

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

Name (as on your part A application form): Tulip Ltd

Our permit reference number (if you have one): UP3904BM/A001

Your document reference number: Appendix H

### 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 [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.	Higher energy requirements for cooling demand	2	1	2	Ongoing energy efficiency measures part of CI programme.	2	1	2
	Potential for odour from waste streams	2	2	4	Regular waste uplifts; ensure containers covered.	1	1	1
2. Winter daily maximum temperature could be 4°C more than the current average.	No significant impact anticipated	1	1	1	N/A	1	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 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)*.	<p>Low potential risk of flooding from controlled water (site is currently within located within a Flood Zone 1 (low probability).</p> <p>Increased potential for sewer flooding.</p> <p>Potential for surface water drains to be overwhelmed.</p> <p>Mobilising pollutants stored in the area e.g. waste, cleaning chemicals.</p> <p>There are no records of the site ever flooding in the past.</p>	2	2	4	<p>Potential for storage areas to be moved away from any areas identified at higher risk areas.</p> <p>Ensure good integrity of storage containers, regular checks and uplifts.</p> <p>Drainage survey to assess condition of drainage to ensure adequacy for efficient removal of surface water from site.</p>	1	1	1
4. Average winter rainfall may increase by 41% on today's averages.	<p>Low potential risk of flooding from controlled water (site is currently within located within a Flood Zone 1 (low probability).</p> <p>potentially mobilising pollutants stored in the area e.g. waste, cleaning chemicals.</p> <p>Potential for waterlogging in surrounding green space, although this area not currently required for site access.</p> <p>There are no records of the site ever flooding in the past.</p>	2	1	2	<p>Potential for storage areas to be moved away from any areas identified at higher risk areas.</p> <p>Ensure good integrity of storage containers, regular checks and uplifts.</p> <p>Drainage survey to assess condition of drainage to ensure adequacy for efficient removal of surface water from site.</p>	1	1	1

<b>Potential changing climate variable</b>	<b>A Impact</b>	<b>B Likelihood</b>	<b>C Severity</b>	<b>D Risk (B x C)</b>	<b>E Mitigation (what will you do to mitigate this risk)</b>	<b>F Likelihood (after mitigation)</b>	<b>G Severity (after mitigation)</b>	<b>H Residual risk (F x G)</b>
5. Sea level could be as much as 0.6m higher compared to today's level *.	No significant impact anticipated	1	1	1	N/A	1	1	1
6. Drier summers, potentially up to 45% less rain than now.	Potential for water shortages for use in manufacturing and cleaning.	1	1	1	Ongoing water efficiency measures. Part of CI programme and identification of best practice through consultation with Group and within sector.	1	1	1
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.	Higher energy requirements for cooling demand	2	1	2	Ongoing energy efficiency measures. Part of CI programme and identification of best practice through consultation with Group and within sector.	2	1	2
	Potential for odour from waste streams	2	2	4	Regular waste uplifts; ensure containers covered.	1	1	1

\*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.