

## Severn river basin district: climate change risk assessment worksheet

Name (as on your part A application form): **Oswestry STOR Facility**

Our permit reference number (if you have one): **EPR/PP3405BE/A001**

Your document reference number: **ECCS.129.002.R.002\_ERA\_Final**

### 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.	Potential for excess strain placed on engine cooling system. If engines get too hot – automated emergency stop triggered - keeping any operational heat within the genset, with a possibility of Gen-set overheat and causing damage to components	3	3	9	SCADA system will continuously monitor operational temperature of each Gen-set to ensure plant operates within safe temperature operating envelop. Plant control philosophy will include Standard Stop – that will issue a stop sequence which puts the engine into cool down stop mode – the engine will run down to the configured cool setting, then shut down in a controlled manner Install additional cooling system if required in future	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
3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity)*.	No negative impact expected.	N/a	N/a	N/a	N/a	N/a	N/a	N/a
4. Average winter rainfall may increase by 29% on today's averages.	No negative impact expected.	N/a	N/a	N/a	N/a	N/a	N/a	N/a
5. Sea level could be as much as 0.6m higher compared to today's level *.	No negative impact expected.	N/a	N/a	N/a	N/a	N/a	N/a	N/a
6. Drier summers, potentially up to 41% 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 40% more than now, and at its lowest it could be 65% less than now.	No negative impact expected.	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.