

<b>Job Demand Analysis</b>	
Placement/Job Title:	Treatment Technician
Division/Branch:	Infrastructure and Operations / Water Supply and Sewerage
Date of Assessment:	5 October 2012
Assessment Completed By:	Human Resources Advisor 4 Supervisor Treatment
Standard Hours:	7am to 4pm on a nine day fortnight
Variable Hours:	<input checked="" type="checkbox"/> Overtime <input checked="" type="checkbox"/> On Call <input checked="" type="checkbox"/> Call Outs
Breaks / Rest Periods:	30 minute lunch break

#### **Environmental/Psychosocial Factors**

- Depending on work demands-can work alone or on teams.
- Is exposed to all weather conditions and may work in uneven/sloped terrain and slippery/muddy ground surfaces (gum boots are available for use). The work area may be surrounded by water and hazards may be present. Snakes, spiders and other vermin may also be present in the vicinity of the work area.
- Works in an office environment when using the SCADA system to monitor water and sewerage operations.
- Works in a laboratory testing water and sewerage.
- May be required to perform overtime and may be called out for emergency situations. However, this is only required on an intermittent basis.

#### **Job Descriptions**

To operate the water filtration and sewerage treatment plants in such a way that water and effluent quality meets the requirements of relevant authorities  
Please see corresponding position description for further information.

<b>Physical Demands</b>	<b>Rarely 1-5%</b>	<b>Occasional 6-33%</b>	<b>Frequent 34-66%</b>	<b>Continuous 67-100%</b>	<b>Comments</b>
Standing				<b>X</b>	In plant or laboratory; outdoors.
Walking				<b>X</b>	In plant or laboratory; outdoors.
Sitting		<b>X</b>			To drive, usually interchanged with walking and standing, usually 10-15 minute drive between sites; computer work at treatment plant.

Bending/ Stooping			X		To reach tap, esky, retrieve bottles, reach into cupboards in lab.
Squatting/ Crouching		X			While sampling and doing routine tasks.
Kneeling	X				Rarely required
Reaching overhead		X			Climbing into pits, opening and closing overhead valves for chemical silos and pits.
Reaching waist level/below waist level		X			Lifting chemical bags in and out of ute when doing routine plant and grounds maintenance.
Trunk Rotation			X		Required to load and unload chemicals.
Repetitive forearm, hand and finger movements			X		When completing lab tests, wiping bottles, undoing lids, tearing open buffer and using computers.
Manual dexterity and handling				X	When loading and unloading chemicals and carrying out routine maintenance.

<b>Manual Handling</b>			
	<b>Weight:</b>	<b>Frequency:</b>	<b>Comments:</b>
Lifting	Up to 25kg	Occasional	Lifted at various heights between floor to shoulder level, lifting fittings.
	>25kg	Occasional	Lifted at various heights between floor to shoulder level, lifting fittings. A two person lift is used where possible
Carrying	Up to 25kg	Occasional	Carried over short distances, no more than 10-20 metres, carrying fittings and parts. Wheelbarrows and trolleys (with jacks) are available for use.
Pushing / pulling	Varied	Frequently	Moving equipment, i.e. trailers, sludge pontoons, packed bags.
This job falls into the medium physical demands category.			

<b>Tools Used</b>		
<b>Tool:</b>	<b>Weight:</b>	<b>Comments:</b>
Whipper snipper	8kg	Cylindrical grasp.
Back pack spray unit	20kg	Lateral grasp interchanged with cylindrical grasp.
20L Drums	25kg	25kg drums but only filled 20L level. Hook grasp.
Chlorine analyser	800g	Nil.
Manhole lifting device	1kg	Required to lift sewer man holes for inspections.

Ladder	35kg	Used for climbing.
Various Hand Tools	2kg	Nil
Drill	5kg	Nil

<b>Balance</b>		
	<b>Exposure to:</b>	<b>Comments:</b>
Level ground	Yes	When doing office and laboratory work.
Uneven ground	Yes	When working on job sites, when working in the bush or slanted surfaces, on dirt roads or around open trenches.
Unprotected high levels	Yes	Around water and sewerage plants and reservoirs. PPE supplied.

<b>Environmental Conditions</b>		
	<b>Exposure to:</b>	<b>Comments:</b>
Inside work	Yes	Doing office work.
Outside work	Yes	When working on the job sites.
Night Work	Yes	Occasionally required.
Extreme heat	Yes	Exposure to the weather elements.
Extreme cold	Yes	
Humid or wet	Yes	
Noise	Yes	When operating equipment or when on a job site. Hearing protection is to be worn in the blower room at the water treatment plant.
Vibration	No	Not applicable.
Mechanical hazards	Yes	Working around operating machinery.
Electrical hazards	Yes	May be required to check faults and circuit breakers when called out for break downs. An electrician should be called.
Risk of burns	Yes	When working with chemicals. PPE is provided including; glasses, masks and full body overalls as required.
Radiant energy	Yes	Sun exposure.
Poor ventilation	Yes	Rarely required.
Moving objects	Yes	Hanging objects, most pumps are guarded. When encountering vehicles or traffic. Also when working around machinery.
Sharp tools	Yes	Chain saws, knives, hedger.
Cluttered or slippery floors	Yes	Chemical spillages.
Elevated surfaces	Yes	When climbing ladders or working on elevated platforms.
Lighting	N/A	May encounter lighting difficulties at night.
Exposure to fumes/odours/ dusts/mists/gases	Yes	When working around the sewer and when working with treatment chemicals – Quicklime, chlorine gas, Polymer, hydrated glue, gaseous carbon dioxide, sodium chloride, sodium bisulphate, fluorosilic acid, alum, sodium hydroxide, sodium hypochlorite, hydrogen sulphide.
Exposure to biological hazards	Yes	Sharps and raw sewage

<b>Sensory/Communication</b>		
	<b>Required:</b>	<b>Comments:</b>
Vision	Yes	To be able to see water sample quality.
Hearing	Yes	To hear usual noises of the plant and communicate with co-workers.
Speech	Yes	To communicate with co-workers.
Reading	Yes	Laboratory instructions, documentation and sampling results.
Writing	Yes	Laboratory documentation and sampling results.
Numerical ability	Yes	Laboratory test preparation and sampling.

This Job Demand Analysis has been assessed and approved by the relevant Supervisor and corresponding Manager within Dubbo Regional Council. This Job Demand Analysis will be implemented on 8 April 2013.