

## **WATER UTILITY OPERATOR**

### **Task List**

1. Monitors pumping plant operations and reservoirs by reviewing and observing computer displays/data in order to obtain information such as water pressure levels, flows, elevations, pumping plant regulator vaults, motor and pump bearing temperatures and vibrations, reservoir elevation, and which pumps are in use in order to operate the pumping plant (e.g. starting and stopping pumps, opening, closing, and adjusting by-pass valves and system gate valves according to system demand from computer displays) and makes hard copies of various displays and/or records readings into a computer log (e.g. information such as calls received, plant activities, and operational changes) to maintain pumping plant operations and inform related parties including but not limited to Water Operations Management, the Water Control Section, and the Chief Operations Field Supervisor.
2. Inspects reservoirs, debris basins, dam walls, sump areas, drainage ditches and walkways (visually) by walking across the top of the dam in order to look for cracks and/or wet spots due to water seepage (i.e. weakening of the structural soundness of the structure) and checks for plant growth or rodents in order to determine if debris should be removed using shovels and rakes, to report potential diseases and/or to determine and prevent dam failures and ensure water quality and safety of major dam facilities.
3. Inspects the oil level and takes temperature readings for pumps, motors, and bearings (visually) and when necessary, changes or applies grease and oil (manually) by taking into consideration the appropriate levels for lubrication in order to extend the life of the equipment, for proper operation, and to fill the reservoir to the appropriate level.
4. Inspects the Department of Water and Power (DWP) facilities and property gates (visually) to determine if they locked and secured, and if not, locks the gates and reports to management if the locks appear to have been compromised (e.g. tampered).
5. Inspects and measures the gravel packing level of the water well casings visually and using a tape measure and replaces gravel as necessary to maintain proper filtering conditions.
6. Reads observation well water levels, inflow and outflow meters, a telemeter recorder, or gauges and counts the rungs of the water tower ladder or uses a whistle tape, piezometer, water line pressure or high-pressure nitrogen recorder and/or air pump in order to be aware of operating conditions, measure water flowing through a V-notch weir, open and close inlet and outlet gates as necessary to regulate water flow and maintain predesignated operating elevations, calculate elevations of reservoirs as well as the average water inflow and outflow (monthly), raise and lower water pressures and flows at pumping plants, record readings (e.g. flows, pressures, and what units are running), facilitate work done by gate and regulator crews and electricians, and to determine the depth of water in wells, reservoir water seepage, water elevation, clarity, water level, or deviation of water from the designated operating level and to ensure that the signals sent to Los Angeles Water System Data Acquisition and Control (LAWSDAC) are accurate.
7. Observes the Mercoids pressure switch in order to determine whether to start or stop pumps at a given pressure setting.

8. Hooks up compressors, generators, portable pumps, boats, or portable toilets to vehicles such as trailers, cars, and/or trucks in order to transport them to and from reservoirs.
9. Determines if there are early warning signals of potential electrical, mechanical, and/or hydraulic failure of test equipment (e.g. overheating) using one's own hands and/or equipment such as an infrared temperature sensor or listening device (e.g. stethoscope) to detect and correct any potential problems and attaches tags to malfunctioning equipment or equipment under repair in order to alert other workers when equipment should not be operated.
10. Performs minor or routine maintenance such as cleaning graffiti from wells and control cabinets, replacing the air filter in an air handling system, repairing water control lines and tank and reservoir cleaning, replacing ink and pen for recording charts, and cleaning, sweeping, polishing, painting, and/or repairing leaks at a plant using equipment such as pliers, screw drivers, wrenches, and/or other associated tools and records all maintenance activities (e.g. pressure settings, station changes, and/or installation or repair of equipment) into logs in order to ensure proper working conditions and proper station operation and to keep operators informed of conditions.
11. Sets and resets relief valves (manually) by turning valves to adjust to a predetermined pressure setting in order to keep from over-pressurizing water lines.
12. Flushes the suppressor line of air and water using pumps (e.g. hand pump and/or pressure gate) to clear the line of sediment and recharges the suppressor by pumping the suppressor back to the predesignated mixture of air and water as necessary in order to attain desired levels resulting in a more accurate pressure read.
13. Communicates with the public, gate crews, regulator crews, the Water Control Section, the Dam Surveillance Section and other Water Utility Operators in the field (in-person, using a telephone, mobile radio unit and/or a 2-way radio) by listening to, notifying, reporting, providing and obtaining information pertaining to reservoir elevation and flow readings, special/emergency operations (e.g. fire, earthquake, main break, pressure problem, excessive flow, or dam or seepage problems) or general inquiries/concerns in order to keep the public informed, to confirm system operation, and to handle emergency operations.
14. Tests valves, pumps, and diesel engines on emergency back-up pumps by using a shut-in-test, pressure gage, and completing steps including, but not limited to, checking fluids, running the engine up to temperature, and completing a reading to determine their efficiency, pump capacity, and proper operation.
15. Properly disposes of hazardous materials including muriatic acid, waste oil, solvents, gasoline, diesel fuel, chlorine, mercury, sulfuric acid, antifreeze, aerosol paint, empty paint cans, spray cans of lubricants, and weed abatement poisons in order to adhere to CAL-OSHA regulations.
16. Reads blueprints of City streets sufficient to locate wells, valves, and lines in order to isolate a pump station and know which valves to shut off.
17. Writes daily, weekly, and monthly reports (hand written or electronically using Microsoft Word) for management and other trades including, but not limited to, engineers and hydrographers pertaining to operations such as maintenance, reservoir levels, pumping plants, water wells, precipitation, temperature, humidity, the water master report, and quarterly pump-hour usage in order to assist and inform the appropriate parties regarding various conditions.