

Scheme Component	Hazard	Hazardous Event	Maximum Risk			Preventive Measures	Residual Risk			Is the Risk Acceptable	Comments / Any further Actions
			Consequence	Likelihood	Risk Level		Consequence	Likelihood	Risk Level		
Waste Water Treatment Plant	Physical – high inflow	Insufficient treatment	Moderate	Likely	H-66	Infiltration, inflow reduction projects (smoke testing, sewer relining). Treatment Plant designed to handle 5 x ADWF.	Minor	Rare	L-32	Yes	No Further Assessment required
Bioreactor	Microbiological (Fungi, Protozoa, coliforms)	Solids carryover from high plant inflow resulting in poor Effluent Quality	Moderate	Possible	H-60	Bioreactor is designed to handle 5 x ADWF. SCADA alarms to notify if fault occurs.	Minor	Rare	L-32	Yes	No further Assessment required
Secondary Sedimentation Tank	Microbiological (Fungi, Protozoa, coliforms)	Insufficient treatment	Moderate	Possible	H-60	Operational Procedure, SCADA telemetry, Validation Testing, 2x SST present at WWTP.	Minor	Unlikely	L-38	Yes	No further assessment required
Chlorine Contact Tank	Microbiological (Fungi, Protozoa, coliforms)	Chlorine Dosing Failure	Moderate	Possible	H-60	Operational Procedure, SCADA telemetry, Validation Testing, 2 x CCT at WWTP	Minor	Unlikely	L-38	Yes	No further assessment required
Irrigation Area	Microbiological (Fungi, Protozoa, coliforms)	Incorrect irrigation practices (Winch Irrigator, Flood Irrigation)	Major	Possible	E-72	Infrastructure is set-up to cease the delivery of recycled water to the recycled water user. Irrigation method specified in Third Party Agreement.	Minor	Rare	L-32	Yes	Water Quality standard specified in agreement Current irrigation infrastructure is compliant
Irrigation Area	Microbiological (Fungi, Protozoa, coliforms)	Irrigation of unauthorised crop (Carrot, Potato)	Major	Possible	E-72	Infrastructure is set-up to cease the delivery of recycled water to the recycled water user. Authorised crops specified in Third Party Agreement.	Minor	Rare	L-32	Yes	Water Quality standard specified in agreement Current crop is compliant
Irrigation Area	Microbiological (Fungi, Protozoa, coliforms)	Farm Asset Failure resulting in overflow of storage dam	Insignificant	Possible	L-36	Council has an Approval for release to Yellow Waterholes Creek or divert to on-site irrigation.	Insignificant	Unlikely	L-28	Yes	Treated effluent released to Yellow Waterholes Creek or onsite irrigation during event would not effect public health
Sewerage Catchment Area	Chemical (Cooking Oils, Petroleum Products, Manufacturing Chemicals)	Chemical levels present in treated effluent	Moderate	Unlikely	M-52	Limited industry connected to sewer network, new industry subjected to Trade Waste approval. Various contaminants removed through treatment process.	Minor	Rare	L-32	Yes	No further assessment required
Recycled Water Delivery Pipeline	Microbiological (Fungi, Protozoa, coliforms)	Failure in delivery pipeline, effluent	Insignificant	Possible	L- 36	Pipeline infrastructure installed to handle	Insignificant	Unlikely	L-28	Yes	Treated effluent released to gully during

		released to environment / treatment plant grounds				maximum treatment plant flow					event would not effect public health
Recycled Water Storage Lagoon	Microbiological (Fungi, Protozoa, Coliforms)	Presence of uncontrolled wildlife in recycled water storage lagoons	Moderate	Possible	H-60	Infrastructure is set-up to cease the delivery of recycled water to the recycled water user. Weekly testing of recycled water in the Chlorine Contact Tank and storage lagoons.	Minor	Unlikely	L-40	Yes	Treated effluent released to Yellow Waterholes Creek or onsite irrigation during event would not effect public health
Recycled Water Storage Lagoon	Microbiological (Fungi, Protozoa, Coliforms)	High level of E.coli in recycled water distributed to user	Major	Likely	E-80	Weekly testing of recycled water in the Chlorine Contact Tank and storage lagoons. Daily monitoring of specified control points. Cease of supply to user when trigger levels exceeded. Subsurface irrigation methods.	Minor	Unlikely	L-38	Yes	No further assessment required
Laboratory Analysis	Microbiological (Fungi, Protozoa, coliforms)	Incorrect monitoring results due to analysis procedures resulting in un-validated effluent	Moderate	Unlikely	M-52	Calibration procedures, monitoring procedure and staff training	Minor	Rare	L-32	Yes	No further assessment required

Note: Operational Procedures include: Monitoring specified quality levels throughout the treatment process.