shall include tests for control of chemicals and operating conditions with a written service report to be issued to Victor Morris or Public Works personnel at the time of the service call. Service reports must be signed by the designated City employee at each location to document service was performed. Tests, which must be performed by successful vendor and reported at each visit, are as follows:

- A. pH
- B. Hardness
- C. Alkalinity
- D. Chlorides
- E. Conductivity
- F. Total Iron
- G. Treatment Residual

3.4 Provide on-site classroom training for all involved operating personnel. The training classes should cover four (4) related topics, each lasting approximately one (1) hour in duration. The classes must include visual aids and training manuals for each participant. The subjects that must be covered include the following:

- A. Water and Water Quality
- B. Corrosion Prevention
- C. Scale Prevention
- D. Water Testing and Analysis

3.5 Vendor is to provide chemicals, equipment and supervisory personnel to assist City personnel to chemically clean scaled condenser on chillers, chemically clean inside of boilers, and drain and clean cooling towers as needed. Service must be coordinated with City personnel. Service may be required to be performed Saturday and/or Sunday when the system can be shut down without interfering with normal facility work schedules.

WATER CHEMICAL TREATMENT

**BIDDER
COMPLIANCE
YES NO**

3.6 Provide two (2) operations manuals for your proposed water treatment program prior to commencement of any work. An example of which must be submitted with your proposal. The manual must include:

- A. Product/Program Summary
- B. Testing Requirements, Ranges, and Adjustment Instructions
- C. Troubleshooting Guide
- D. List of Deleterious Effects of Non-Compliance to the Specifics of Program.
- E. Written Testing Instructions (with Desired Ranges)
- F. Material Safety Data Sheets for all chemicals and/or substitutes.

3.7 Provide testing for microbiological control in cooling towers as follows:

- A. Every two (2) months perform dip-slide counts on each tower.
- B. Every six (6) months perform Biological Activity Reaction Tests (BART) or equivalent to detect iron related bacteria, sulfate reducing bacteria, and slime forming bacteria.
- C. Every twelve (12) months perform a micro-biocide-challenge test on composite tower samples to prove the effectiveness of non-oxidizing biocides.
- D. Clean closed looped systems when needed.

3.8 Provide five (5) 3 pass coupon racks with coupons and analysis that must be performed at 90 day intervals. The coupon racks shall be installed by city personnel as instructed and observed by vendor. A (MPY) mills per year, metal loss shall be provided on each set of coupons. The coupons alloy must be:

- A. Copper at less than 0.3 mills per year.
- B. Mild Steel at less than 2.0 mills per year.
- C. Zinc at less than 3.0 mills per year.

3.9 Chemical feeders including brominators, approved for use by City personnel, shall be furnished by contractor. Brominators shall be of the floating type, slow release, placed in the outside edge of cooling tower. Installation shall be performed by City personnel under supervision of vendor's personnel. All equipment shall become the property of the City of Birmingham.

3.10 It shall be the responsibility of the vendor to perform all scheduled testing as established by the contract. These reagents shall include pH buffers and conductivity standards. The City of Birmingham reserves the right to have independent testing performed to ensure no errors occur in testing.

3.11 All materials must be packaged in either containers per manufacturer's standard practice or I.C.C. approved containers, legibly marked for ease of identification with appropriate precautionary text legibly printed on the container if required. All packages shall be clear (natural) for ease of determining the amount of product remaining in the container without removing the package lid or cap. Packages shall be available in containers ranging in size between 5 to 30 gallons and 5 to 30 pound pails for oxidizing biocide tablets to facilitate use in all locations.

3.12 Vendor shall keep City personnel abreast of changing technologies, methods, and regulations as they relate to water treatment programs. The vendor is also responsible for keeping abreast of all local, state, and federal regulations that govern the manufacture and use of potentially hazardous chemicals. The vendor will notify the City at the earliest possible moment of any changes that might affect our operations.

WATER CHEMICAL TREATMENT

**BIDDER
COMPLIANCE
YES NO**

- 3.13 Vendor shall have a fully staffed technical support group, available for consultation during normal business hours. Vendor shall submit a listing of the support personnel which should include names, locations, qualifications, year'(s) with the company, and phone/fax numbers. _____
- 3.14 All chemical treatment products must be able to be stored for a minimum of twelve months under ambient temperature/conditions at the City without deterioration, or leakage from container. Chemical treatment formulations are to remain in solution while stored in containers for a period of at least one (1) year after receipt of product. Any product falling out of solution will be considered non-compliant. Vendor shall be responsible for replacing product at no charge to the City. _____
- 3.15 Vendor shall provide laboratory data concerning biocidal efficiency in controlling Legionnaire's Disease Bacteria growth. Vendor shall supply their most recent report of Legionnaire's Disease with their proposal. _____
- 3.16 Vendor shall have a product for use in City Fountains as well as a product to treat cool cells. All product data as well as a list of three references where you currently treat these types of systems must be included with your bid. _____
- 3.17 All chemicals must be U.S. Department of Agriculture approved since possible contact with food may occur. All chemicals must be compatible due to mixing of all chemicals in feed tanks for each boiler. All USDA letters of approval must be included with your bid. _____
- 3.18 The vendor shall be able to provide the chemicals and mechanical cleaning services under the contract to clean and service the boilers, fountains, cooling towers and any other hot and chill loop systems used for heat or cooling of City owned buildings when needed. Vendor is to provide itemized pricing for the needed chemicals delivered to site, temporary use of an appropriate pump and supervision of City's personnel to perform the cleaning process. _____
- 3.19 An authorized City employee will accompany service technician to all sites for testing, provide access to equipment, and sign service reports. _____

4.0 VENDOR REQUIREMENTS

- 4.1 Delivery of chemicals is required within four (4) days after receipt of order. All chemicals must be quoted as a delivered price and must be FOB City of Birmingham delivered. Please specify your earliest possible delivery after receipt of order. In some situations, orders may need to be shipped within twenty-four (24) hours after order placement. Delivery of chemicals must be made to multiple sites on the City facilities to be specified at the time of order by the City. Delivery is to be made with a gate lift truck, unloaded at each site and installed by vendor personnel. Failure to comply with quoted delivery commitments will be grounds for cancellation of contract and may jeopardize the vendor's position on the City's list of responsible vendor's. _____
- 4.2 Delivery does not constitute acceptance. All equipment/products delivered to the City as a result of an award of this contract is subject to inspection and testing. Items that do not meet the specifications of this bid document will be rejected. Failure to reject upon receipt does not relieve the vendor of his/her liability. If tests subsequent to delivery reveal a failure to meet the specifications of this document, the vendor shall be deemed to have breached his/her contract. Vendor shall be responsible for replacing all noncompliant material at no extra cost to the City. Failure to do so will result in termination of the contract. _____

WATER CHEMICAL TREATMENT

**BIDDER
COMPLIANCE
YES NO**

- 4.3 With all vendor procedures being followed, should damage, failure, or excessive wear occur, the City must conclude that the material being furnished is not adequate to meet the requirements as the vendor proposed. Should any of these conditions occur, the City must be protected against loss caused by lack of performance of the vendor's proposed products with resultant damage to equipment, and down time for cleaning. The contract vendor will be required to reimburse the City the cost in down-time, labor, and equipment required to restore the equipment to its normal operating condition. Cost may be withheld from future payment due the vendor for contract performance. _____
- 4.4 The successful vendor will be required to furnish a performance bond to guarantee that the performance of the contract will be properly secured. The amount of the bond shall be equal to one hundred percent (100%) of the contract price for the first year, covering and including products and services. This bond will be used to secure products and services to complete the term of this contract if the contract vendor defaults on the contract. The premium of the bond shall be paid by the contractor. The performance bond must be received in the City Purchasing Division within 10 days of receipt of notice of award. _____
- 4.5 Under the terms of this contract, the successful vendor will be required to furnish all chemicals, services, equipment, etc. to accomplish the end result as outlined in this invitation to bid. _____
- 4.6 Vendor must submit a list of three comparable institutions that have contracted for your products and services for a minimum of three (3) years. The list must include the name of the institution, contact person, and phone number of that person. Failure to provide this information may eliminate your bid from consideration. _____
- 4.7 The total annual amount paid to the successful vendor shall not exceed the total annual cost submitted in your bid except in the cases where systems are added to the contract, where errors made by City personnel cause excess chemicals to be used, where leaks develop, or where systems have to be drained. If necessary, the contract vendor will be required to continue to provide indicated chemicals and services above and beyond the indicated amount of the bid through the end of the contract period without additional payment except in the cases indicated earlier in this paragraph. _____
- 4.8 A monthly meeting with City personnel and vendor representatives will be scheduled at a mutually agreeable time by the Facilities Manager. _____
- 4.9 The awarded vendor must provide the City Facilities Division with a physical address to their office to allow the City personnel to perform an inspection to verify that they have the proper staff and laboratory required in the bid specification. _____
- 4.10 All vendors shall have a business office in the Jefferson County, or any County Contiguous to Jefferson County, staffed with the proper certified and state licensed personnel, in addition to the use of third party independent lab referenced in 3.2. City representatives reserve the right to visit Vendor's place of business prior to award of bid. _____

5.0 PRODUCT GUIDELINES

- 5.1 Provide a liquid corrosion and scale inhibitor. The formulation must be a blend of polymeric anti-foulants, organic sequestrants, and molybdate for the inhibition of scale and corrosion formation. Product shall contain no chromate, zinc, or polyphosphates and not depend upon alkalinity or pH to effect corrosion or scale protection. Must be a free flowing liquid with no flash point, no or low odor, low foam, minimum freezing point of 22 degrees Fahrenheit and pH of approximately 12.75 s.u.. Product must be supplied in plastic containers ranging in size between 5-30 gallons. _____

WATER CHEMICAL TREATMENT

**BIDDER
COMPLIANCE
YES NO**

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|------|--|-------|-------|
| 5.2 | Provide a concentrated liquid closed system treatment with a corrosion inhibitor for ferrous and non-ferrous metals and low toxicity, which will not affect non-metal components or seals. The treatment is to contain no chromate, zinc, or phosphate and shall not depend on silicates for corrosion protection. It must be compatible with antifreeze and be a single treatment. Must be a free flowing liquid with no flash point, and a minimum freezing point of zero degrees Fahrenheit. Must have a deep red color for visual checking and assistance for locating leaks. Product must be supplied in plastic containers ranging in size between 5-30 gallons. | _____ | _____ |
| 5.3 | Provide a liquid, broad spectrum, free flowing, and slightly aromatic, non-foaming, non-oxidizing biocide. Product must have low disposal problems and contain no chlorinated biphenols or chlorine. Must be a free flowing liquid with a flash point greater than 212 degrees Fahrenheit, minimum freezing point of 10 degrees Fahrenheit with no separation upon thawing and to be effective at pH ranging from 6.5 to 9.5 s.u. Product must be supplied in plastic containers ranging in size between 5-30 gallons. | _____ | _____ |
| 5.4 | Provide an organic bromine release tablet type oxidizing micro-biocide for algae and bacteria control in recirculating cooling towers. The bromine tablets must contain no calcium. Chlorine tablets will not be accepted. The tablets must contain 61% available bromine and 27% available with a total active ingredient equal to 92.5%. Active ingredient must be 1-bromo-3-chloro-5, 5-dimethylhydantoin (BCDMH). Brominators will be furnished at no charge and installed by City personnel under supervision of the successful vendor. | _____ | _____ |
| 5.5 | Provide a secondary bio-dispersant for cooling towers to enhance the performance of the biocide program and disperse suspended solids in the tower water. Product must be supplied in plastic containers ranging in size between 5-30 gallons. Provide propylene glycol for freeze protection. Product shall not be diluted. | _____ | _____ |
| 5.6 | Provide a completely catalyzed sodium sulfite oxygen scavenger solution. The treatment is to be fed in a concentration to provide removal of all dissolved oxygen in 100 degree Fahrenheit feed water and maintain a residual of at least 30 ppm SO3 in the boiler water. Must be a free flowing liquid with no flash point. Product must be supplied in plastic containers ranging in size from 5-30 gallons. | _____ | _____ |
| 5.7 | Provide a boiler dispersant and on-line cleaner. This product must be a combination of phosphonate and acrylate containing at least 10 percent active ingredients to be added as a supplement to selected boilers containing old calcium carbonate deposits. Must be a free flowing liquid with no flash point. Product must be supplied in plastic containers ranging in size between 5-30 gallons. | _____ | _____ |
| 5.8 | Provide a boiler treatment product that can be used as a single drum product for some of the smaller systems located in the City. This product shall contain a sludge fluidizer, sulfite for oxygen scavenging, phosphate for hardness control, polymaleic acid, boiler dispersant, phosphonate, potassium hydroxide for alkalinity control, and a neutralizing amine. | _____ | _____ |
| 5.9 | All biocides must be free of phenols and heavy metals. No biocides which are carcinogens may be used. Provide a secondary biocide for synergistic effectiveness and resistance prevention meeting same specifications as primary biocide. Biocide must not foam. Provide a molybdate based corrosion inhibitor for aid in winterizing equipment. | _____ | _____ |
| 5.10 | Scale and corrosion control formulation must be a one drum formula which can be fed directly from the shipping container without mixing or dilution and must contain molybdate. The formulation must include molybdate, polymeric dispersants, and sequestrants for the aid of metal passivation. Use of supplemental acid is prohibited. Product must be biodegradable, non-toxic, containing no heavy metals, inorganic phosphates, or nitrites. | _____ | _____ |
| 5.11 | Vendor must submit with his bid the product data sheet, material safety data sheet, and U.S. Department of Agriculture certification for each product proposed. Failure to provide this information shall eliminate your proposal from consideration. | _____ | _____ |

WATER CHEMICAL TREATMENT

**BIDDER
COMPLIANCE
YES NO**

- 5.12 All chemicals proposed must meet pollution standards, as required by the State of Alabama, Federal Government, and the EPA. All chemicals must be U.S. Department of Agriculture approved since possible contact with food may occur. _____

- 5.13 Included are attachments in this request for proposal that may assist you in your preparation of a proposal. Enclosed is a list of the number of cooling towers, chill water loop, hot water loops, cool cell units, fountains, their locations, and the total tons, as well as the City of Birmingham Water Department Analyses. As applicable, any vendor that so chooses may obtain a water sample during the on-site inspection. _____

List of facilities to be served under this contract.

1. Main Library (2100 Park Place). 800 tons condenser with two (2) open loop systems/cooling towers, (2) steam boilers.
2. Linn Henley Library downtown (2100 Park Place). Close loop boiler system with three (3) hot water boilers
3. City Hall / Annex (710 North 20th Street) downtown chill water open loop.
4. Boutwell Auditorium (1930 8th Avenue North) one (1) 200 hp steam boiler, six (6) 10 hp steam boilers, (1) open loop cooling tower with 400 ton chiller, (1) closed loop system.
5. Tactical Building 6th Ave South. One (1) chill water loop and One (1) hot water loop (seasonal).
6. Five Points West Fitness Center (4419 Avenue W) One (1) chill water closed loop and One (1) hot water closed loop.
7. Five Points West Library (4812 Avenue W). One (1) chill water closed loop and one (1) hot water loop.
8. Five Points South Library (1814 11th Avenue South). One (1) chill water closed loop and one (1) hot water loop.
9. Comer Building Downtown (808 18th Street North). One (1) 75 ton chiller with 75 ton water cooling tower, one (1) chill water loop and one (1) hot water loop (seasonal).
10. Springville Road Library (1224 Old Springville Road). One (1) chill water loop and one (1) hot water loop.
11. Fairpark Arena. (2331 Bessemer Road) Two (2) hot water boilers.
12. CrossPlex. (2337 Bessemer Road) (1) chill water closed loop, (1) hot water closed loop and cooling towers condensing loop.
13. Birmingham City Jail (425 6th Avenue South) Two (2) 60 hp Cleaver Brooks hot water boilers on the west side mechanical room and one (1) Raypack hot water boiler on east side mechanical room.
14. Police Administration Building (1710 1st Avenue North) 250 Ton Condenser open Loop.
15. Highland Park Racquet Club (3300 Highland Avenue South) (1) closed loop chiller and (1) closed loop boiler.
16. 8th Avenue, North (Gardenwalk) – fountain.
17. Linn Park (20th Street – 7th Avenue North) - fountain
18. Kelly Ingram Park (500 17th Street North) – fountain.
19. Five Points South Intersection – fountain.
20. Brother Bryan Park (2100 Magnolia Avenue South) – fountain.
21. Birmingham Museum of Art (2000 8th Avenue North) (2) steam boilers and (2) chillers.
22. Civil Rights Institute (520 16th Street North) one (1) hot water boiler closed loop.
23. East Pinson Valley Recreation Center (3000 Jefferson State Parkway) one (1) hot water boiler closed loop.
24. Hawkins Recreation Center (8920 Roebuck Boulevard) one (1) hot water boiler closed loop.
25. Sloss Furnace (20 32nd Street North) one (1) cooling tower.
26. 911 Calling Center – Air cooled chiller 1-closed chill water loop
27. East Lake Library (5 Oporto Madrid Boulevard) one (1) cooling tower. _____

WATER CHEMICAL TREATMENT

**BIDDER
COMPLIANCE
YES NO**

- 5.14 The City reserves the right to add other city sites, as needed and mutually agreeable to both parties, based on an agreed upon calculation of the volume of products needed and using the original unit prices bid for each product to determine the cost for such additional facilities.

Summary:

This invitation to bid is to establish a contract with a single vendor for water treatment chemicals for The City of Birmingham. The chemicals proposed must provide complete protection from scale, sludge, pitting, corrosion, and organic growth which may reduce the life expectancy of the equipment. All chemicals added to the water systems must be approved by the vendor, the City, the State of Alabama, and the Environmental Protection Agency, for its intended use in water treatment.

By responding to this invitation, the vendor guarantees the chemical program and his or her consulting services will produce equipment that is scale free, sludge free, free of pitting, and free of organic growth when the treatment is administered in accordance with the specifications contained herein and per the consultant's directions and recommendations. For these reasons, The City of Birmingham requires the vendor to meet the listed minimum specifications.

Please provide a complete itemized detailed description of your water chemical treatment program by attachment. Vendor must list the brand name, product number and unit price (per gallon, per pound etc.) of each chemical listed. Vendor must calculate the annual quantity required for each chemical listed for their water chemical program. Quantities should be based on one (1) year of operation. Vendor must supply specification sheet and Material Safety Data Sheet for each item quoted. Failure to provide information may eliminate your bid from consideration.

Chemicals usage is to be calculated and shown for each individual facility and a breakdown sheet showing the amount of monthly and yearly totals for water, steam, chilled and hot water loops to be treated under this contract.

Feed and Control Equipment:

COOLING TOWER SYSTEMS

The cooling tower equipment chemical feeder to be provided by the City of Birmingham. The equipment will be a DC 4500 controller with dual alternating biocide and feed and bleed lockout, four selectable inhibitor feed timers, and two chemical pumps

CHILL, HOT and CLOSED LOOPS

Chill, Hot, and Closed Loops: A five shot feeder with a cartridge filter conversion kit and adjustable legs shall eventually be installed on all loops by City personnel.

STEAM BOILERS

The proposed water treatment program will incorporate one chemical feed pump and mix tank per steam boiler to feed the scale inhibitor, sludge conditioner, alkalinity builder, and anime directly to each boiler.

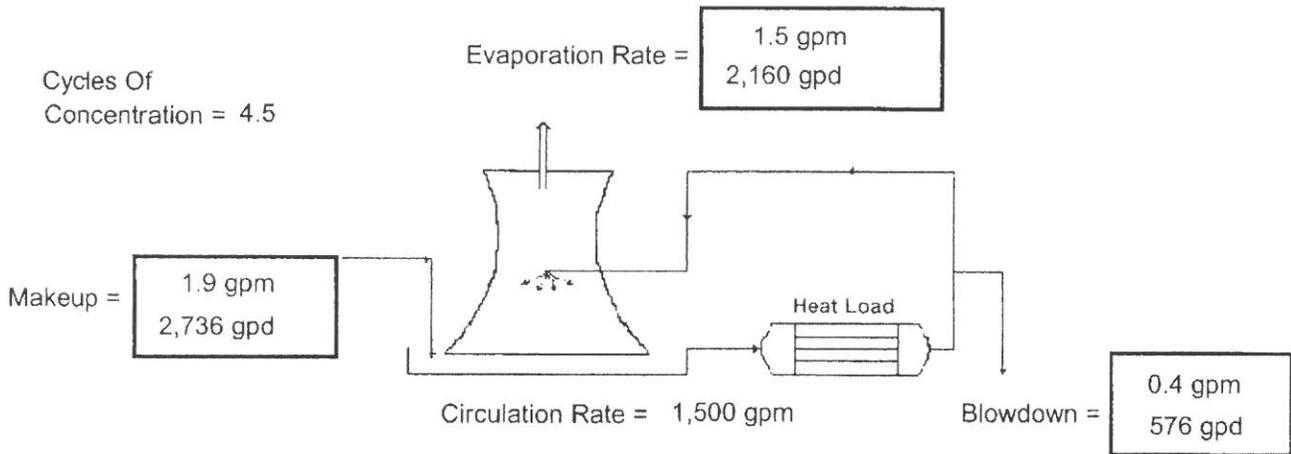
The proposed water treatment program will incorporate a separate chemical feed pump and mix tank (furnished and installed by the City) to feed the sulfite directly to the feed water tank.

By attachment, vendor should provide the following information:

- (1) Contact information for 24 hour service needs.
- (2) Inside person responsible for communication with City personnel.
- (3) From what location will supplies be shipped?
- (4) How many delivery vehicles do you utilize in the Birmingham Area on a daily basis?
- (5) How do you handle partial shipments and back orders?
- (6) Can you provide detailed monthly summary of invoices/shipments?
- (7) Minimum of at least three references as required in Section 4.6 on the bid specifications.

COOLING SYSTEM MASS BALANCE

07/09/02



Basis Of Calculations:

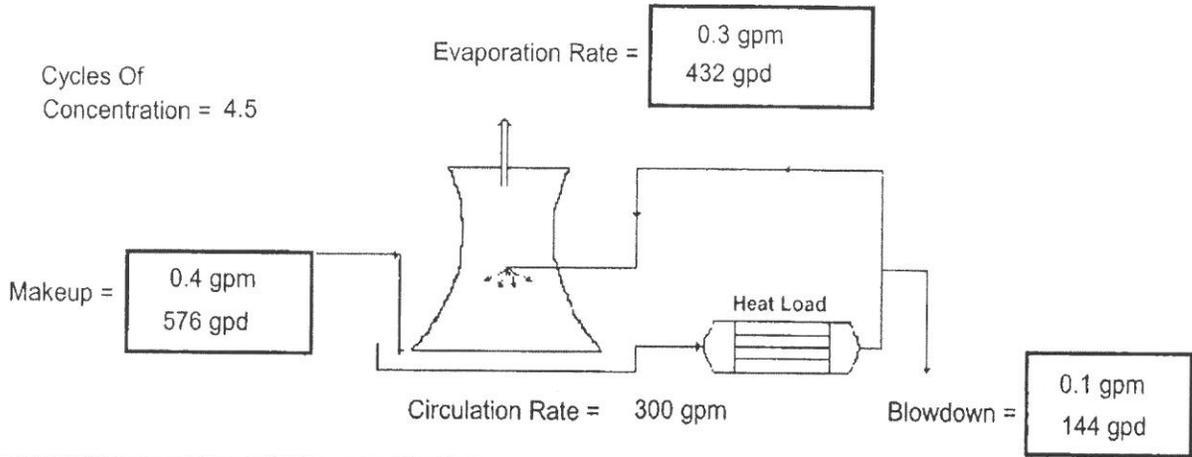
Analyte:	Conductivity
Concentration Of Analyte In Makeup:	220
Concentration Of Analyte In Tower:	1,000
Temperature Drop Over Tower, °F:	10.0
Evaporation Factor, %Evap/10 _F:	0.100

COMMENTS

Operating conditions at City Hall - 500 tons of chiller capacity.

COOLING SYSTEM MASS BALANCE

07/09/02



Basis Of Calculations:

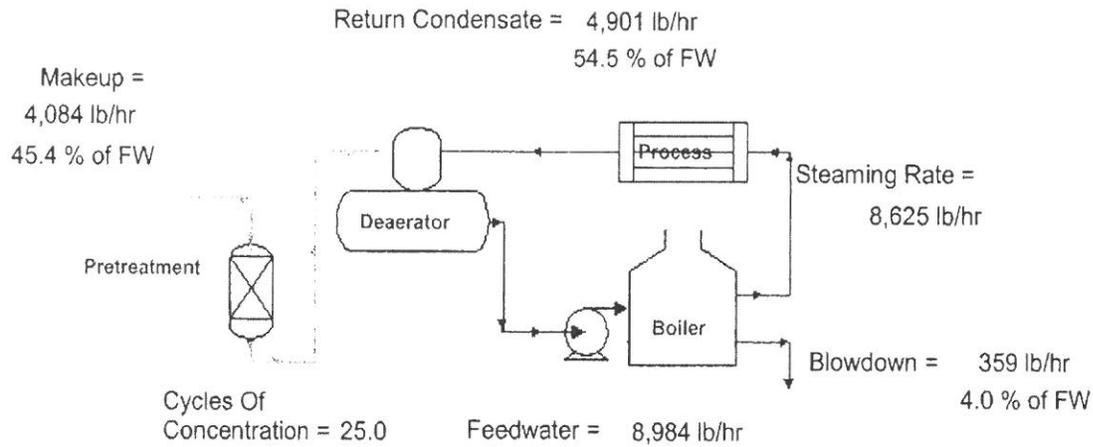
Analyte:	Conductivity
Concentration Of Analyte In Makeup:	220
Concentration Of Analyte In Tower:	1,000
Temperature Drop Over Tower, °F:	10.0
Evaporation Factor, %Evap/10_F:	0.100

COMMENTS

Operating conditions at the Comer Building - Approx. 100 tons of chiller capacity

BOILER SYSTEM MASS BALANCE

07/09/02



Basis Of Calculations:

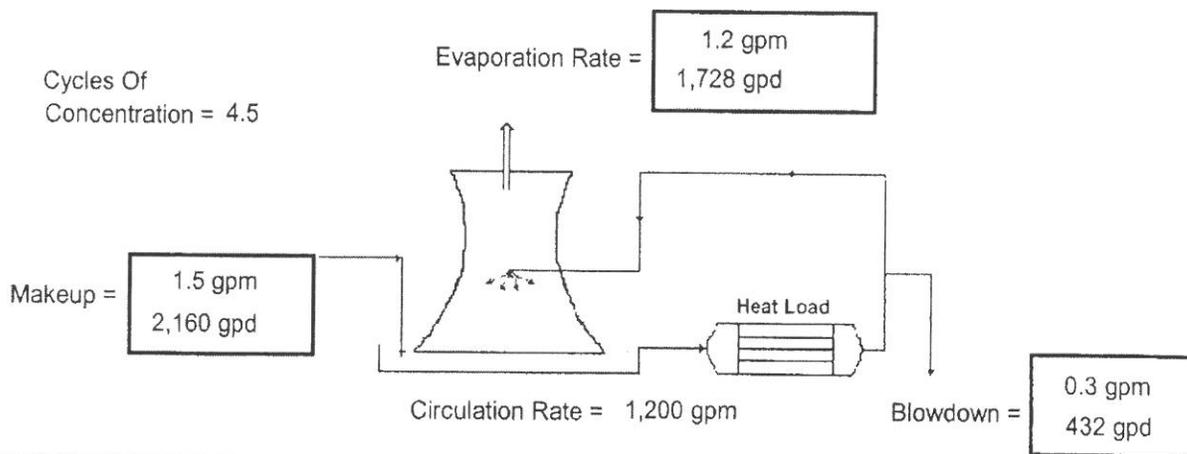
Analyte:	Conductivity
Concentration Of Analyte In Makeup:	220
Concentration Of Analyte In Feedwater:	100
Concentration Of Analyte In Boiler:	2,500
Steam Produced, lb/hr:	8,625 lb/hr

COMMENTS

Operating conditions at Boutwell Auditorium with 250 HP Boiler(s).

COOLING SYSTEM MASS BALANCE

07/09/02



Basis Of Calculations:

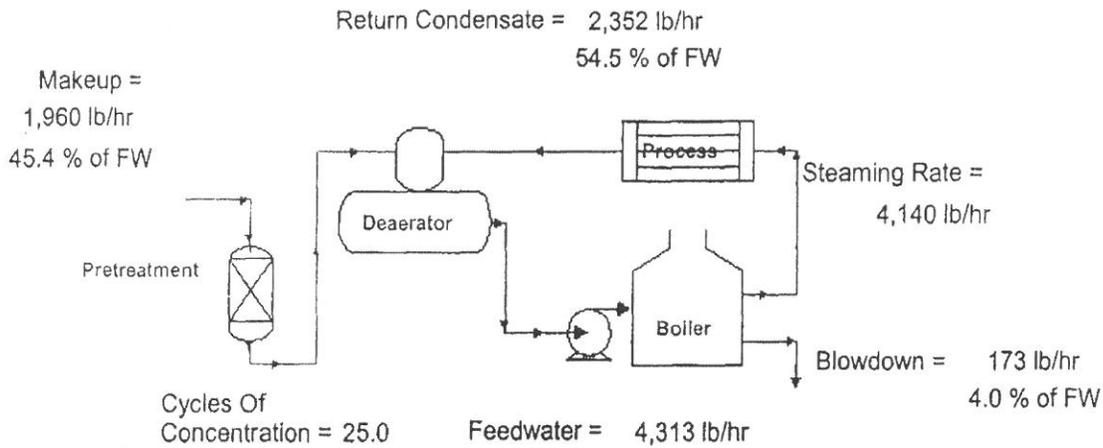
Analyte:	Conductivity
Concentration Of Analyte In Makeup:	220
Concentration Of Analyte In Tower:	1,000
Temperature Drop Over Tower, °F:	10.0
Evaporation Factor, %Evap/10 °F:	0.100

COMMENTS

Operating conditions at the Boutwell Auditorium - 400 ton chiller

BOILER SYSTEM MASS BALANCE

07/09/02



Basis Of Calculations:

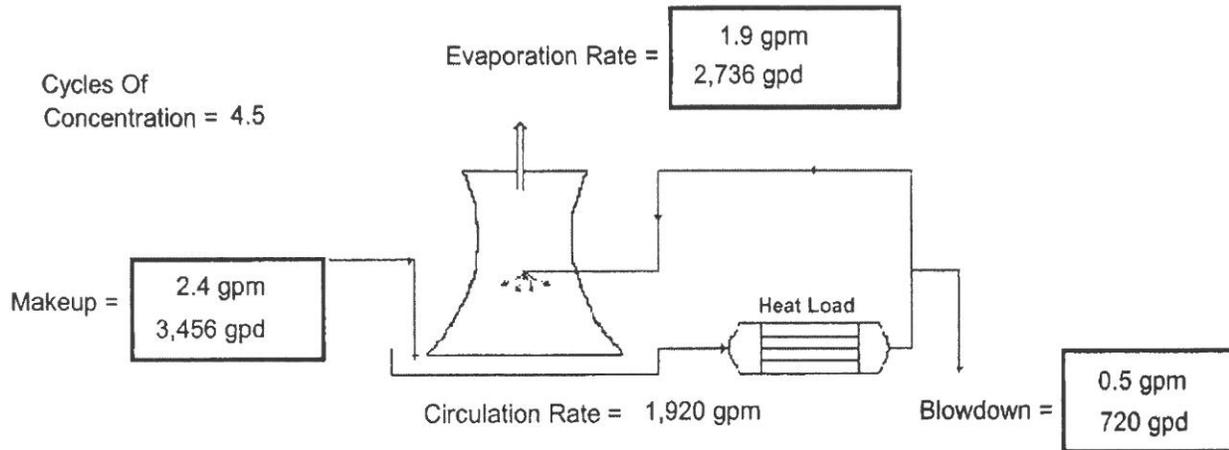
Analyte:	Conductivity
Concentration Of Analyte In Makeup:	220
Concentration Of Analyte In Feedwater:	100
Concentration Of Analyte In Boiler:	2,500
Steam Produced, lb/hr:	4,140 lb/hr

COMMENTS

Operating conditions at the Library with 120 HP Boiler(s).

COOLING SYSTEM MASS BALANCE

07/09/02



Basis Of Calculations:

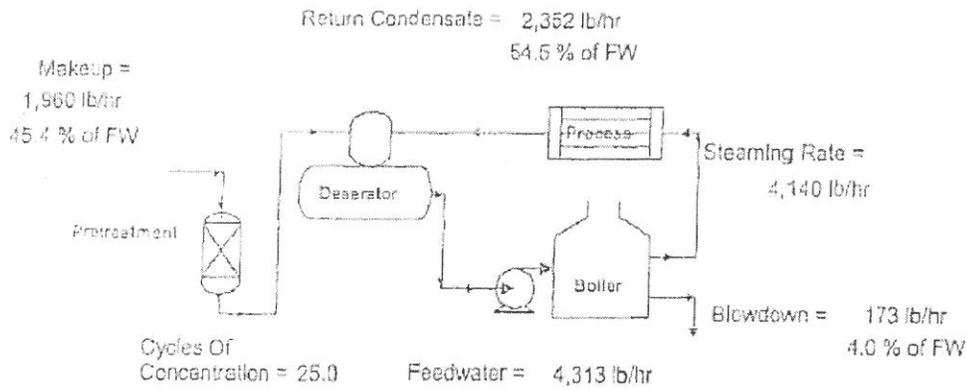
	Analyte:	Conductivity
Concentration Of Analyte In Makeup:		220
Concentration Of Analyte In Tower:		1,000
Temperature Drop Over Tower, °F:		10.0
Evaporation Factor, %Evap/10 °F:		0.100

COMMENTS

Operating conditions at the Library with 2 - 320 ton chillers.

BOILER SYSTEM MASS BALANCE

07/09/02



Basis Of Calculations:

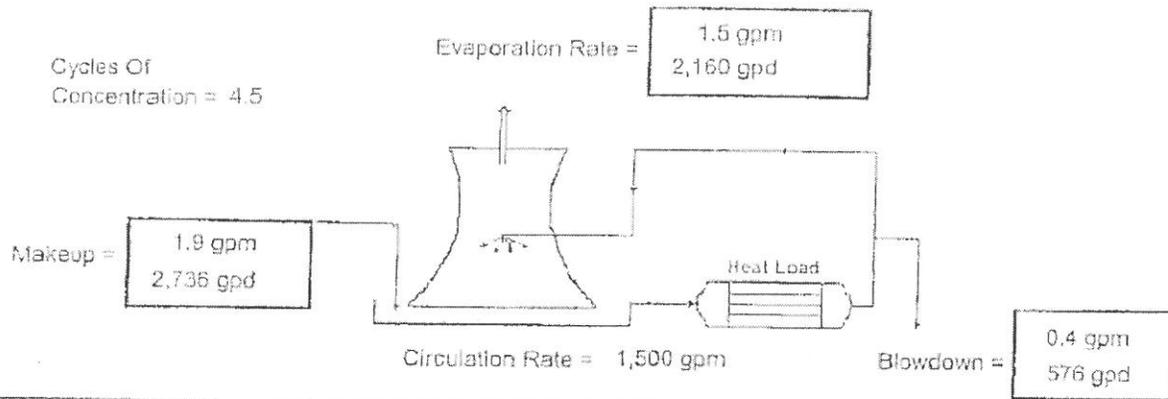
Analyte:	Conductivity
Concentration Of Analyte In Makeup:	220
Concentration Of Analyte In Feedwater:	100
Concentration Of Analyte In Boiler:	2,500
Steam Produced, lb/hr:	4,140 lb/hr

COMMENTS

Operating conditions at Museum of Art (2) 2,000 BTU steam boilers; (2) 3,400 BTU steam boilers.

COOLING SYSTEM MASS BALANCE

07/09/02



Basis Of Calculations:

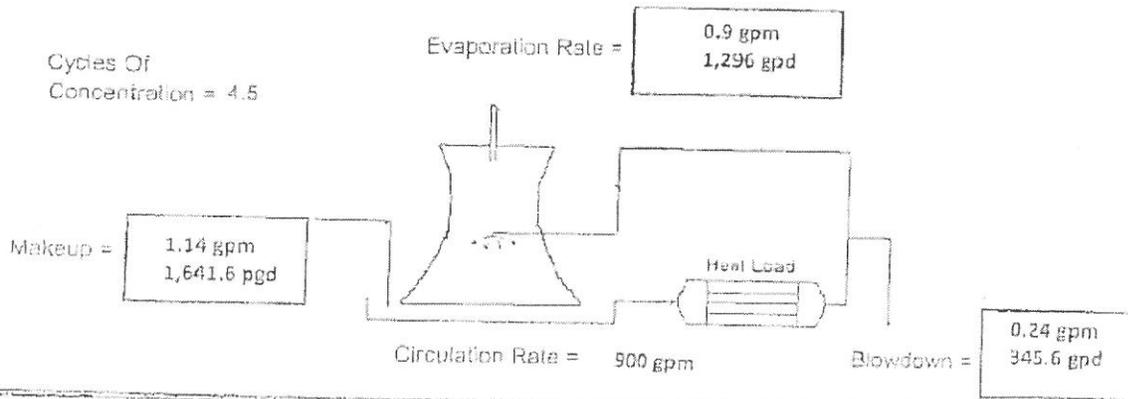
	<i>Analyte:</i>	<i>Conductivity</i>
<i>Concentration Of Analyte In Makeup:</i>	220	
<i>Concentration Of Analyte In Tower:</i>	1,000	
<i>Temperature Drop Over Tower, °F:</i>	10.0	
<i>Evaporation Factor, %Evap/10 _F:</i>	0.100	

COMMENTS

Operating conditions at Museum of Art (2) 300 tons of chiller capacity.

City of Birmingham
Crossplex

COOLING SYSTEM MASS BALANCE



Basis Of Calculations:

Analyte:	Conductivity
Concentration Of Analyte In Makeup:	220
Concentration Of Analyte In Tower:	1,000
Temperature Drop Over Tower, °F:	10.0
Evaporation Factor, %Evap/10_F:	0.100

COMMENTS:

Operating conditions at the Fair Park Facility – 600 tons of chiller capacity

BID FORM

W. E. Caffee
 Assistant Purchasing Agent
 Birmingham, Alabama

Submitted below is my firm bid for water chemical treatment program for the City of Birmingham, in accordance with your invitation to bid and specifications dated December 4, 2015. Prices quoted are f.o.b. Birmingham, Alabama delivered and I am bidding in accordance with specification except as listed below.

Description	Annual Cost
Complete Water Chemical Treatment Program as per specifications <u>Year 1</u>	
Main Library Downtown	\$
Linn Henley Library	\$
City Hall/Annex	\$
Boutwell Auditorium	\$
Tactical Building	\$
Five Points West Fitness Center	\$
Five Points West Library	\$
Five Points South Library	\$
Comer Building	\$
Springville Road Library	\$
Fair Park Arena	\$
CrossPlex	\$
Birmingham City Jail	\$
Police Administration Building	\$
Highland Park Racquet Club	\$
8 th Avenue, North (Gardenwalk) Water Fountain	\$
Linn Park Water Fountain	\$
Kelly Ingram Park Water Fountains	\$
Five Points South Water Fountains	\$
Brother Bryant Park Water Fountain	\$
Birmingham Museum of Art	\$
Civil Rights Institute	\$
East Pinson Valley Recreation Center	\$
Hawkins Recreation Center	\$
Sloss Furnace	\$
911 Calling Center	\$
East Lake Library	\$
Total Year One	\$
Complete Water Chemical Treatment Program as per specifications <u>Year 2</u>	
Main Library Downtown	\$
Linn Henley Library	\$
City Hall/Annex	\$
Boutwell Auditorium	\$
Tactical Building	\$
Five Points West Fitness Center	\$
Five Points West Library	\$
Five Points South Library	\$
Comer Building	\$
Springville Road Library	\$
Fair Park Arena	\$
CrossPlex	\$
Birmingham City Jail	\$
Police Administration Building	\$
Highland Park Racquet Club	\$
8 th Avenue, North (Gardenwalk) Water Fountain	\$
Linn Park Water Fountain	\$
Kelly Ingram Park Water Fountains	\$
Five Points South Water Fountains	\$
Brother Bryant Park Water Fountain	\$
Birmingham Museum of Art	\$
Civil Rights Institute	\$
East Pinson Valley Recreation Center	\$
Hawkins Recreation Center	\$
Sloss Furnace	\$
911 Calling Center	\$
East Lake Library	\$
Total Year Two	\$

Description	Annual Cost
Complete Water Chemical Treatment Program as per specifications Year 3	
Main Library Downtown	\$
Linn Henley Library	\$
City Hall/Annex	\$
Boutwell Auditorium	\$
Tactical Building	\$
Five Points West Fitness Center	\$
Five Points West Library	\$
Five Points South Library	\$
Comer Building	\$
Springville Road Library	\$
Fair Park Arena	\$
CrossPlex	\$
Birmingham City Jail	\$
Police Administration Building	\$
Highland Park Racquet Club	\$
8 th Avenue, North (Gardenwalk) Water Fountain	\$
Linn Park Water Fountain	\$
Kelly Ingram Park Water Fountains	\$
Five Points South Water Fountains	\$
Brother Bryant Park Water Fountain	\$
Birmingham Museum of Art	\$
Civil Rights Institute	\$
East Pinson Valley Recreation Center	\$
Hawkins Recreation Center	\$
Sloss Furnace	\$
911 Calling Center	\$
East Lake Library	\$
Total Year Three	\$

I hereby certify that we do not discriminate in employment of our personnel against any persons on account of race, creed, color, sex, or national origins, and acknowledge and agree that the City encourages minority and women-owned business participation to the maximum extent possible. This policy includes Historically Underutilized Business Enterprises such as architectural firms, engineering firms, investment banking firms, other professional service providers, and construction contractors as part of the City's business, economic and community revitalization programs.

_____	_____
	Date of Bid
_____	_____
	Company
_____	_____
	Street Address
_____	_____
Tax ID Number	
_____	_____
Name (Print or Type)	Post Office Box (Zip if different the street address)
_____	_____
Signature	City State Zip
_____	_____
Title	Terms of Payment
_____	_____
E-mail address	Fax Number

	Telephone Number

	Fax Number

Bidder acknowledges receipt of _____ addenda to the bid.
(Number(s))

