

Table S1: Hazardous events checklist

Section of SSP	Hazardous Event
Collection Issues	Map of System
	Leaks in System
	Cracks in System
	Recent Inspection
	Unused/uncapped laterals
	Inflow and Infiltration (collection)
	Pipe material
	Presence of cross connections
	Pipe proximity to water mains
Treatment Operations	Manhole deterioration
	Inflow and Infiltration
	Leaks in Lagoons or Tanks
	Backup Power Sources
	Age of system
	Pump Failures
	Pump clogging
	Pump backup power
	Pump overflows
	Pump inflow and infiltration
	Disinfection inoperational
	Disinfection chemical requirements
	Disinfection not meeting regulatory requirements
	Disinfection system cleanings
	Disinfection system clogging
Section of SSP	Hazardous Event
Operators	Operator certification
	Operator training
	Knowledge of system
	Adequate record keeping
	Backup operator
Treatment Design	Age of system (design)
	Recent upgrades performed
	Planned upgrades
	Design capacity
	Operating as designed
	Infrastructure documentation
	Building construction
Reports and Regulations	SCADA System connected
	SCADA System alarms
	Effluent Quality - BOD
	Effluent Quality - TSS
	Effluent Quality - Ammonia
	Effluent Quality - Fecal Coliforms
	Sampling frequency
	Adequate record keeping (discharge)
	Standard operating procedures (SOPs)
	Maintenance plans
	Hazardous Event
	Effluent Quality - BOD (discharge)

	Effluent Quality - TSS (discharge)
	Discharge to drinking water source
	Recreational activities on discharge water body
	Receiving water vulnerability
	Map of system watershed