Humber river basin district: climate change risk assessment worksheet

Name (as on your part A application form): Cattle Holderness Ltd, Willow Tree Farm

Our permit reference number (if you have one): EPR/New

Your document reference number: Appendix 5a

Risk assessment worksheet for the 2050s

Humber 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 user guide 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** (B x C)	**E** **Mitigation** (what will you do to mitigate this risk)	**F** **Likelihood** (after mitigation)	**G** **Severity** (after mitigation)	**H** **Residual 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 livestock housing.	2	3	6	Keep a log of any hot days which occur each year. If necessary, install additional cooling system and upgrade building insulation.	2	1	2
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

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3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity)*.	a) Surface water drainage system overloaded. b) Overtopping of bunds.	a) 2 b) 2	a) 2 b) 2	a) 4 b) 4	a) Considered surface falls at design stage. Drains and attenuation pond managed. No more hardstanding area than necessary. Significant clean water pond capacity, and topography of site allows for increases in rainfall c) Bunded tanks will be protected from rainfall (undercover)			
4. Average winter rainfall may increase by 29% on today's averages.	Surface water drainage system overloaded.	2	2	4	Significant capacity of surface water pond existing, ,and topography of site allows for increases in rainfall Manage drains and ponds. Also, as above.			
5. Sea level could be as much as 0.6m higher compared to today's level *.	Inland, approx. 10m above sea level. Low impact expected.	3	2	6	Monitor permanent change to local river levels and plan for flood defences as/if appropriate	2	1	2
6. Drier summers, potentially up to 34% less rain than now.	Increased dust – less water to suppress.	4	2	8	Collect and store rainwater in tanks for use in washing out buildings. Mains water backup means we are not reliant on non-mains source but contingency plans should be in place none the less.	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.	Surface water running to pond so very low impact on watercourses expected. No direct discharge to watercourse.	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*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.