Severn river basin district: climate change risk assessment worksheet

Name RJ & JM Bowen Ltd

Our permit reference number EPR/TP3704SV/A001

Your document reference number:

Risk assessment worksheet for the 2050s

Severn river basin district

You must carry out a climate change risk assessment for any new bespoke waste and installations permit applications if you expect to operate for more than 5 years. Use the <u>user guide</u> to complete the table. You can add in extra pages if necessary.

Consider how your operations will be affected by the changes in weather and climate described in the table. Consider any changes to average climate conditions that may impact on your operations, for example extreme rainfall.

Also consider:

- critical thresholds where a 'tipping point' is reached, for example a specific temperature where site processes cannot operate safely
- changes to averages for example an entire summer of higher than expected rainfall causing waterlogging
- where hazards may combine to cause more impacts

You can add in other climate variables if you wish.

If you have stated on your application form that you do not expect to be operational in 2050, you must still consider climate change risks for the time you do intend to operate. Whilst the variables are for the 2050s, this is an estimated date and you may experience these conditions before then.

This worksheet will sit in your management system. It must appear on the management system summary you submit with your application, even if you do not need to submit the whole risk assessment with your application.

If your pre-mitigation risk score (column D) is 5 or higher, you must complete columns E to H.

Potential changing climate variable	A Impact	B Likelihood	C Severity	D Risk	E Mitigation	F Likelihood	G Severity	H Residual
				(B x C)	(what will you do to mitigate this risk)	(after mitigation)	(after mitigation)	risk (F x G)
1. Summer daily maximum temperature may be around 6°C higher compared to average summer temperatures now.	Ventilation system unable to maintain optimum temperature within poultry houses.	3	3	9	Maintain temperature. Install additional cooling system if required. Additional insulation already installed.	3	1	3
2. Winter daily maximum temperature could be 4°C more than the current average.	No negative impact expected	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3. The biggest rainfall events are up to 20% more intense than current	A) Surface drainage system overloaded	a) 3	a)3	a) 9	a) Drainage system constructed with anticipated increase	a) 2	a) 2	4
extremes (peak rainfall intensity)*.	b) Overfill at soakaways	b) 2	b) 2	b) 4	b) Soakaways sized for anticipated increase	b) 1	b) 1	1

Potential changing climate variable	A Impact	B Likelihood	C Severity	D Risk (B x C)	E Mitigation (what will you do to mitigate this	F Likelihood (after	G Severity (after	H Residual risk
Average winter rainfall may increase by 29% on today's averages.	Surface drainage system overloaded	3	3	9	risk) Drainage system constructed with anticipated increase. Soakaways sized for anticipated increase	mitigation) 2	mitigation) 2	(F x G) 4
5. Sea level could be as much as 0.6m higher compared to today's level *.	Inland site. Low impact expected	3	2	6	Site level increased during construction	2	1	2
6. Drier summers, potentially up to 34% less rain than now.	No negative impact expected	n/a	n/a	n/a	n/a	n/a	n/a	n/a
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.	At low flow increased stress on watercourse	3	2	6	Discharge flow rate managed	2	1	2

^{*}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.

.