UNIVERSITY OF SOUTHERN CALIFORNIA

Water Treatment Technician II

Job Code: 180267

Grade: TA
OT Eligible: Yes
Comp Approval: 3/9/2010

**JOB SUMMARY:**

Provides leadership and guidance to journeymen and Water Treatment Technicians. Performs routine maintenance rounds on closed loop and open loop systems. Monitors all water cooling towers and chilled water systems in order to maintain water quality and maximize energy conservation. Inspects water level, adjusts set points, cleans probes, monitors backwash and changes filters as needed. Tests and monitors water at specific set point for proper working result. Keeps cooling towers, condensers and equipment maintained to ensure efficiency.

**JOB ACCOUNTABILITIES:**

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Performs routine maintenance on closed loop and open loop systems. Monitors all water cooling towers and chilled water systems in order to maintain water quality and maximize energy conservation. Inspects water level, adjusts set points, cleans probes, monitors backwash and changes filters as needed. Identifies technical and equipment problems.

______  ______ Replaces and adjusts belts on all water cooling towers. Ensures tower bearings are adequately oiled and greased. Repairs makeup water valves.

______  ______ Cleans condensers and cooling towers as scheduled or emergency request. Prepares cooling towers for cleaning and/or sanitizing. Ensures cooling towers are working at maximum efficiency.

______  ______ Purchases parts and chemicals for cooling towers and closed loop water treatment program. Arranges for chemical deliveries with vendor to different sites on campus.

______  ______ Cleans thermal energy storages (T.E.S.) filters as required. Performs chemical analysis. Adds chemicals to protect system metals as needed.

______  ______ Inputs thermal energy storages (T.E.S) data in the computer for trending reports, including pictures and usage of chemicals. Downloads nightly central plant water treatment operations on a daily basis. Checks for system irregularities. Troubleshoots controller connectivity issues.

______  ______ Tests heating and chilled water closed loop systems for proper chemical residuals. Makes additions and cleans systems as necessary.

______  ______ Installs system components, controllers, acid injectors, pumps, solenoids, etc. Programs parameter alarms, set points and different functions with schedule for proper chemical feeding. Monitors controller output. Troubleshoots controller connectivity issues.

______  ______ Interfaces with outside vendors for new equipment installations and repairs.

______  ______ Communicates with Zone Maintenance department to ensure their needs are met as it pertains to chemical product placement.

______  ______ Prepares reports and/or maintains maintenance records, as needed.
Trains other journeymen, Water Treatment Technicians, or other employees on specific skills and tasks, as required. Identifies additional training or defines needs for new or continuing training that would benefit staff.

Responds to on-call emergencies related to water treatment systems, as required. Performs other related duties as assigned or requested. The university reserves the right to add or change duties at any time.

*Select E (ESSENTIAL), M (MARGINAL) or NA (NON-APPLICABLE) to denote importance of each job function to position.

**EMERGENCY RESPONSE/RECOVERY:**

Essential:  
- Yes In the event of an emergency, the employee holding this position is required to “report to duty” in accordance with the university’s Emergency Operations Plan and/or the employee’s department’s emergency response and/or recovery plans. Familiarity with those plans and regular training to implement those plans is required. During or immediately following an emergency, the employee will be notified to assist in the emergency response efforts, and mobilize other staff members if needed.

**JOB QUALIFICATIONS:**

**Minimum Education:**
- High school or equivalent
- Specialized/technical training

**Minimum Experience:**
- 3 years

**Minimum Field of Expertise:**
- Experience in the maintenance of water treatment industry with cooling towers, boilers and/or water chemical testing and treatment. Familiar with city and state building codes, OSHA rules and regulations, standard safety practices and equipment, and other requirements for workplace safety.

**Preferred Education:**
- Related undergraduate study

**Skills: Administrative:**
- Communicate with others to gather information
- Customer service
- Prioritize different projects
- Understand and apply policies and procedures

**Skills: Machine/Equipment:**
- Calculator
- Computer network (department or school)
- Computer network (university)
- Computer peripheral equipment
- Fax
- Personal computer
- Photocopyer

**Skills: Trade/Auxiliary:**
- Estimate materials costs
Handle and move objects
Identify technical and equipment problems
Inspect and evaluate the quality of products
Install equipment, machines, or wiring to meet specifications
Lead/guidance skills
Maintain inventories
Maintain records, logs, etc.
Monitor events, materials and/or surroundings
Prepare reports and/or maintenance records
Purchase materials and services
Read, write, and follow verbal instructions
Respond to emergency situations
Use and/or operate various stationary machinery, hand held power tools, and/or non power tools

**Supervises: Level:**
May oversee student, temporary and/or resource workers.
Trains employees on specific skills and tasks as required.

**Comments:**
May require frequent bending, reaching, climbing and heavy physical effort (over 50 pounds). Required to handle chemicals for water treatment.

**SIGNATURES:**

Employee: ____________________________ Date: ____________________________

Supervisor: ____________________________ Date: ____________________________

The above statements are intended to describe the general nature and level of work being performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

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