### PROCUREMENT PLANNING & MANAGEMENT DEPARTMENT

Tel. No. 8920-6401 loc 5504-5507/6391

September 3, 2021

### Sir/Madam:

Please furnish us with your quotation on or before **September 7, 2021 @ 4:00 PM** for the items listed in the attached Request for Quotation (RFQ).

Kindly accomplish the Request for Quotation and Bidder's Information and affix your confirmation on the Terms and Conditions by signing the certification.

Refer to the Instruction to Suppliers for the procedure on the submission of quotation.

Thank you.

Very Truly Yours,

VIOLETA V. JAVAR

PHILGEPS REF. NO.: 7972823

DATE POSTED : 09/03/21

POSTED BY : AMY

# REQUEST FOR QUOTATION (RFQ) FORM

Number	RFQ Date	ABC	APP Number
2021-0127	August 4, 2021	₽ 312,000.00	169

Lot No.		PARTICULARS	Total Cost
1	WATER CONDITI FOR ON	OF LABOR & MATERIALS FOR THE TREATMENT OF THE CENTRALIZED AIR-IONING SYSTEM OF THE SSS MAIN BLDG. E (1) YEAR	
		ical Specifications & Annex B for Bill of	
Date Rece	eipt of Red	quest for Quotation Form:	
Price Vali	dity	Three (3) Months	
Delivery T	erms	One (1) year (December 26, 2021 – December	er 25, 2022)
Payment <sup>1</sup>	Terms	<ul> <li>Government Terms</li> <li>SSS shall withhold the applicable taxes from payable in accordance with the BIR regula</li> <li>12 monthly payment upon submission of S Sales Invoice</li> </ul>	tions

E	BIDDER'S INFORMATION	
Business Name	Address	
Name of Company Representative	Email Address	Telephone/Mobile Number
PhilGEPS Registration No.	SS Number	BIR TIN

NOTE: Supplier must ensure to fill-out the owner/company representative signature over printed name and business details. Incompletely filled-out RFQ Form is ground for disqualification of submitted quotation.

### TERMS AND CONDITIONS

- 1. For contract price amounting to P100,000.00 and above, the winning supplier shall be required to post a Performance Security from receipt of Notice of Award equivalent to the Percentage (%) of Contract Price as follows:
  - 5% (Goods & Consulting Services) or 10% (Infrastructure) Cash, Cashier's/Manager's Check, Bank Draft/Guarantee, or
  - 30% Surety Bond callable upon demand.
- 2. In case two or more suppliers submitted the same price quotation and have been evaluated as the Lowest Calculated and Responsive Quotation, submission of best offer in a sealed envelope to be dropped at the drop box located at Procurement Planning & Management Dept., 2nd Flr., SSS Main Bldg., East Ave., Diliman, Quezon City or password-protected zipped file folder sent via e-mail at bacsealedquotations@sss.gov.ph shall be adopted as the tie-breaking method to finally determine the single winning supplier.
- 3. Alternative offer shall not be allowed. Any bid exceeding the ABC shall be ground for disqualification.
- 4. Quantity is subject to change but not to exceed the quantity in the approved PO/JO/LO.
- 5. Award shall be on a per "LOT BASIS" and date of conduct/start of the project is subject to change.

### INSTRUCTIONS TO SUPPLIERS

- 1. For Clarification of details, please call Mr. Gilbert Cacafranca/EFMD @ (8) 920-6401 local 5526 or via e-mail <a href="mailto:cacafrancaga@sss.gov.ph">cacafrancaga@sss.gov.ph</a>.
- 2. Supplier should indicate "COMPLIED" or "NOT COMPLIED" in the STATEMENT OF COMPLIANCE COLUMN. Failure to indicate compliance or non-compliance will mean automatic disqualification.
- 3. Sealed quotation maybe submitted through any of the following:
  - a. DROP BOX located at the Procurement Planning & Management Dept. (PPMD), 2nd Floor, SSS Main Bldg., East Ave., Diliman, Quezon City. It shall be addressed to Ms. VIOLETA V. JAVAR Acting Head of the PPMD.
    - Indicate in the sealed envelope the RFQ Number, company name, name of company representative, business address and contact details.
  - b. ELECTRONIC MAIL at **bacsealedquotations@sss.gov.ph** with the following requirements:
    - i. Quotations and attachments should be in portable document format (pdf), compressed/zipped and protected by a password. (See attached Guide in Creating password protected zip file folder.)
    - ii. File name of the zip file folder shall be by RFQ number and Project Title.
    - iii. The Supplier who timely submitted its Sealed Quotation but who fails to provide its password on the date and time of opening shall be disqualified.
    - iv. Passwords shall be made available only (not earlier and not beyond the prescribed schedule) through email (bacsealedquotations@sss.gov.ph) or SMS (09062603807) during opening of bids which is scheduled on:

DATE: <u>September 9, 2021</u> TIME: <u>1:30 PM - 2:00 PM</u>

4. After evaluation of offer, the SUPPLIER is required to submit complete documentary requirements after receipt of notice or advise from SSS, as follows: a. Valid Mayor's/Business Permit;<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Per GPPB Resolution No. 09-2020, dated 7 May 2020, Expired Business or Mayor's permit with Official Receipt of renewal application and Unnotarized Omnibus Sworn Statement may be submitted for procurement activities during a State of Calamity, or implementation of community quarantine or similar restrictions subject to compliance therewith after award of contract but before payment.

- b. PhilGEPS Registration Number (Red Membership) or PhilGEPS Certificate (Platinum Membership);
- c. Certificate of Registration whichever may be appropriate under existing laws of the Philippines:
  - i. Bureau of Domestic Trade & Industry (DTI) Sole Proprietorship
  - ii. Incorporation Papers registered and approved by the Securities & Exchange Commission Partnership/Corporation
  - iii. Philippine Contractors Accreditation Board License (PCAB) Contractors/Civil Works
  - iv. Cooperative Development Authority (CDA) Cooperatives;
- d. Latest Annual Income / Business Tax Return (for ABCs above P500K);
- e. BIR Certificate of Registration Form 2303;
- f. SSS ID Number (Employer/Self-Employed);
- g. Notarized Omnibus Sworn Statement (for ABCs above ₽50,000);<sup>1 and</sup>
- h. For ABCs amounting to ₱50,000 and below, the supplier with lowest calculated & responsive quotation/bid shall be required to submit a Notarized Special Power of Attorney (SPA) for Sole Proprietorship or Secretary's Certificate for Partnership/Corporation.

### GENERAL CONDITIONS OF THE CONTRACT

- 1. The SUPPLIER shall deliver the goods in accordance with the description and quantity specifications of the Purchase Order/Job Order;
- 2. The SUPPLIER shall deliver the goods within the period indicated in the Purchase Order. A penalty of 1/10 of 1% of the total amount of the items shall be imposed for every day of delay in delivery.
- 3. The SUPPLIER shall deliver Goods/Services which must all be fresh stock, brandnew, unused, properly sealed, and which are not set to expire within two (2) years from date of delivery to SSS, if applicable.
- 4. The SUPPLIER warrants that all the Goods/Services have no defect arising from design, materials, or workmanship or from any act or omission of the SUPPLIER or the manufacturer that may develop under normal use of consumables, if applicable.
- 5. For Goods, the SUPPLIER shall replace any defective item within twenty-four (24) hours from the time that it was notified by SSS of the defect. Defects detected only after the item is installed and used is covered by the replacement warranty which will be in effect for every item until its expiry date. Replacement of defective item shall have no cost to the SSS, if applicable.
- 6. To assure that manufacturing defects shall be corrected by the SUPPLIER, a warranty security shall be required from the SUPPLIER for a minimum of three (3) months, in the case of expendable items or a minimum period of one (1) year, in the case of non-expendable items, after the acceptance of the delivered items. The obligation for the warranty shall be covered, at the Supplier's option, by either retention money in an amount equivalent to five percent (5%) of total purchase price, or a special bank guarantee equivalent to five percent (5%) of the total purchase price with validity period starting from the date of acceptance. The said amounts shall only be released after the lapse of the warranty period.
- 7. If the SUPPLIER, having been notified, fails to remedy the defect(s) within the specified period, the SSS may proceed to take such remedial action as may be necessary, at the SUPPLIER's risk and expense and without prejudice to any other rights which the SSS may have against the SUPPLIER under these Terms and Conditions and under the applicable law.
- 8. The pricing of the Goods/Services shall be in Peso and inclusive of Twelve Percent (12%) Value-Added Tax (VAT).

### MISCELLANEOUS PROVISIONS

1. Confidentiality. Neither Party shall, without the prior written consent of the other, disclose or make available to any person, make public, or use directly or indirectly, except for the performance and implementation of the works, any confidential information acquired from an information holder in connection with the performance of this Agreement, unless: (i) the information is known to the disclosing Party, as evidenced by its written records, prior to obtaining the same from the information holder and is not otherwise subject to disclosure restrictions on the disclosing Party, (ii) the information is disclosed to the disclosing Party by a third party who did not receive the same, directly or indirectly, from an information holder, and who has no obligation of secrecy with respect thereto, or (iii) required to be disclosed by law.

The obligation of confidentiality by both Parties, as provided herein, shall survive the termination of this Agreement.

- 2. Merger and Consolidation. In case of merger, consolidation or change of ownership of the SUPPLIER with another company, it is the responsibility of the surviving company/consolidated company/acquiring entity to inform SSS of the change in corporate structure/ownership. Failure to do so shall translate in such company assuming all liabilities of the acquired/merged company under this Agreement.
- 3. **Force Majeure.** The SUPPLIER shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that the SUPPLIER's delay in performance or other failure to perform its obligations under this Agreement is the result of a force majeure.

For purposes of this Agreement the terms "force majeure" and "fortuitous event" may be used interchangeably. In this regard, a fortuitous event or force majeure shall be interpreted to mean an event which the SUPPLIER could not have foreseen, or which though foreseen, was inevitable. It shall not include ordinary unfavorable weather conditions; and any other cause the effects of which could have been avoided with the exercise of reasonable diligence by the SUPPLIER. Such events may include, but not limited to, acts of SSS in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

- 4. **Non-Assignment**. Neither Party may assign the Contract in whole or in part without the consent of the other Party.
- 5. Waiver. Failure by either party to insist upon the other the strict performance of any of the terms and conditions hereof shall not be deemed a relinquishment or waiver of any subsequent breach or default of the terms and conditions hereof, which can only be deemed made if expressed in writing and signed by its duly authorized representative. No such waiver shall be construed as modification of any of the provisions of this Agreement or as a waiver of any past or future default or breach hereof, except as expressly stated in such waiver.
- 6. **Cumulative Remedies.** Any and all remedies granted to the Parties under the applicable laws and this Agreement shall be deemed cumulative and may, therefore, at the sole option and discretion, be availed of by the aggrieved Party simultaneously, successively, or independently.
- 7. **No Employer-Employee Relationship**. It is expressly and manifestly understood and agreed upon that the employees of the SUPPLIER assigned to perform the PROJECT are not employees of SSS. Neither is there an employer-employee relationship between SSS and the SUPPLIER.

This Agreement does not create an employer-employee relationship between SSS and the SUPPLIER including its personnel; that the PROJECT rendered by the personnel assigned by the SUPPLIER to SSS in the performance of its obligation under this Agreement do not represent government service and will not be credited as such; that its personnel assigned to SSS are not entitled to benefits enjoyed by SSS' officials and employees such as Personal Economic Relief Allowance (PERA), Representation and Transportation Allowance (RATA), ACA, etc.; that these personnel are not related within the third degree of consanguinity

or affinity to the contracting officer and appointing authority of SSS; that they have not been previously dismissed from the government service by reason of an administrative case; that they have not reached the compulsory retirement age of sixty-five (65); and that they possess the education, experience and skills required to perform the job. The SUPPLIER hereby acknowledges that no authority has been given by SSS to hire any person as an employee of the latter. Any instruction given by SSS or any of its personnel to the SUPPLIER's employees are to be construed merely as a measure taken by the former to ensure and enhance the quality of PROJECT performed hereunder. The SUPPLIER shall, at all times, exercise supervision and control over its employees in the performance of its obligations under this Agreement.

- 8. **Partnership**. Nothing in this Agreement shall constitute a partnership between the Parties. No Party or its agents or employees shall be deemed to be the agent, employee or representative of any other Party.
- 9. Compliance with SS Law. The SUPPLIER shall report all its employees to SSS for coverage and their contributions, as well as all amortizations for salary/education/calamity and other SSS loans shall be updated. Should the SUPPLIER fail to comply with its obligation under the provisions of the SS Law and Employees' Compensation Act, SSS shall have the authority to deduct any unpaid SS and EC contributions, salary, educational, emergency and/or calamity loan amortizations, employer's liability for damages, including interests and penalties from the SUPPLIER's receivables under this Agreement.

Further, prescription does not run against SSS for its failure to demand SS contributions or payments from the SUPPLIER. Moreover, the SUPPLIER shall forever hold in trust SS contributions or payments of its employees until the same is fully remitted to SSS.

- 10. Compliance with Labor Laws. The SUPPLIER, as employer of the personnel assigned to undertake the PROJECT, shall comply with all its obligations under existing laws and their implementing rules and regulations on the payment of minimum wage, overtime pay, and other labor-related benefits as well as remittances or payment of the appropriate amount or contributions/payment (SSS, EC, Pag-IBIG, PhilHealth and taxes) with concerned government agencies/offices.
  - It is agreed further, that prior to the release of any payment by SSS to the SUPPLIER, its President or its duly authorized representative, shall submit a sworn statement that all moneys due to all the employees assigned to the PROJECT as well as benefits by law and other related labor legislation have been paid by the SUPPLIER and that he/she assumed full responsibility thereof.
- 11. Compliance with Tax Laws. The SUPPLIER shall, in compliance with tax laws, pay the applicable taxes in full and on time and shall regularly present to the SSS within the duration of this Agreement, tax clearance from the Bureau of Internal Revenue (BIR) as well as copy of its income and business tax returns duly stamped by the BIR and duly validated with the tax payments made thereon. Failure by the SUPPLIER to comply with the foregoing shall entitle the SSS to suspend payment of the Contract Price.
- 12. **Liquidated Damages.** If the SUPPLIER fails to satisfactorily deliver any or all of the Goods and/or to perform the Services within the period(s) specified in the PBD inclusive of duly granted time extensions if any, SSS shall, without prejudice to its other remedies under this Agreement and under the applicable law, deduct from the Contract Price, as liquidated damages, the applicable rate of one tenth (1/10) of one (1) percent of the cost of the unperformed portion for every day of delay until actual delivery or performance. Once the amount of liquidated damages reaches ten percent (10%), SSS may rescind or terminate this Agreement, without prejudice to other courses of action and remedies open to it.
- 13. Hold Free and Harmless. The SUPPLIER agrees to defend, indemnify, and hold SSS free and harmless from any and all claims, damages, expenses, fines, penalties and/or liabilities of whatever nature and kind, whether in law or equity, that may arise by reason of the implementation of the Agreement. In addition, the SUPPLIER agrees to indemnify SSS for any damage as a result of said implementation.

- 14. **Settlement of Disputes.** All actions and controversies that may arise from the Contract involving but not limited to demands for specific performance of the obligations as specified herein and/or in the interpretation of any provisions or clauses contained herein, shall, in the first instance, be settled within thirty (30) calendar days through amicable means, such as, but not limited to mutual discussion. Should the dispute remain unresolved by the end of the aforementioned period, the dispute shall be settled in accordance with applicable provisions of Republic Act No. 9285, otherwise known as the Alternative Dispute Resolution Act of 2004.
- 15. **Venue of Actions**. Any suit or proceeding arising out of relating to the contract shall be instituted in the appropriate court in Quezon City, parties hereto waiving any other venue.
- 16. **Governing Law.** This Agreement shall be governed by and interpreted according to the laws of the Republic of the Philippines.
- 17. **Amendments.** This Agreement may be amended only in writing and executed by the parties or their duly authorized representatives.
- 18. **Separability**. If any one or more of the provisions contained in this Agreement or any document executed in connection herewith shall be invalid, illegal or unenforceable in any respect under any applicable law, then: (i) the validity, legality and enforceability of the remaining provisions contained herein or therein shall not in any way be affected or impaired and shall remain in full force and effect; and (ii) the invalid, illegal or unenforceable provision shall be replaced by the Parties immediately with a term or provision that is valid, legal and enforceable and that comes closest to expressing the intention of such invalid, illegal or unenforceable term or provision.
- 19. **Binding Effect.** This Agreement shall be binding upon the Parties hereto, their assignee/s and successor/s-in-interest.
- 20. **Non-Publicity**. No press release in oral, written or electronic form shall be issued covering this transaction without prior written approval of SSS. Inclusion in any reference lit shall also be undertaken only upon prior written approval of SSS.

CERTIFICATION	
This is to certify that my Company is updated in the paym and loans to SSS, and conforms with the above Terms a that the data / quotation indicated are va	nd Conditions, and
Owner/Company Representative (Signature over Printed Name)	
Date	

## ANNEX A. SCOPE OF WORKS & TECHNICAL SPECIFICATIONS

Suppliers/Bidders should indicate  $\underline{\text{"COMPLIED"}}$  or  $\underline{\text{"NOT COMPLIED"}}$  to the items below.

ITEM NO.	Scope of Works & Technical Specifications	STATEMENT
		OF COMPLIANCE
1.0	General Requirements	
1.1	Conduct chemical water analysis using the water samples from the close system, open system and make-up line to determine/establish the reference for chemical treatment program necessary to be applied to effectively control the development of scales, algae and other contaminants that may cause to reduce heat transfer of the evaporator and condenser recirculating water system. It shall be based on the acquired water samples at site condition as derived from the result of chemical analysis to ensure successful program and results.	
1.2	Perform <b>monthly</b> on-site water chemical analysis of the re- circulating and make up water for open system. Apply appropriate water treatment to control the engineering parameters based on manufacturer's recommendation and standard industrial practices.	
1.3	Perform the same procedure <b>quarterly</b> for the close system and keep the parameters at standard level to avoid corrosion to the system.	
2.0	Conduct cleaning of the evaporators & condenser tubes at least twice a year or a needed to address excessive fouling, remove scales of shell and tube, poor water, ph level quality, and minimize approach temperature to improve efficient heat transfer or condition of the Chiller. Perform descaling procedure using descalant chemicals, soak the tubes to soften the hard scale, introduced heater if necessary and conduct mechanical brushing/cleaning of the evaporator & condenser tubes, & enclosure/box and schedule the treatment program. Use motorized mechanical equipment to efficiently remove the scale inside the copper tubes. Use appropriate nylon brass for swabbing and removing scales and other unnecessary dirts, and other foreign materials from the tubes.	
2.1	Perform chemical analysis of the <b>close system</b> and determine the water condition and the possible contamination of foreign materials, corrosion contaminants. Introduce appropriate treatment to control fouling, corrosion with inhibitor to protect damaging of copper tube.	
2.2	Perform chemical analysis of the <b>close system</b> and determine the water condition and the possible contamination of foreign materials, corrosion contaminants. Introduce appropriate treatment to control fouling, corrosion with inhibitor to protect damaging of copper tube.	
2.3	Perform water analysis of the <b>open system</b> and determine the necessary treatment requirement to control the growth of alga and fouling, corrosion, scale formation. Implement mechanical and chemical	

	treatment to optimize heat transfer and restore chiller	
	efficiency.	
2.3.1	Cleaning Tube Procedures	
2.3.1.1	If the tubes consist of dirt & sludge, it can usually be removed by means of the brushing process. Drain water sides of the circuit to be cleaned (cooling tower or chilled water). Remove the heads & thoroughly clean each tube with a soft bristle bronze or nylon brush. Do Not USE A STEEL BRUSH. It may damage the tubes. Improve results can be obtained by admitting water in the tube during cleaning process. This can be done by mounting an appropriate size of a brush to efficiently clean the inner surface of the tubes & shell.	
2.3.1.2	If the condenser tubes are fouled with hard scale deposit, they may require descaling process. It is important that before descaling, the tube should be cleaned by the brushing process to determine the extent of scale formation inside the tubes which shall be used as among the basis of determining the exact proportion of chemicals to be applied. Use motorized mechanical brushing equipment.	
2.3.1.3	Apply approved/appropriate descaling chemicals inside the tube and soaked for 16 hours(max.), if necessary. Provide chemical inhibitor to protect the copper from melting while soaking with appropriate composition descalant during the process. Provide heater to the recirculating soaking tank to help effectively loosen the scales inside the tube. Recirculate the system with descallant to efficiently dissolve scale prior to another mechanical brushing with motorized equipment.	
2.3.1.4	Rinse the condenser tubes with fresh water to completely remove the presence of acids and to preven development of corrosion inside the system.	
2.3.1.5	Restore the condenser tube & shell into its original form or state.	
2.3.1.6	After the cleaning, fill-up the system with raw water and apply initial shock treatment in the system using the established data obtained from the water analysis.	
3.0	Remove and conduct cleaning of all the system's strainers using mechanical brushing process and descaling methods as applicable, at <b>least quarterly</b> or <b>as needed</b> to ensure efficient flow of water. Restore the original size of each hole of the strainers including its insulation, wrappings, etc. Rinse the strainers with fresh water, thoroughly cleaned.	
4.0	Conduct cleaning of cooling towers, critical components, assemblies using mechanical brushing & descaling methods at least <b>quarterly</b> or <b>as needed</b> to loosen and remove all foreign deposits attached to the corrugated fillers, louvers, strainer, & cooling tower basin. Use high pressure washer in removing these foreign deposits but with extra care. Rinse these components with fresh water, thoroughly cleaned.	

5.0	Application of different chemicals for treatment (open & close system) data in the water analysis shall be the appropriate amount of chemical order to prevent scale formation, and corrosion.	The established used to determine als to be applied in biological, fouling	
6.0	Conduct daily monitoring in order condition of the cooling water syste and weekly on - site analysis there site analysis must be performed by licensed chemist to ensure effect successful results.	m for the first week eafter. Regular on- y experienced and	
	The winning bidder prior to the services shall submit program of we requirement showing daily/mont activities with corresponding labor which shall be the basis for monitor of billings for payment.	ork for one (1) year hly/quarterly/yearly & materials cost,	
7.0	Use of feed pump/chemical inject dosage/application of chemicals for treatment and adopt the intermitter different biocides to effectively growth and avoid immunity amon Timing of application must be in behavior of biological growth.	or the maintenance on treatment of two prevent biological og micro-organism.	
8.0	The supplier must be available any for the services and consultation treatment procedures and other pertaining thereto. The scope of wo	on on the water r related matters	
9.0	The supplier must conduct ser Certification duly signed by au officials in order to update the personnel and / or its machine's of to the new development and other may help in the effective water treater.	minars and issue thorized company e SSS technical perators pertaining technologies which	
10.0	Sufficient amount of chemicals consumption shall be delivered owithin the duration of the contract.	,	
11.0	Submission of accomplishment services/ activities rendered; que report of actual condition & reconstruction final/summary of report at the end of to final payment. Submitted document book binder form containing all throughout the year.	parterly evaluation ommendation; and of the contract prior ments must be in the activities done	
12.0	Maintenance Schedule for Coolin	,~	01.1
Description	Requirement (Labor for Cleaning/Inspection/Evaluation/	Maintenance (Frequency)	Statement of compliance
Clean suction	Recommendation/Report)	Maakk	
screen	Physically clean screen of all debris	Weekly	
Check tower structure	Check for loose fill, connections, leaks, etc.	Weekly	
Test water samples	,	Weekly (Open)	
	as necessary.	Quarterly	

			(Closed)	
	Perform quarter	ly analysis closed	(Closed)	
	systems.	iy anaiyoio diooca		
Inspect hot	•	vater is flowing	Weekly	
tower basin		in the hot tower	VVCCRIY	
for clogging	basin	in the not tower		
Clean tower		e, and algae from	Weekly	
Olcan tower	hot tower basin	c, and algae nom	VVCCRIY	
13.0		Chemical recomn	nended for water	
		be indicated in the		
			ed Water (Closed	
	Loop)		,	
		Inhibitor for Conde	enser Water (Open	
	Loop)		` .	
	c.) Biocides			
14.0		ce Indicator (KPI)		
14.1	Accepted/ Desi			
Parar	neters	Desired P	arameters	Statement of Compliance
рН		8.3-8.6 ppm	9.0-9.5 ppm max.	
Total Hardness	(CaCO3)	400 ppm max.	N/A	
P-Alkalinity	(0.00)	500 ppm max.	N/A	
M-Alkalinity		400 ppm max.	N/A	
Total Dissolved	Solids	1,500 max.	N/A	
Sulfite	00	600-1,000 max,	N/A	
Cycles of Conce	entration	1,000 111011,	3 to 4	
gyolog of collect				
Nitrite		600-800 ppm		
		max.		
14.2	Prevent scale for	rmation at the cool	ing towers, PVC	
	fillers condense	r & evaporator tul	bes must be	
	achieved.			
14.3	Prevent algae for	rmation at the cooli	ing tower basins	
	and			
	scale formation	at the hot basin of	the cooling towers.	
15.0	_	be done in the pres	ence of EMD	
	representative.			
16.0	Repainting of C	Cooling Tower Pipe	es	
	a) Equalizing pip	•		
	b) Supply and d			
		ipe (10 inch. diame	ter)	
	d) Make-up wat		,	
		water header of th	e cooling towers.	

17.0	PREPARATION	
	All surfaces should be clean, free of oil, grease and other foreign substance prior to application of epoxy primer and enamel paint.	
18.0	CLEAN-UP	
	At completion of work, the contractor shall remove from the premises surplus of all painting materials and debris. The contractor should clean the working area and restore any affected area to its original and aesthetic appearance.	

# ANNEX B. BILL OF QUANTITIES

	DESCRIPTION	)TC	TIMIT	MATERIA	MATERIALS COST	LABOR	LABOR COST		MARK-UP VAT (12%	VAT (12%	TOTAL
í		<u>-</u>		LINO	TOTAL	LINO	TOTAL	COST	(% D.C.)	(DC +MU)	COST
	<b>a</b>	ပ	۵	ш	ட	(E)	I	_	7	¥	_
					C×E		C × G	Н + Ц	(I) × %		X + C + I
Water Trea	Water Treatment of A/C System										
Supply of Chemicals	Supply of materials & Labor of Chemicals for Water Treatment process										
a. Anti-scale	a. Anti-scale Corrosion Inhibitor for	_	ot								
Chilled W ltr/mo	Chilled Water 120 ltr/yr. @ 10 mo										
b. Anti- scal	b. Anti- scale and corrosion inhibitor	_	lot								
for Cooling Pump)	for Cooling Towers (Chemical Feed Pump)										
d.) Bioci Syst 10 lit	d.) Biocides I for Open loop System at (120 liters/yr) @ 10 liters per month	_	ot								
d. Biocides at 120 liters	d. Biocides II for Open loop System at 120 liters/yr (10 li./mo.)	_	lot								
	SUB TOTAL 1.0										
		•					-		-		

7	Chemical Dosage & Labor Works						
2.1	Initial Shock Treatment, Close system	-	lot				
2.2	Initial Shock Treatment, Open system	~	ot				
2.3	De-scaling/swabbing of condenser tubes & Cleaning of Cooling Towers	1	lot				
	SUB TOTAL 2.0						
	Repainting of Cooling Tower Pipes						
	w/ epoxy primer & enamel paint						
	(Equalizing pipes, 4 " & 10 " diameter pipes						
	and supply & drainage pipes)						
	a. Epoxy primer	9	gal.				
	b. Epoxy enamel	9	gal.				
	c. Surface preparation of pipes	_	lot				
	SUB TOTAL 3.0						
	TOTAL ESTIMATED PROJECT COST						