

SITE NAME: BASINGSTOKE STW
DATE: 13/11/2022

ODOUR RISK ASSESSMENT

Process Stage	Process Unit	Applicable Legislation	Normal		Abnormal			Nearest Customer/ Receptor	Offensive-ness (0-5)	Likelihood of Impact (0-5)	Odour Risk (<5 Low, >15 High)	Odour Impact	Mitigation Measures	Residual Odour Impact (L/M/H)	Responsibility for Mitigation Measures	Customer Communication Needed?	Notes
			Odour Description	Constant/ Intermittent/ Occasional/ Rare	Event Description	Likelihood of Event Frequent/ Rare/ Planned	Length of Time of Release										
Works Inlet	Incoming Sewers & Reception Wet Well	UWWTD	Sewage	C				Housing to the West	2	1	2	Low	Ensuring channels are clear, covers are closed and general housekeeping	-	-	-	
Works Inlet	Incoming Sewers & Reception Wet Well	UWWTD	Sewage		Spillage	R	Days	Housing to the West	3	2	6	Medium	Clean up ASAP		Tech 1	N	
Works Inlet	Cess Reception, Discharge, Wash down & Drainage	UWWTD/EPR	Septic sewage	I				Housing to the West	4	1	4	Low	spills can be easily cleaned up ensure tankers coupled correctly	L	Tech1	N	Bunded area, spillages wash down immediately
Works Inlet	Cess Reception, Discharge, Wash down & Drainage	EPR & UWWTD			Increased cess imports during Reading Festival	P	Weeks	Housing to the West, Veolia	4	2	8	Medium	Shut down imports if necessary	L	PM	N	Increased cess imports during Reading Festival, lasts a couple of weeks
Works Inlet	Cess Reception, Discharge, Wash down & Drainage	EPR & UWWTD			Spillage	R	Days	Housing to the West, Veolia	3	2	6	Medium	Clean up ASAP		Tech 1	N	
Storm Separation	Storm & Balancing Tanks	UWWTD	Sewage	I				Housing to the West, Veolia	2	1	2	Low	Scrapers work well	L	Tech1	N	
Storm Separation	Storm & Balancing Tanks	UWWTD	Sewage		Automatic cleaning failure	R	Days	Housing to the West, Veolia	3	1	3	Low	manually all 3				
Preliminary Treatment	Screens & Screening Conditioning, Drainage & Rag Skip Management	UWWTD	Sewage/musty	C				Housing to the West, Veolia	2	1	2	Low	Raking and changing regularly	L	Tech1	N	
Preliminary Treatment	Screens & Screening Conditioning, Drainage & Rag Skip Management	UWWTD	Sewage		spillage, skip filled	R	Days	Housing to the West, Veolia	3	2	6	Medium	Housekeeping. Replacement of skips	L	Tech1	N	Skip management
Preliminary Treatment	Stone trap	UWWTD	Septic, strong sewage	C				Housing to the West, Veolia	3	1	3	Low	Regular removals to add into normal skips	L	Tech1	N	Skips now fitted with castors to make changes easier.
Preliminary Treatment	Grit Removal Equipment, Drainage & Grit Skip Management	UWWTD	Septic	C				Housing to the West, Veolia	2	1	2	Low	Regular removals	L	Tech1	N	
Primary Settlement	Primary Raw Desludge Pumping	UWWTD	Sewage	C					2	1	2	Low	Daily site rounds	-	-	-	
Primary Settlement	Scum trap	UWWTD	Sewage	C				Housing to the West, Veolia	2	1	2	Low	Fat build up in PST channel Clear out with tanker as required	L	PM	N	No issues as not a fatty site.
Primary Settlement	Primary Settlement Tanks	UWWTD	sewage	C				Housing to the West, Veolia	1	1	1	Low	Usual sludge dips Quarterly clean of center columns	L	Tech1	N	
Primary Settlement	Primary Settlement Tanks	UWWTD	sewage		Sludge in Tank 6, difficulty draining	R	Weeks	Housing to the West, Veolia	2	1	2	Low	Manual drain gradually. Quarterly clean of center columns	L	Tech1	N	Tank 6 is a different design. Desludge pump or tank required to be emptied.
Secondary Treatment (Biological)	Flow & Distribution to Secondary Settlement	UWWTD	Sewage	C					1	1	1	Low	enclosed system underground	-	-	-	
Secondary Treatment (Biological)	Activated Sludge Plant Lanes & Zones	UWWTD	Earthy	C				Housing to the West, Veolia	1	1	1	Low	Ensuring anoxic mixtures are operating at all times	-	Tech 1	-	
Secondary Treatment (Biological)	Activated Sludge Plant Lanes & Zones	UWWTD	Earthy		Lane out for maintenance	P	Days	Housing to the West, Veolia	1	1	1	Low	Clean out ASAP after drain	L	PM	N	
Secondary Settlement	Scum Removal System	UWWTD	Earthy	C				Housing to the West, Veolia	1	1	1	Low	Ensure pumps are operating when they should	-	Tech 1	-	
Secondary Settlement	Scum Removal System	UWWTD	Earthy		pump failure	R	Days	Housing to the West, Veolia	2	1	2	Low	repair pumps	L	Tech 1s	N	
Secondary Settlement	Final Settlement Tanks	UWWTD	Slightly earthy	C				Housing to the West, Veolia	1	1	1	Low	Ensure effluent remains flowing	-	Tech 1	-	
Secondary Settlement	Final Settlement Tanks	UWWTD	Slightly earthy	O	Clean and drain for maintenance	P	Days	Housing to the West, Veolia	1	2	2	Low	Clean out ASAP after drain. Quarterly clean of center columns	L	PM	N	
Secondary Settlement	RAS Chambers & Pumping	UWWTD	Earthy	C				Housing to the West, Veolia	1	1	1	Low	General housekeeping, covers are closed	-	Tech 1	-	
Secondary Settlement	RAS Chambers & Pumping	UWWTD	Earthy		pump failure	R	Days	Housing to the West, Veolia	2	1	2	Low	repair pumps	L	Tech 1	N	
Secondary Settlement	SAS Chambers & Pumping	UWWTD	Earthy	C				Housing to the West, Veolia	1	1	1	Low	General housekeeping, ventilated building	-	Tech 1	-	
Secondary Settlement	SAS Chambers & Pumping	UWWTD	Earthy		pump failure	R	Days	Housing to the West, Veolia	2	1	2	Low	Repair pumps	L	Tech 1	N	

Tertiary Treatment	Filtration - Disc Filters	UWWTD	Watery	C					1	1	1	Low	General maintenance	-	Tech 1	-	
Tertiary Treatment	Back Wash Returns	UWWTD	Watery	C					1	1	1	Low	General housekeeping - keep cleaning, keep them flushed out	-	Tech 1	-	
Final Effluent	Specify Type	UWWTD	River	C					1	1	1	Low	Ensuring channel remains clear and moving	-	Tech 1	-	
Sludge Imports	Sludge Reception, Screening, Wash down & Drainage	EPR	Raw sludge	I				Housing to the West, Veolia	3	1	3	Low	Housekeeping - cleaning up spills. Yearly sludge tank clean Ensure tankers coupled correctly	-	Tech 1	-	Being decommissioned, new THP import facility with closed tank Yr3 AMP6.
Sludge Imports	Sludge Reception, Screening, Wash down & Drainage	EPR	Raw sludge		Spillage	R	Days	Housing to the West, Veolia	3	2	6	Medium	Clean ASAP	L	Tech 1s	N	
Sludge Imports	Skip Management	EPR	Raw sludge	C				Housing to the West, Veolia	3	1	3	Low	Regular removals	L	Tech1	N	
Sludge Conditioning (Indigenous)	Sludge Blending & Mixing	EPR	Mixed sludge	C				Housing to the West, Veolia	3	2	6	Medium	Covered tanks. Yearly sludge tank clean	-	PM/Tech1	-	OCU covers all THP
Sludge Conditioning (Indigenous)	Primary Raw Sludge Thickening & Pumping	EPR	Raw sludge	I				Housing to the West, Veolia	3	2	6	Medium	Good operational practice	L	PM/Tech1	N	Summer issues which are not constant.
Sludge Conditioning (Indigenous)	Primary Raw Sludge Thickening & Pumping	EPR	Raw sludge		Annual drain for maintenance	P	Days	Housing to the West, Veolia	3	2	6	Medium	Carry out clean ASAP	L	PM/Tech1	N	
Sludge Conditioning (Indigenous)	Sludge transfer	EPR	Raw sludge	C				Housing to the West, Veolia	2	1	2	Low	Daily site rounds		Tech 1		
Sludge Conditioning (Indigenous)	Return Liquors	EPR	Sludge	C				Housing to the West, Veolia	1	1	1	Low	Daily site rounds	-	Tech 1	-	
Sludge Storage & Movements	Vehicle Movements & Wash Down	EPR	Digested sludge	I				Housing to the West, Veolia	3	2	6	Medium	Covered truck and wheel wash	L	PM/Tech1	N	
Sludge Conditioning (Indigenous)	Thickening & Pumping	EPR	Activated sludge	C				Housing to the West, Veolia	1	1	1	Low	General housekeeping, ventilated building	-	Tech 1	-	
Sludge Treatment	THP	EPR	Thickened sludge	C				Housing to the West, Veolia	2	0	0	Low	In an enclosed and odour abated system. Pressure relief valves - Valve protected from unnecessary emissions with bursting disk and pressure switch.	-	Techs	N	
Sludge Treatment	THP	EPR	Thickened sludge		Spillage	R	Days	Housing to the West, Veolia	2	2	4	Low			Tech 1s		
Sludge Treatment	Primary Digestion	EPR	Digested sludge	C				Housing to the West, Veolia	2	1	2	Low	Fully enclosed	-			Roofs changing from floating to fixed

Sludge Treatment	Primary Digestion	EPR	Sludge		Sick digester(s)	R	Weeks	Housing to the West, Veolia	5	3	15	High	Regular monitoring, reseeded is an option, may need to tanker raw sludge off-site. Ph dropping, digester full of sick sludge. Odour released from secondary digesters and sludge cake. Possible use of emergency sludge storage (former drying beds)	L	PM	N	Mitigation and communications required will vary depending on the degree of failure. Digester to be decommissioned when THP commissioned Yr3 AMP6.	
Sludge Conditioning (Indigenous)	Sludge transfer	EPR	Raw sludge	C				Housing to the West, Veolia	2	1	2	Low	-					
Sludge Dewatering	Pre THP dewatering feed tank	EPR	Digested sludge	C				Housing to the West, Veolia	2	1	2	Low	Ensure air mixing is operating and sludge is kept fresh. Yearly sludge tank clean	-	-	-		
Mothballed	Disused Secondary Digesters		Digested sludge	C				Housing to the West, Veolia	0	0	0	Low	Keep empty and clear of sludge	-	-	-		Secondary digestion no longer takes place on site.
Sludge Dewatering	Belt press	EPR	Digested sludge	C				Housing to the West, Veolia	2	1	2	Low	Inside building, covered unit with hatches	L	Tech1	N		
Sludge Storage & Movements	Cake Barn & Drainage	EPR	Cake sludge	C				Housing to the West, Veolia	2	1	2	Low	Cake in storage forms a crust after a day or two reducing risk of odour. No additional turning or handling during cake storage. Imports subject to pre-acceptance checks.	L	PM	N		
Undigested Cake import	Cake import facility	EPR	Cake sludge					Housing to the West, Veolia	1	1	1	Low	covered by OCU					
Undigested Cake import	Cake Pad	EPR	Cake sludge					Housing to the West, Veolia	3	3	9	Medium	Keep it moving through process					

Undigested Cake import	Cake Pad	EPR			summer months		Weeks	Housing to the West, Veolia	5	4	20	High	Use of odour suppressant sprays				
Biogas Systems	Biogas Storage	EPR	Biogas	R				Housing to the West, Veolia	1	1	1	Low	Monitor Odour	-	-	-	
Biogas Systems	CHP	EPR	Oily	R				Housing to the West, Veolia	1	1	1	Low	Ensure doors are closed on CHP containers and	-	-	-	
Biogas Systems	Boilers	EPR	None					Housing to the West, Veolia			0	Low	-	-	-	-	
Biogas Systems	Waste Gas Burner	EPR	Biogas	O				Housing to the West, Veolia	3	1	3	Low	General housekeeping	-	-	-	
Biogas Systems	Waste Gas Burner	EPR	Biogas	-	Gas leak	R	Hours	Housing to the West, Veolia	3	2	6	Medium	Turn off and repair	L	PM	N	shut off flare and repair asap
Power Generation	Standby Generators	EPR	Diesel and sooty	I				Housing to the West, Veolia	1	1	1	Low	Only run when required.				
Power Generation	Standby Generators	EPR	Diesel		Faulty engine	R	Hours	Housing to the West, Veolia	1	1	1	Low	repair	L	PM	N	
Odour Control Package		EPR		C				Housing to the West, Veolia	1	1	1	Low	Maintenance contract and daily site runs.				
Odour Control Package		EPR			Failure of OCU	R	Days/Weeks	Housing to the West, Veolia	4	4	16	High	consider use of sprays and repair ASAP	M	PM/Contactor		

