



Procurement Department Bid Section
Customer Center 1st Floor, Room 002
21 W. Church Street
Jacksonville, Florida 32202

May 17, 2016

ADDENDUM NUMBER: **ONE (1)**

TITLE: **WATER TREATMENT PROGRAM FOR CHILLED WATER PLANTS**

JEA IFB NUMBER: **REQUEST FOR QUOTE 83442**

BID DUE DATE: **MAY 23, 2016**

TIME OF RECEIPT: **12:00 NOON**

THIS ADDENDUM IS FOR THE PURPOSE OF MAKING THE FOLLOWING CHANGES OR CLARIFICATIONS IN RED:

- BID DUE DATE CHANGED FROM: MAY 18, 2016 TO MAY 23, 2016.**
- REFER TO: REVISED – TECHNICAL SPECIFICATION – APPENDIX A – SEE ATTACHED.**
- Question:** Can you provide us with the annual make-up water numbers for the condenser and chilled systems? If you have them by location that would be great otherwise totals will work fine.

Answer: Unfortunately with our control system upgrade at the end of 2015 data prior to December was lost. Below is a table of the data we were able to pull from the system through last month though the Springfield Chilled Water Makeup for February appears to be an instrument error and the data should be treated as unreliable for that month. Note there has been a drastic improvement in the Springfield Chilled Water Make Up due to improvements at the end user sites with continued improvements seen in May following additional improvements recently realized.

	Chilled Water Make Up			Condenser Water Make Up		
	Springfield	Downtown	Hogan's Creek	Springfield	Downtown	Hogan's Creek
Dec-15	36,773.30	43.024	0.00	2,488,083.00	26,432.20	No Data
Jan-16	28,007.79	9.07	0.00	2,004,634.75	16,094.78	No Data
Feb-16	325,328.03	0.18	0.00	828,486.63	17,758.00	1,255.04
Mar-16	8,005.83	0.01	0.00	1,185,603.00	26,914.66	1,133.66
Apr-16	2,179.38	74.05	0.00	1,927,782.63	29,495.07	1,311.64
Totals	400,294.33	126.324	0.00	8,434,590.00	116,694.72	3,700.33

- Question:** Is there a requirement for any Legionella testing? If so, how often and how many sample points are being tested?
Answer: Testing completed annually by JEA. Single sample points are taken at this time.
- Question:** What is the projected date of award or anticipated startup date?

Answer: Between June 1 and July 1. Preference is June 1 if feasible. Final dates will be contingent upon bid submittal time frame (i.e. if submittal date is pushed back) and final settlement of contract details with awarded contractor.

6. **Question:** Will the winning contractor initially be responsible for bringing any out of spec parameters back into range at their cost or will JEA issue a change order/one time PO for the cost involved? For example if the biological levels are elevated in the cooling towers and deposits exist will JEA assume the excess cost to initially clean the system?

Answer: Should the Contractor determine there are significant preexisting conditions outside the scope identified within this technical specification for routine water quality monitoring and the associated treatment program, they shall submit a report within the first 14 days detailing those issues. The Contractor shall include recommended corrective actions and cost estimates to mitigate each issue presented. Based upon a review and evaluation of the reported issues, JEA will provide a work scope to address these problem areas. The contractor shall not be held liable for those preexisting issues in this final work scope that are determined to present a significant impact to the contractor. Final determination of what is considered a significant impact will be at JEA's discretion. JEA reserves the right for independent evaluation of the issues to determination of validity of the claim and cost estimates.

7. **Question:** The tower water pH listed in the RFQ is not possible at 3 cycles and the listed alkalinity level. Can the awarded contractor make new recommendations based on the actual samples at 3 cycles and amend the agreement?

Answer: Under Section 5. Contract Performance/Performance Standards (KPI's – Key Performance Indicators) of the Technical Specification the Cooling Tower KPI pH range of 6-8 will be modified to 6-10 for the first 30 days.

The Contractor shall submit a report detailing any recommended permanent changes to the Cooling Tower chemistry control parameters and the justification of the proposed changes within the 30 day grace period. JEA will evaluate the submitted proposal for final approval, counter-proposal, or rejection within 7 days of submission.

8. **Question:** After the RFQ is awarded will the winning vender have a period to redline/negotiate some parts of the agreement that are acceptable to both parties?

Answer: This bid is to be submitted based on the information provided in the specification and the ensuing addendums with the assumption no changes will be allowed. Following the awarding of the contract should the Contractor determine avenues to improve the performance and longevity of the associated equipment exists, they shall submit such recommendations to JEA in a proposal for evaluation. JEA will only commit to accepting the proposal and considering its merits. Any modifications to the water chemistry program will be at JEA's discretion

9. **Question:** The KPI section item E. asks the vender to check boilers. No boilers were discussed in the walk through. Are there sites that contain boilers or hot loops that are to be included in this bid? If so, please provide the location of each.

Answer: There are no boilers associated with the facilities at this time. This bid is only on currently installed equipment. Should boilers be added at a later date JEA will work with the Contractor to implement changes to the agreement to cover the additional work scope.

10. **Question:** In Section 4 "Service" there is a requirement that a **local lab** exist within the vendor's company that has the ability to perform various analysis including Metallurgical Failure, Metal Analysis and Ultraviolet analysis. This requirement eliminates most of the prospective vendors. Only one company has a local lab within their company and would have to have a scanning electron microscope and a mass spectrophotometer to complete some of the tests. Proof of the ownership of this expensive lab equipment would be required to meet these specs. All of the companies have their own in house lab and alliances with laboratories that specialize in the tests required. Would it be acceptable for a vender to utilize their in house lab, located at the home office, and outsource the specialized tests for the most accurate results available?

Answer: The language reads *"Local laboratory services will be made available to JEA at any time to determine the effectiveness of the program in place and will be provided at no additional charge. The Contractor shall have access to or operate and staff its own full service laboratory. The laboratory shall have the capability of performing at least the following:*

- *Routine water analysis*
- *Corrosion coupon evaluations*
- *Metallurgical failure Analysis*

- *Ion Exchange Resin Analysis*
- *Microscopic Photography*
- *Microbiological Analysis*
- *Metal Analysis*
- *Ultraviolet Analysis*
- *Atomic Absorption Analysis*
- *Deposit Analysis*

All Contractors will be required to furnish written documentation that a local laboratory does exist within their company."

The opening statement states "...access to or operate and staff" for the testing referenced. The second statement will follow the same "Access to or operate and staff" requirement. Local will be defined as a regional lab where expedited analysis/testing can be accomplished at JEA's request.

11. **Question:** In the KPI section there is a parameter for HPS-1 (polymer) level. This is a patented polymer and does not allow for competitive bidding. Can companies bid with HPS-1 equivalent polymers?
Answer: In the bid documents on JEA.com, the technical specification states in the KPI Section below the pH spec *"NOTE: If approved by the JEA technical lead in writing prior to the bid due date, an equivalent polymer may be used by the bidder in the place of HPS-1"*
12. **Question:** In regards to containment, can double walled tanks be utilized in place of traditional containment basins?
Answer: Requirements for containments are as specified. Should the contractor be awarded the contract they may submit requested modification to the containment stipulation with specific detail of the proposed container to JEA for consideration.
13. **Question:** In the KPI section, the total hardness is asked to be held between 650-950 ppm. This exceeds the saturation index for this mineral and will cause scaling. Is it acceptable to run the hardness in the range associated with the 3 cycles that is referenced in Appendix A?
Answer: Under Section 5. Contract Performance/Performance Standards (KPI's – Key Performance Indicators) of the Technical Specification the Cooling Tower KPI Hardness range of 650-950 ppm will be relaxed to the contractor's recommended level for the first 30 days. The Contractor shall submit a report detailing any recommended permanent changes to the Cooling Tower chemistry control parameters and the justification of the proposed changes within the 30 day grace period. JEA will evaluate the submitted proposal for final approval, counter-proposal, or rejection within 7 days of submission.
14. **Question:** In the KPI section, the pH is asked to be maintained between 6-8. This is not achievable with the city water in Jacksonville without acid feed. Does JEA want acid to be fed into the towers to maintain this pH range?
Answer: Under Section 5. Contract Performance/Performance Standards (KPI's – Key Performance Indicators) of the Technical Specification the Cooling Tower KPI pH range of 6-8 will be modified to 6-10 for the first 30 days. The Contractor shall submit a report detailing any recommended permanent changes to the Cooling Tower chemistry control parameters and the justification of the proposed changes within the 30 day grace period. JEA will evaluate the submitted proposal for final approval, counter-proposal, or rejection within 7 days of submission.
15. **Question:** There are several references to web based controllers. This will require new controllers to be installed because the current controllers do not have this capability. Does JEA want new controllers with web based capabilities installed at the three locations?
Answer: Unable to locate references to web based controllers only web based service reporting; web based program for historical analysis and trending; and web based service tracking and operator data logging.
16. **Question:** Will JEA provide Ethernet or phone line connections next to the web based controllers?
Answer: Unable to locate references to web based controllers only web based service reporting; web based program for historical analysis and trending; and web based service tracking and operator data logging. Should the contractor utilized web based controllers JEA will only provide power and piping assistance within the abilities of the technicians at the facility.

17. **Question:** The Springfield location has a large amount of mud on the bottom of the basin as well as scale from the tower fill change. Will JEA clean the basins to remove the scale and mud?
Answer: Should the Contractor determine there are significant preexisting conditions outside the scope identified within this technical specification for routine water quality monitoring and the associated treatment program, they shall submit a report within the first 14 days detailing those issues. The Contractor shall include recommended corrective actions and cost estimates to mitigate each issue presented. Based upon a review and evaluation of the reported issues, JEA will provide a work scope to address these problem areas. The contractor shall not be held liable for those preexisting issues in this final work scope that are determined to present a significant impact to the contractor. Final determination of what is considered a significant impact will be at JEA's discretion. JEA reserves the right for independent evaluation of the issues to determination of validity of the claim and cost estimates.
18. **Question:** In the "Water Treatment" section item #6 the yearly routine testing will include metal analysis, infrared analysis, ultraviolet analysis and microscopic photography. What specifically does JEA want these tests performed on every year? Is there a piece of metal that will be removed from the system to test?
Answer: This requirement is to provide such service as part of this agreement at no cost to JEA. Should there be no need for the specific analysis it will not be required. This will be at JEA discretion the makeup of the sample if it is to be submitted.
19. **Question:** In the "Water Treatment" section, item #5 stipulates that the contractor will be responsible for removing scale from the system. The spec also says no inhibited acids can be used to perform the cleaning. Mineral acids are the primary ingredient in de-scaling chemicals. What will JEA allow contractors to use for de-scaling should the need arise?
Answer: The specification states "The water treatment program must prevent a build-up of scale or algae and adherent mineral deposits on the heat exchange equipment being treated. Periodic de-scaling with inhibited acids will not be considered as meeting this specification." This is to be interpreted to mean **prevention** of scale buildup is the intention of the program. It does not state inhibited acids will not be used, only that this is not to be the primary control method utilized by the contractor. Should the contractor fail to control scale build up it will be at their expense to remove it. In the past descaling products that are biodegradable, non-corrosive, and non-hazardous such as RYDLYME have been utilized for these purposes. Note: JEA does not endorse any specific product for these purposes; the use of the product name was only to be interpreted an example of previously utilized techniques.
20. **Question:** If the closed loop does not contain the required 400-800 ppm of nitrite at the beginning of the contract will JEA purchase chemical to bring the loop into specs or is that the responsibility of the contractor?
Answer: Should the Contractor determine there are significant preexisting conditions outside the scope identified within this technical specification for routine water quality monitoring and the associated treatment program, they shall submit a report within the first 14 days detailing those issues. The Contractor shall include recommended corrective actions and cost estimates to mitigate each issue presented. Based upon a review and evaluation of the reported issues, JEA will provide a work scope to address these problem areas. The contractor shall not be held liable for those preexisting issues in this final work scope that are determined to present a significant impact to the contractor. Final determination of what is considered a significant impact will be at JEA's discretion. JEA reserves the right for independent evaluation of the issues to determination of validity of the claim and cost estimates.
21. **Question:** What are the volumes of all three closed loop systems?
Answer:
**Estimated values based on engineering calculations and assumptions on end user plant configurations.*
Springfield – 102, 800 Gallons
Downtown – 159,200 Gallons
Hogans Creek – 119,000 Gallons + 1 Million Gallon Storage Tank
22. **Question:** Since KPI require that bleach be used, and continuously controlled between >1-.8 ppm, how should we control the chlorine within that range? No chlorine controller was specified. Should we assume JEA will provide that equipment?
Answer: As stated under Section 1. SCOPE OF WORK/Water Treatment under item 1 "Contractor shall supply all necessary consultant services, chemicals, sampling feed equipment, controllers, testing, laboratory analysis supplies, technician and management labor, and any other items or apparatus necessary to provide all service

requirements as defined herein.” And Item 10 “All controls and related feed equipment shall be provided and maintained by the Contractor”

Additionally as stated under Section 3. EQUIPMENT in the first paragraph “Should any additional feed equipment be needed, the Contractor must furnish and install it at no additional charge.”

JEA will provide support for the electrical/piping portions of the installation of equipment unless the requests of the contractor are beyond the capabilities of the technicians at the facility.

If this is deemed significant impact to the contractor the following statement made previously would apply. “Should the Contractor determine there are significant preexisting conditions outside the scope identified within this technical specification for routine water quality monitoring and the associated treatment program, they shall submit a report within the first 14 days detailing those issues. The Contractor shall include recommended corrective actions and cost estimates to mitigate each issue presented. Based upon a review and evaluation of the reported issues, JEA will provide a work scope to address these problem areas. The contractor shall not be held liable for those preexisting issues in this final work scope that are determined to present a significant impact to the contractor. Final determination of what is considered a significant impact will be at JEA’s discretion. JEA reserves the right for independent evaluation of the issues to determination of validity of the claim and cost estimates.”

23. **Question:** In item G there are stipulations about the approach temperatures being 1.3-3.7 degrees. Springfield basin has mud that can cause fouling. Will the chillers be cleaned at JEA’s expense until the basin has been cleaned to remove the mud and scale?

Answer: Should the Contractor determine there are significant preexisting conditions outside the scope identified within this technical specification for routine water quality monitoring and the associated treatment program, they shall submit a report within the first 14 days detailing those issues. The Contractor shall include recommended corrective actions and cost estimates to mitigate each issue presented. Based upon a review and evaluation of the reported issues, JEA will provide a work scope to address these problem areas. The contractor shall not be held liable for those preexisting issues in this final work scope that are determined to present a significant impact to the contractor. Final determination of what is considered a significant impact will be at JEA’s discretion. JEA reserves the right for independent evaluation of the issues to determination of validity of the claim and cost estimates.

24. **Question:** Feed equipment is to remain the property of JEA. Is the feed equipment just the pumps or are the controllers included in this statement?

Answer: Section 3. EQUIPMENT states “Systems currently under treatment have automatic feed and control equipment. The water treatment Contractor may utilize all of this equipment in implementing their program. Should any additional feed equipment be needed, the Contractor must furnish and install it at no additional charge. Any such equipment will become the property of JEA at the end of the contract period.” Additional feed equipment installed by its nature would include the control equipment. It is expected the feed equipment be left in the functional manner it was operating under at the end of the contract.

25. **Question:** If the current piping arrangement for chemical injection is not functional and/or needs to be changed to insure an effective program will JEA provide water sample piping and electricity for controls? Should contractors add the cost of hiring licensed plumbers and electricians at each plant? Currently the water sample piping is restricted at Springfield. Will JEA replace/repair this piping to full use? Injecting bleach and inhibitor into the common sample line will lead to clogging again. If multiple injection points are needed, will JEA provide those locations with water and power? The clogging at all 3 plants was in place 3 years ago.

Answer: Should the Contractor determine there are significant preexisting conditions outside the scope identified within this technical specification for routine water quality monitoring and the associated treatment program, they shall submit a report within the first 14 days detailing those issues. The Contractor shall include recommended corrective actions and cost estimates to mitigate each issue presented. Based upon a review and evaluation of the reported issues, JEA will provide a work scope to address these problem areas. The contractor shall not be held liable for those preexisting issues in this final work scope that are determined to present a significant impact to the contractor. Final determination of what is considered a significant impact will be at JEA’s discretion. JEA reserves the right for independent evaluation of the issues to determination of validity of the claim and cost estimates.

Note: The referenced piping at Springfield has been replaced during the past several weeks. JEA will provide additional support for the electrical/piping portions of the installation of equipment unless the requests of the contractor are beyond the capabilities of the technicians at the facility.

26. **Question:** Will JEA provides makeup and chilled water meter readings to determine uncontrolled water losses, specifically at Springfield? Currently, the chilled water is and has been untreated for years. Will JEA expect nitrite on-going “at no cost” because the system loses water, beyond control? With the current water loss, the inhibitor level is hard to maintain resulting in insufficient protection, and will not meet copper corrosion specifications. Does the contractor provide product, or will JEA purchase product off contract due to leaks and or water loss? Since it has been stated UF Health has the water losses, we presume this issue to be long term.

Answer: Unfortunately with our control system upgrade at the end of 2015 data prior to December was lost. Below is a table of the data we were able to pull from the system through last month though the Springfield Chilled Water Makeup for February appears to be an instrument error and the data should be treated as unreliable for that month. Note there has been a drastic improvement in the Springfield Chilled Water Make Up due to improvements at the end user sites with continued improvements seen in May following additional improvements recently realized.

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Totals	400,294.33	126.324	0.00	8,434,590.00	116,694.72	3,700.33

Due to the repairs completed at the end user sites and the dramatic reduction in Chilled Water make-up usage the contractor will be held responsible for maintaining the spec based on the assumption April 2016 makeup levels are what their bid should be based. Makeup levels will be monitored monthly to ensure no significant unexplained increases in makeup have occurred. Should makeup usage increase substantially JEA will work with the contractor to mitigate the cost impacts above this benchmark value.

Should the Contractor determine there are significant preexisting conditions outside the scope identified within this technical specification for routine water quality monitoring and the associated treatment program, they shall submit a report within the first 14 days detailing those issues. The Contractor shall include recommended corrective actions and cost estimates to mitigate each issue presented. Based upon a review and evaluation of the reported issues, JEA will provide a work scope to address these problem areas. The contractor shall not be held liable for those preexisting issues in this final work scope that are determined to present a significant impact to the contractor. Final determination of what is considered a significant impact will be at JEA’s discretion. JEA reserves the right for independent evaluation of the issues to determination of validity of the claim and cost estimates.

27. **Question:** In the legend of equipment, 3 solids separators, and sweep systems are on each tower. None are operational. Will JEA repair/replace each to function as designed?

Answer: Should the Contractor determine there are significant preexisting conditions outside the scope identified within this technical specification for routine water quality monitoring and the associated treatment program, they shall submit a report within the first 14 days detailing those issues. The Contractor shall include recommended corrective actions and cost estimates to mitigate each issue presented. Based upon a review and evaluation of the reported issues, JEA will provide a work scope to address these problem areas. The contractor shall not be held liable for those preexisting issues in this final work scope that are determined to present a significant impact to the contractor. Final determination of what is considered a significant impact will be at JEA's discretion. JEA reserves the right for independent evaluation of the issues to determination of validity of the claim and cost estimates.

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON YOUR BID FORM