## South west England river basin district: climate change risk assessment worksheet

Name (as on your part A application form): Wessex Water Enterprises Limited

Our permit reference number (if you have one): EPR/GP3304MZ/A001

Your document reference number: JER9235

## Risk assessment worksheet for the 2050s

South west England 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 (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)
Summer daily maximum temperature may be around 7°C higher compared to average summer temperatures now.	No negative impact anticipated	N/A	N/A	N/A	N/A	N/A	N/A	N/ A
2. 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 anticipated	N/A	N/A	N/A	N/A	N/A	N/A	N/ A

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)
3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity)*.	Flood events more likely to happen within the site.	3	2	6	On site, most of the assets are raised above ground level so should not be affected by flooding.  If flooding does happen, the waste will be diverted to an alternative facility.  Management procedures will ensure all drains are kept clear so as to minimise any risk from flooding.	1	2	2
4. Average winter rainfall may increase by 41% on today's averages.	Flood events more likely to happen within the site	3	2	6	On site, most of the assets are raised above ground level so should not be affected by flooding.  If flooding does happen, the waste will be diverted to an alternative facility.  Management procedures will ensure all drains are kept clear so as to minimise any risk from flooding.	1	2	2
5. Sea level could be as much as 0.6m higher compared to today's level *.	Flood events more likely to happen within the site.	2	2	4	On site, most of the assets are raised above ground level so should not be affected by flooding.  If flooding does happen, the waste will be diverted to an alternative facility.  Management procedures will ensure all drains are kept clear so as to minimise any risk from flooding.	1	2	2
6. Drier summers, potentially up to 45% less rain than now.	No negative impacted anticipated.	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 80% less than now.	This could increase the flood risk, however as the site is already in flood zone 3 the flood zone classification will not change.	3	2	6	On site, most of the assets are raised above ground level so should not be affected by flooding.  If flooding does happen, the waste will be diverted to an alternative facility.  Management procedures will ensure all drains are kept clear so as to minimise any risk from flooding.	1	2	2

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