

Name: **Tetron Treatment Limited**
 Catchment: **Humber river basin district**

Potential changing climate variable	Impact	Likelihood	Severity	Risk (Likelihood x Severity)	Mitigation (what will you do to mitigate this risk)	Likelihood (after mitigation)	Severity (after mitigation)	Residual risk
1. Summer daily maximum temperature may be around 6°C higher compared to average summer temperatures now.	<ul style="list-style-type: none"> Workplace exposure to heat causing damage to workforce. 	2	8	16	<ul style="list-style-type: none"> The Operator will ensure the appropriate PPE is worn for all workers; Updates to internal PPE and working procedures will be undertaken yearly and incorporate any gradual changes including climate changes. 	1	1	1
	<ul style="list-style-type: none"> Increase in dust potential due to drier weather 	3	3	9	<ul style="list-style-type: none"> All works will be undertaken in accordance with the Dust Management Plan. Water provision and controls will be reviewed yearly to ensure provision is safeguarded and controls become more frequent (dependent on annual climate review). 	1	1	1
	<ul style="list-style-type: none"> Increase in fire risk potential due to increase in temperature 	2	3	6	<ul style="list-style-type: none"> All works will be undertaken in accordance with FPP. Fire risk is inherently low and relevant to activity Area 2 only. 	1	1	1
	<ul style="list-style-type: none"> Decrease in surface and groundwater levels causing lower water provision 	3	3	9	<ul style="list-style-type: none"> Water provision and controls will be reviewed yearly to ensure provision is safeguarded and controls become more frequent (dependent on annual climate review). If groundwater abstraction borehole is deemed necessary, a separate permit application will be submitted. No surface water abstraction necessary. 	3	1	3

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2. Winter daily maximum temperature could be 4°C more than the current average.	<ul style="list-style-type: none"> Increase in dust potential due to drier weather 	3	3	9	<ul style="list-style-type: none"> All works will be undertaken in accordance with the Dust Management Plan. Water provision and controls will be reviewed yearly to ensure provision is safeguarded and controls become more frequent (dependent on annual climate review). 	1	1	1
	<ul style="list-style-type: none"> Increase in fire risk potential due to increase in temperature 	2	3	6	<ul style="list-style-type: none"> All works will be undertaken in accordance with FPP. Fire risk is inherently low and relevant to activity Area 2 only. 	1	1	1
3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity) *.	<ul style="list-style-type: none"> Overloading of surface water system. 	3	3	9	<ul style="list-style-type: none"> The proposed drainage system promotes rain water harvesting. Any increases in flow will be in agreement with Yorkshire Water. 	1	1	1
	<ul style="list-style-type: none"> Mud on road nuisance 	1	2	2	<ul style="list-style-type: none"> The site is on a fully impermeable concrete surface. Controls for mud will be in accordance with Dust Management Plan and Operational Plan. 	1	1	1
	<ul style="list-style-type: none"> Pollution caused from mobilisation of silts. 	1	2	2	<ul style="list-style-type: none"> The majority of activities are under cover. All surface water is contained and treated prior to discharge to sewer in agreement with Yorkshire Water. 	1	1	1

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	<ul style="list-style-type: none"> Fluvial flooding on site. 	3	3	9	<ul style="list-style-type: none"> The site is already within Flood Zone 3 and is an existing site. Climate change is unlikely to change it's risk given proximity to the River Don. The site is afforded flood defence relief. Site will be managed in accordance with Accident Management Plan. No habitable land use on site and Site Manager will be signed up to the EA Flood Alerts. 	1	1	1
4. Average winter rainfall may increase by 29% on today's averages.	<ul style="list-style-type: none"> Overloading of surface water system. 	3	3	9	<ul style="list-style-type: none"> The proposed drainage system promotes rain water harvesting. Any increases in flow will be in agreement with Yorkshire Water. 	1	1	1
	<ul style="list-style-type: none"> Mud on road nuisance 	1	2	2	<ul style="list-style-type: none"> The site is on a fully impermeable concrete surface. Controls for mud will be in accordance with Dust Management Plan and Operational Plan. 	1	1	1
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5. Sea level could be as much as 0.6 m higher compared to today's level *.	<ul style="list-style-type: none"> Overloading of surface water system. 	3	3	9	<ul style="list-style-type: none"> The proposed drainage system promotes rain water harvesting. Any increases in flow will be in agreement with Yorkshire Water. 	1	1	1
	<ul style="list-style-type: none"> Mud on road nuisance 	1	2	2	<ul style="list-style-type: none"> The site is on a fully impermeable concrete surface. Controls for mud will be in accordance with Dust Management Plan and Operational Plan. 	1	1	1
	<ul style="list-style-type: none"> Pollution caused from mobilisation of silts. 	1	2	2	<ul style="list-style-type: none"> The majority of activities are under cover. All surface water is contained and treated prior to discharge to sewer in agreement with Yorkshire Water. 	1	1	1

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6. Drier summers, potentially up to 34% less rain than now.	<ul style="list-style-type: none"> Increased dust - less rainwater to store. 	4	2	8	<ul style="list-style-type: none"> Review of rainwater harvesting provision. Increase surface water tank storage capacity and misting frequency dependent upon review. 	4	1	4
	<ul style="list-style-type: none"> Decrease in groundwater and surface water levels causing lower water provision. 	4	3	12	<ul style="list-style-type: none"> Increase surface water tank storage capacity to hold water when groundwater. Water provision and controls will be reviewed yearly to ensure provision is safeguarded and controls become more frequent (dependent on annual climate review). 	4	1	4
7. At its peak, the flow in watercourses could be 30% more than now, and at its lowest it could be 65% less than now.	<ul style="list-style-type: none"> Increased stress on the river and probability of flooding on site. 	3	3	9	<ul style="list-style-type: none"> The site is already within Flood Zone 3 and is an existing site. Climate change is unlikely to change it's risk given proximity to the River Don. The site is afforded flood defence relief. Site will be managed in accordance with Accident Management Plan. No habitable land use on site and Site Manager will be signed up to the EA Flood Alerts. 	3	1	3

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	<ul style="list-style-type: none"> Decrease in groundwater and surface water levels causing lower water provision. 	3	1	3	<ul style="list-style-type: none"> Water provision and controls will be reviewed yearly to ensure provision is safeguarded and controls become more frequent (dependent on annual climate review). If groundwater abstraction borehole is deemed necessary, a separate permit application will be submitted. No surface water abstraction necessary. 	3	1	3

*Indicates data has come from climate change allowances as part of the spatial planning process. Evidence from your planning submission is acceptable evidence for this worksheet.