Severn river basin district: climate change risk assessment worksheet

Name (as on your part A application form):Corbett Farms Limited – Birch Tree Farm Poultry Site

Our permit reference number (if you have one):

Your document reference number: CFL/19/CCRA

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 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 7°C higher compared to average summer temperatures now.	Building 1 & 2 (Existing) Ventilation system unable to maintain optimum temperature within livestock housing.	3	3	9	Keep a log of any hot days which occur each year. Install additional cooling system and upgrade building insulation.	3	1	3

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2. Summer daily maximum temperature may be around 7°C higher compared to average summer temperatures now.	Building 3 (New Build) Ventilation system unable to maintain optimum temperature within livestock housing.	3	2	6	Keep a log of any hot days which occur each year. Install additional cooling system and upgrade building insulation.	3	1	3
3. Winter daily maximum temperature could be 4°C more than the current average, with the potential for more extreme temperatures, both warmer and colder than present.	No negative impact expected.	1	1	1	No mitigation required as very low risk. Score under 5.	1	1	1
3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity)*.	a) Building 1 (Existing Drainage System) - Surface water drainage system overloaded. b) Building 2 & 3 (Upgraded Drainage System) – Surface water drainage system overloaded	a) 3 b) 1	a) 3 b) 2	a) 9 b) 2	a) Consider upgrading attenuation storage around building 1 b) The surface water system has recently been upgraded to cope with a 1 in 100 yr store + 40%. The risk score is therefore below 5.	a)1 b)1	a)3 b)2	a)3 b)2
4. Average winter rainfall may increase by 29% on today's averages.	Surface water drainage system overloaded. a)Building 1 (Existing Drainage System) b)Building 2/3 (New Drainage System)	a) 3 b) 1	a) 2 b) 2	a) 6 b) 2	Increase surface water storage capacity. Also, as above.	a) 2 b) 1	a) 2 b) 2	a) 4 b) 2
5. Sea level could be as much as 0.6m higher compared to today's level *.	Inland site. Low impact expected.	3	2	6	Monitor permanent change to local river levels and plan for flood defences as appropriate	2	1	2
6. Drier summers, potentially up to 41% less rain than now.	Increased dust – less water to suppress.	4	1	4	No mitigation required as very low risk. Score under 5.	4	1	4
6. Drier summers, potentially up to 41% less rain than now.	Risk of rationing of Mains Water	1	4	4	Have a contingency Plan for Tankering in drinking water for birds	1	1	1
7. At its peak, the flow in watercourses could be 40% more than now, and at its lowest it could be 65% less than now.	No watercourse close to site	3	1	3	No mitigation required as very low risk. Score under 5.	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.