

SECTOR	WATER SERVICES																	
	SUB SECTOR	ACCREDITATION	WATER SUPPLY							SEWERAGE						S2WW:TPO		
	JOB AREA	Education Background	Water Resources	DAM Safety Management	WATER TREATMENT			WATER DISTRIBUTION				PLANNING AND DESIGN			OPERATION AND MAINTENANCE			Experience and Life-Long Learning
	SUB JOB AREA				Maintenance	Operation	Laboratory	Instrumentation	Operation	Non-Revenue Water	Treatment	Network	Desludging	Treatment	Network	Desludging		
Level 8	PhD								HEAD OF DEPARTMENT (with option of Ir.)						ADVANCE <ul style="list-style-type: none"> Develop operations personnel to be conversant with tertiary treatment and gain a deeper understanding of secondary treatment processes and complex calculations, biological and chemical processes. Be able to trouble-shoot complex problems and recommend solutions Develop a greater understanding of new technologies and incorporate these into upgrading of STPs Keep abreast of Sewage Regulations changes and operational challenges arising from these amendments 			
Level 7	Master's								HEAD OF SECTION (with option of Ir.)									
Level 6	Bachelor's								SENIOR MANAGER									
Level 5	Advance Diploma	Water Resources Manager	Dam Manager	Water Treatment Plant Manager			Water Distribution Manager		Water Distribution Manager	Planning and Design Manager			Treatment Manager	Network Manager	Desludging Manager	INTERMEDIATE <ul style="list-style-type: none"> Develop operations personnel to take charge and be fully responsible for STP performance. Build upon knowledge acquired in TPOC-Basic and raise the knowledge to a level where the operations personnel are able to make effective operational decisions Be fully conversant with the requirements and obligations of the sewage regulations Take responsibility for regulatory compliance in furtherance of the concept of self-regulation. Prepare operations personnel to take examinations to be certified as an operator under the sewage regulations 		
Level 4	Diploma	Water Resources Executive	Dam Executive	Facility Executive	Water Treatment Plant Executive	Chemist	Water Distribution Instrumentation Executive	Water Distribution Executive	NRW Executive	Planning and Design Engineer			Treatment Engineer	Network Engineer	Desludging Executive			
Level 3	Certification	Water Resources Senior Technician	Dam Supervisor	Facility Senior Technician	Water Treatment Plant Senior Technician	Quality Assurance Senior Technician	Water Distribution Instrumentation Senior Technician	Water Distribution Operation Senior Technician	NRW Sr. Technician				Treatment Supervisor	Network Supervisor	Desludging Supervisor	BASIC <ul style="list-style-type: none"> Develop knowledgeable operations personnel on basic sewage chemistry and sewage treatment fundamentals. Develop skills to ensure STPs are in compliance, reporting internally and to regulators. Develop skills on basic STP operations and maintenance requirements 		
Level 2		Water Resources Technician	Dam Technician	Facility Technician	Water Treatment Plant Technician	Lab Assistant Technician	Water Distribution Instrumentation Technician	Water Distribution Technician	NRW Technician				Treatment Technician	Network Technician	Desludging Surveyor			
Level 1				Dam Operator	Handyman		Water Sampler		Fitter				NRW Field Assistant (Crew)				Desludging Operator	AWARENESS <ul style="list-style-type: none"> Make operations personnel aware of work scope, work responsibilities and environmental impacts of sewage and sewage treatment activities Instill knowledge on Environmental Quality Act, Sewage Regulations and concept of self-regulation and its implications Instill knowledge on Health and Safety requirements and risks at STPs, pump stations and sewer networks Instill knowledge on reporting requirements and process of escalating issues for resolution and compliance.

SEWERAGE TO WASTEWATER: TREATMENT PLANT OPERATIONS (OBJECTIVES)