103786-CHE-E-2006
Chemist

Holds a B. Sc. in Special Chemistry and has over 9 years of solid experience in power plants including varied water treatment technologies.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	01/03/1984
Gender	:	Male
Marital Status	:	Married
Residence	:	Currently KSA

EDUCATION

: B. Sc. in Special Chemistry, Al-Azhar University, 2006

LANGUAGES

Arabic	:	Native Language
English	:	Very Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point), Internet
: Adobe Photoshop
: Flash

TRAINING COURSES AND CERTIFICATIONS

: Water treatment (Solid Contact Clarifier, DAF, chemical feed).
: Sea intake system.
: Demi. Desal. Plant.
: Chemical treatment.
: WWT, Sewage, Sludge, Oil Separator.
: Cooling Water (CCW, chiller).
: HRSG (Boiler chemistry).
: Chemical feed system.
: Water analysis training.
: Electro-chlorination system.
: Environment, air and water pollution.
: Chemical handling, hazards.
: Scaling and corrosion.

: Training on Understanding the Requirements of ISO.
: Fuel gas compressor system.
: Vibration monitoring system.
: Presentation & communication skills.
: SAP system.
: Ampilissma program training and application in El-Atf Power Plant (monitoring store & maintenance and work orders issuing).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From May 2013 till now
Employer : First National Operation and Maintenance Company Ltd. (NOMAC)
Project : Qurayyah Independent Combined Cycle Power Plant (QIPP), the biggest combined cycle power plant all over the world, 4100MW (12x230MW GT units), (12 HRSG units), (6x230MW ST units) – KSA
Job title : Chemist
Job Description : First attended the construction & commissioning and performance of (QURAYYAH INDEPENDENT POWER PROJECT), then the operation/monitoring and chemistry control of the following systems:

- Traditional sea water pre-treatment system (1400 m3/h) including DAF, DMF with its chemical dosing system (Coagulant, Flocculant, and Disinfectant).
- RO plant (3 streams x 241 m3/h), each stream consist of 2 passes with the related chemical dosing system (SMBS, sulfuric acid, caustic soda, antiscalant).
- MB units (3 x 95 m3/h) provided with Regeneration & Neutralization systems.
- Electro-chlorination unit, "4 generators x 90 m3/h" (product of 2000 ppm NaOCL).
- Potable water system (2 tanks x 150 m3), with chemical dosing skids "Calcium Chloride, Sulfuric Acid and sodium hypochlorite".
- Chemistry of 12 HRSG each one have (HPD of 85 bar, LPD of 8 bar), with the related chemical feed system (Ammonia and Tri Sodium Phosphate).
- 6 Closed Cooling Water Systems with its chemical addition "hydrazine".
- 2 chiller water units (2 Thermal Storage Tanks x 37,500 m3); chemistry and related chemical feed "Corrosion guard".
- 16 cooling towers (480 m3/each); chemistry and related chemical feed "Bo guard & total guard".
- Industrial Waste Water Treatment unit (650 m3/h).
- 4 Oil separators "Corrugated Plate Interceptor CPI" total capacity 100 m3/h.
- Sewage Treatment Plant (STP) (2 units with max 84 m3/day).
- 1 Sludge dehydrator package with polymer dosing skid.

Dates : From Mar. 2011 till May 2013
Employer : Middle Delta for Electricity Production Company (MDEPC)
Project : El-Atf Combined Cycle Power Plant 750MW (2x250MW GT units), (2 HRSG units), (1x250MW ST units)

Job title : Chemist

Job Description : First attended the commissioning and performance of El-Atf power project, then the operation/monitoring and chemistry control of the following systems:

- Traditional river water treatment system (85 m3/h) including 2 Solid Contact Clarifies and 2 Dual Media Filters with its chemical dosing system (coagulant, flocculant, and disinfectant).
- Full Demineralization plant (2 trains separately) (2 x 75 m3/h), each train consist of:
  - 1 Granular Activated Carbon Filter.
  - 1 Cation Exchanger "strong cation + weak cation".
  - 1 De-carbonator.
  - 1 Anion Exchanger "Strong Anion + Weak Anion".
  - 1 Mixed Bed "Strong Cation, Strong Anion".
- Chemistry of 2 HRSG each one have (HPD of 125 bar, IPD of 34 bar, LPD of 8 bar), with its chemical feed system (Ammonia, Tri Sodium Phosphate and Hydrazine) 1 Closed Cooling Water System with its chemical addition "hydrazine".
- Hydrogen generation unit.
- Industrial Waste Water Treatment unit (80 m3/h).
- Filter press for sludge dehydration, with polymer dosing skid.
- 1 Oil separators (Corrugated Plate Interceptor CPI) "20 m3/h".

Dates : From Jun. 2008 till Mar. 2011

Employer : Middle Delta for Electricity Production Company (MDEPC)

Project : Mahmoudia Combined Cycle Power Plant 300MW (8x25MW GT units), (8 HRSG units), (2x50MW ST units)

Job title : Chemist

Job Description : Worked as a Laboratory Chemist & Water Treatment Plant Operator in Operation/Monitoring and chemistry control of the following systems:

- Traditional river water pre-treatment system (30 m3/h) including 2 Solid Contact Clarifies and 2 Sand Filters with its chemical dosing system (Coagulant, Disinfectant).
- Full Demineralization plant (25 m3/h) including:
  - 1 common Granular Activated Carbon Filter.
  - 2 cation exchangers contain "strong cation, weak cation".
  - 1 common de-carbonator.
  - 2 anion exchangers contain "Strong Anion, Weak Anion".
  - 1 common Mixed Bed contain "Strong Cation, Strong Anion".
- Chemistry of 8 HRSG each one have (IPD of 34 bar), with its chemical feed system (Ammonia, Tri Sodium Phosphate and Hydrazine).
- Closed Cooling Water System with its chemical addition hydrazine.
- Industrial Waste Water Treatment unit (25 m3/h).
- Filter press for sludge dehydration, with polymer dosing skid.

Dates : From Mar. 2007 till Jun. 2008

Employer : JAPCO

Job title : Medical Representative

Field of experience :

- Perform a variety of routine, complex and special chemical & biological laboratory tests on samples for all required systems (using Stander Test Method & ASTM as original references & HACH instruments and reagents) to ensure water quality within required limits and standards for all systems, Analyze and communicate lab results.
- Operation, monitoring of various water treatment processes:
  - Pretreatment processes "SCC, DAF, DMF, UF, MF" and related chemical feed systems.
  - Ion exchange, Softeners, Condensate polishing and related chemical feed systems.
  - RO plant.
  - WWT plant and related chemical feed systems.
- Coordination with shift charge engineer / shift supervisor during unit start-up, shutdown and normal running of the plant and maintain the chemistry under control to achieve quality of work.
- Follow-up day-to-day maintenance and the annual maintenance of chemical plants.
- Carry out the trouble shooting of the chemical plants.
- Chemistry control of water/steam cycle, cooling towers, chilled water and closed cooling systems, Improvement of the power station performance by oversee the ways in which chemistry can be used.
- Handling & calibration of laboratory testing instruments & equipment's (as; pH meter, conductivity meter, turbidity meter, spectrophotometer, Karl Fischer, SDI measuring instrument, analytical balance, electronic balance, glassware, …. etc.
- Monitoring and Calibration of all online analyzers of water, waste water and HRSG sampling systems (PH & COND. & AC & Na & DO & SIO2 & Fe, TOC and FRC, etc.).
- Develop, review, and revise established laboratory SOP to ensure compliance with rules and regulations.
- Comply, record, review, and manage laboratory data and records; ensure the calculations are performed accurately; develop methods and procedures for record keeping and data retrieval.
- Prepare / supervise all the chemical preparations in the lab. / field.
- Perform LSI, S&DI calculations and SDI test of different processes.
- Acid & alkaline cleaning of different systems (RO membranes, ECP generators and CCW plate heat exchangers "including monitoring the different parameters during cleaning process").
- Preservation of different systems equipment's as HRSG boilers, RO membranes, ion exchange resin as per design manual and monitoring the different parameter during preservation period.
- Prepare daily & monthly calculation report for:
  - Water production & consumption (from raw to final).
  - Chemicals (dosing rates & consumption).
  - Calculation and troubleshooting the proper chemicals & dosing rate and consumption.
- Conduct training courses for newly joined chemists and technician.
- Monitoring & reporting stack emission.
- Ensure proper waste disposal measures.
- Ensure availability of MSDS of chemicals.
- Ensure availability of suitable PPE, eyewash facility and first aid measures in the chemical handling areas.

- Responsible for the chemical hazards & dependent person's safety in the field by Commitment to and following up HSE procedures & MSDS instructions.