

## CONTRACT FOR THE PREVENTIVE MAINTENANCE SERVICE FOR KIRLOSKAR CHILLER

**THE PUBLIC IS INFORMED:**

This Contract is executed between:

**METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM (MWSS)**, a government instrumentality with corporate powers duly organized and existing by virtue of Republic Act 6234, as amended, holding principal office at Katipunan Road, Balara Quezon City, Metro Manila, represented here by its Administrator, **PDDG. REYNALDO V. VELASCO (Ret.)**, duly authorized for this purpose by the MWSS Board of Trustees by virtue of a Board Resolution,\*

and

**AIRCODE CORPORATION (AIRCODE)**, a corporation duly organized and existing under Philippine Laws, holding principal office at unit 205-206 Cityland Pasong Tamo, Estacion St., Pio Del Pilar, Makati City, represented here by its **PRESIDENT, DANIEL S. LATORRE**, duly authorized for this purpose by its Board of Directors by virtue of a Board Resolution.\*

### ANTECEDENTS

MWSS desires to engage the services of AIRCODE for the preventive maintenance of its Kirloskar Chiller installed at the MWSS Administration Building.

AIRCODE intends to provide the needs of MWSS regarding the preventive maintenance of MWSS' Kirloskar Chiller.

ACCORDINGLY, the parties do hereby agree, as follows:

1. **SERVICE LOCATION:** Services detailed herein will be performed on equipment located and installed at MWSS Compound, Kalipunan Ave, Matandang Balara, Quezon City, Philippines.
2. **TERM:** The Contract shall for a period of One (1) Year commencing the date of \_\_\_\_\_ hereinafter called "the period" and thereafter and until this agreement shall be terminated as hereinafter provided carried out at the Customer's worksite of the equipment specified hereinafter called the equipment and in accordance with the terms and conditions specified scope under this agreement.
3. **EQUIPMENT COVERAGE:** Services detailed herein will be performed on the equipment detailed in the table below:

Item	Description
1	KIRLOSKAR CHILLER KSC079

4. **SCOPE OF AGREEMENT**
  - a. AIRCODE undertakes to provide Preventive Maintenance Services in accordance to this service agreement, to ensure that they run and operate in good working condition as required by MWSS.
  - b. In consideration for the performance by AIRCODE of its obligation under this Agreement, MWSS shall pay AIRCODE the following service fee:

Description	Months	Contract Price (Monthly)	Total Contract Price (Annual; 12 months)
Preventive Service Agreement Proposal for Monthly Operatorship and Periodic Maintenance for Kirloskar Chiller	12	Php 15,000.00	Php 180,000.00

*h*

**Note:** The above fee is inclusive of VAT, payable within thirty (30) days upon presentation of invoice and complete submission of service report as requirement for payment purposes.

#### 5. SCOPE OF PREVENTIVE MAINTENANCE SERVICE

The following scope of service will be performed as necessary and if applicable after assessment and as adjudged to be the best option in order to keep the air-conditioning system operating on the parameters of its working condition with optimum energy efficiency.

**Note:** A once-a-month inspection procedure will be formed simultaneously with the quarterly, semi-annual and annual inspections, as it overlaps in schedule.

##### a. TECHNICAL MONITORING & INSPECTION - MONTHLY BASIS

A once-a-month visit inspection will be conducted to perform preventive maintenance. The maintenance services or any repair works shall be carried out during what is considered to be regular working dayshours. Weekdays (Mondays to Friday, 8:30AM – 5:00PM. During weekends, (only on Saturdays), the working hours start at 8:30AM to 5:00PM.

- Monthly Agreement services will be performed during the period the Chiller is not required to be operated.
- Discuss all preventive maintenance activities to allow close coordination with the Customer's Chief Engineer or Engineer-in-charge wherein procedures and schedules shall be discussed, planned and agreed upon by both parties.
- Discuss with your operator the problems encountered with your Kirloskar chillers.
- Check the chiller operating performance and conduct control test.
- Evaluate operator log and make needed recommendations for any unusual conditions when needed.
- Check the compressor under load and unload conditions.
- Check the condenser and evaporator operating performance.
- Test operation of oil pump and oil sump heater
- Perform external leak test.
- Conduct an external leak check and identify the leak cause.
- Material and labor supplied will be charged accordingly for repair.
- Visual inspection and observe abnormal sound and vibration.
- Visual checking for leaks and recommend corrective measures. (Repair of leaks are to be covered by a separate proposal.) Add refrigerant and oil if recommended. (Refrigerant and oil are to be supplied by the owner)
- Log the following pressure and temperature readings :
  - Suction pressure
  - Oil Tank temperature
  - Chilled water entering and leaving temperature
  - Voltage
  - Current Draw
- Tighten loose nuts, bolts and screws.
- Check operating and safety controls.
- Check operating log of temperature, pressure, voltages, and amperages.
- Check operation of the lubrication system.
- Perform thermal scanning of all electrical circuits.
- Verify chilled water flow interlock switch for proper operation.
- Record operating conditions.
- Provide written report to the owner of the work done.

##### b. QUARTERLY PREVENTIVE MAINTENANCE SERVICES

- Check all control set points and make adjustments if needed.
- Check the lubrication system and check oil heater operation.
- Check for refrigerant and oil leaks and make necessary adjustments and minor repair.
- Check the operation safety and operating controls/devices.
- Check the required water flow across the condenser and cooler.
- Perform thermal scanning of motor control circuits.
- Check all gauges and thermometer.
- Perform cleaning as needed and check terminal connections for tightness. Examine starters, contractors and relays for burned, pitted and worn contacts.

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- Check differential pressure switch, oil and refrigerant pressure gauges, all pressure switches and interlocks.
- Test the operation of the oil pump and oil sump heater.
- Perform external leak test.
- Provide a written report of work completed and indicate all detected deficiencies (if any).

**c. ANNUAL AGREEMENT SERVICES: SCOPE OF WORKS**

\* Shut down the chiller once each year to check the items listed below.

- Perform and scan for all electrical connection
- Check heater and thermostat
- Check all the oil system components including the oil cooler, oil strainer and the solenoid valves.
- Check all terminals and tighten connections, if necessary.
- Check display data accuracy and set points.
- Check the condenser and controller for the following items:
- Visual checking for refrigerant leak (leak repair, if any, will be quoted separately)
- Check mounting integrity of all safety and temperature monitoring controls.
- Motor terminals and control panel terminals.
- Tighten oil heater leads and record amperages.
- Log the following pressure and temperature readings :
  - Suction pressure
  - Oil tank temperature
  - Chilled water entering and leaving temperature
  - Voltage
  - Current
- Provide a written report of work completed and indicate all detected deficiencies (if any).

**6. CHILLER MAINTENANCE PROGRAM: Scheduled Maintenance Agreement**

- a. AIRCODE will provide recommendations for more efficient operating conditions of the units involved in the preventive maintenance program.
- b. Preventive maintenance will be performed by two (2) field technicians and/or one (1) field engineer or senior engineer, if the need arises. An equally qualified personnel shall substitute or be replace him in the event of an emergency or absence.

**7. TERMS AND CONDITIONS**

a. Initial Inspection :

During the first 30 days of this agreement, an initial inspection will conducted to determine the working condition. Through the course of our inspection if we should any equipment that needs repair or replacement of parts, we will recommend in writing the condition and the proper actions to be taken. Upon this written notification, it is understood that we will not be held responsible for the present or future repair or replacement, or operability of the specific unit, until such time the equipment is brought back to operating conditions acceptable to us.

b. Exclusions :

The following are not included in this agreement

- Operation of the Equipment
- Overhauling of pumps, compressors, pump gearboxes and starter controls.
- Rewinding and/or reconditioning of electric motors.
- Replacement and installation of shaft seals, packing, bearings, controllers and other parts or accessories.
- Dismantling, installation, disassembly, re-assembly, aligning and re-insulation of units, components or equipment.
- Major leak repair which necessitates refrigerant evacuation, draining of oil, flushing, vacuuming, dehydration, welding, brazing, etc. of the system.
- Leak testing, repair, re-tubing and mechanical or chemical de-scaling of condenser and cooler tubes.
- Flushing and vacuuming/dehydration of the refrigerant system.
- Evacuating and recharging of refrigerant from and into the system using additional equipment.
- Brazing, welding, painting or fabricating works.
- Rewiring of electrical and/or electronic controls and accessories.
- Extensive water balancing.
- Retrofilling works.

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- Retrofilling works.

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IN WITNESS WHEREOF THE PARTIES HERETO HAVE HEREUNTO SET THEIR HANDS this  
\_\_\_\_ day of \_\_\_\_\_ 2018 at \_\_\_\_\_ City.

For and behalf of **METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM:**

**PDDG. REYNALDO V. VELASCO**  
*R. Velasco*  
\_\_\_\_\_  
(Customer's Representative Name)

*[Signature]*  
\_\_\_\_\_  
(Signature)

For and on behalf of **AIRCODE CORPORATION.**

**DANIEL S. LATORRE – President**  
\_\_\_\_\_  
(Contractor's Representative Name)

*[Signature]*  
\_\_\_\_\_  
(Signature)

*[Signature]*  
\_\_\_\_\_  
(Customer's Witness)

\_\_\_\_\_  
(Signature)

**ANGELITO P. BASE**  
\_\_\_\_\_  
(Contractor Witness)

*[Signature]*  
\_\_\_\_\_  
(Signature)

*[Signature]*

**ACKNOWLEDGEMENT**

REPUBLIC OF THE PHILIPPINES)  
\_\_\_\_\_ ) S.S.

*NOT. J. P. 2018*

**BEFORE ME**, this \_\_\_\_ day of \_\_\_\_\_, 2018 in the Municipality of \_\_\_\_\_, Philippines personally appeared.

Name	Valid ID	Date / Place issued
<b>DANIEL S. LATORRE</b>	PRC# _____	September 14, 1979 City of Manila
<b>PDDG. REYNALDO V. VELASCO</b>	Passport No. _____	January 6, 2016 DFA-SM Megamall

Both known to me and to me know to be the same persons who executed the foregoing instrument for and in behalf of the party they represent and they acknowledged to me that the same are their own personal act and deeds.

WITNESS MY HAND AND SEAL on the date and in the place first above-written

NOTARY PUBLIC

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Series of 2018.

**ATTY. JOVENCIO F. FULGUERAS**  
Notary Public  
Expires Dec. 31, 2019  
Roll of Attorney No. 30906  
IBP No. 016526/10.26.2017/Pasig City  
PTR No. 3882687-C/A.16.2017/Q.C.  
MCLE Compliance No. V - 0606760  
ADD: MWSS Bldg. Katipunan Rd. Bafara, Q.C

*A*