

Utah Mastery - Treatment

Objective	Treatment I		Treatment II		Treatment III		Treatment IV	
	Points Possible	Average Points						
Perform Admin Duties	4	4.58	5	3.57	5	2.89	4	2.92
<i>Perform administrative duties, such as complying with regulatory and recordkeeping requirements.</i>								
Perform Admin Duties-Math							2	0.92
<i>Perform mathematical calculations related to administrative duties, such as budgeting.</i>								
Collect Samples & Interpret Analysis	7	4.67	3	1.21	6	4.11	7	4.08
<i>Perform mathematical calculations related to evaluating equipment, such as calculating pressure head</i>								
Evaluate Wastestream-Math	1	0.58	1	0.43			1	0.77
<i>Inspect equipment and read charts, meters and pressure gauges</i>								
Effluent Discharge & Reuse-Math			1	0.29	1	0.22		
<i>Perform mathematical calculations related to discharge to lagoons, on-site disposal, solids composting, etc.</i>								
Effluent Discharge & Reuse	1	0.83						
<i>Monitor, evaluate, and adjust discharge to lagoons, on-site disposal, solids composting, etc.</i>								
Evaluate Equipment-Math			1	0.5	2	1.44	2	0.92
<i>Perform mathematical calculations related to evaluating equipment, such as calculating pressure head.</i>								
Evaluate Operation of Equip	2	0.92	6	3.64	3	2.78	3	1.92
<i>Inspect equipment and read charts, meters and pressure gauges.</i>								
Evaluate Wastestream Characteristics	4	3.08	4	2.57	5	2.44	4	2.73
<i>Evaluate color, flow pattern, foam, odor, temperature, volume, solids concentration, and mixing pattern of wastestream.</i>								
Interpret Laboratory Analyses-Math			1	0.43			1	0.54
<i>Perform mathematical calculations related to BOD, chlorine residual, dissolved oxygen, pH, solids, etc.</i>								
Interpret Laboratory Analyses	1	0.83	5	3.36	4	1.89	2	1.08
<i>Interpret results for BOD, chlorine residual, dissolved oxygen, pH, solids, etc.</i>								
Additional Treatment					1	0.67	2	0.92
Chemical Addition	2	1.33			1	0		
<i>Monitor, evaluate, and adjust dry, gaseous, and liquid chemicals.</i>								
Chemical Addition-Math	2	1.5			1	0.56	1	0.58
<i>Perform mathematical calculations related to monitoring, evaluating, and adjusting dry, gaseous, and liquid chemicals.</i>								
Disinfection-Math			1	0.57	1	0.56	1	0.58
<i>Perform mathematical calculations related to monitoring, evaluating, and adjusting the disinfection process.</i>								
Disinfection	1	0.75	3	1.64	3	1.89	4	2.65
<i>Monitor, evaluate, and adjust the disinfection process.</i>								
Preliminary Treatment	5	3.08	2	0.93				
<i>Monitor, evaluate, and adjust plant pumping of main flow, screening, grit removal, and flow equalization.</i>								
Primary Treatment	4	2.67	2	1.14	1	0.33		
<i>Monitor, evaluate, and adjust clarifiers.</i>								
Primary Treatment-Math	1	0.67			1	0.67	1	0.5
<i>Perform mathematical calculations related to clarifiers.</i>								
Secondary Treatment	6	3.83	10	5.07	10	4.89	4	1.46
<i>Monitor, evaluate, and adjust fixed-film reactors, activated sludge, and stabilization ponds.</i>								
Secondary Treatment-Math	2	0.42	4	1.86	3	1.44	8	3.27
<i>Perform mathematical calculations related to fixed-film reactors, activated sludge, and stabilization ponds.</i>								
Solids Handling	3	2.25	5	2.5	3	0.89	6	2.46
<i>Monitor, evaluate, and adjust conditioning, dewatering, stabilization, thickening, and volume reduction.</i>								
Solids Handling-Math	2	1.08			4	2.33	1	0.62
<i>Perform mathematical calculations related to conditioning, dewatering, stabilization, thickening, and volume reduction.</i>								
Advanced (Tertiary) Treatment	2	1.75	5	2.5	3	1.33	6	3.46
<i>Monitor, evaluate, and adjust carbon adsorption, air stripping, chemical coagulation, precipitation, nitrification, denitrification, phosphorus removal, etc.</i>								
General Math	3	1.5	1	0.57	1	0.56		
<i>Perform mathematical calculations such as flow measurement.</i>								
Operate Equipment	17	11.75	16	10.21	16	9.78	15	9.65
<i>Operate support equipment, such as blowers, chemical feeders, motors, pumps and valves.</i>								
Operate Equipment-Math							1	0.58
<i>Perform mathematical calculations for operating equipments, such as detention time, dosage, efficiency, feed rate, and pumping rate.</i>								
Perform Laboratory Analyses	5	2.5	7	4.07	7	3.44	8	3.85
<i>Perform laboratory analyses for alkalinity, chlorine residual, dissolved oxygen, pH, settleability testing, solids, temperature, turbidity, etc.</i>								
Perform Laboratory Analyses-Math					2	1.11	1	0.19
<i>Perform math calc. related to laboratory analyses for alkalinity, chlorine residual, dissolved oxygen, pH, settleability testing, solids, temperature, turbidity, etc.</i>								
Maintain Equipment	14	11.17	8	6.36	10	6.22	10	7.19
<i>Maintain chemical feeders, motors, pumps, valves, etc.</i>								
Maintain Equipment-Math								
<i>Perform mathematical calculations such as area and volume.</i>								
Perform Security & Safety Procedures	9	7.67	7	5.5	4	2.56	1	0.96
<i>Perform security and safety procedures, such as confined space entry, lock-out/tag-out, and personal protective equipment.</i>								
Perform Security Procedures			2	1.36	1	0.67	4	2.69
<i>Perform Security Procedures related to emergency preparedness.</i>								