

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

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

Our permit reference number (if you have one):

Your document reference number: 3903 – Climate Change Risk Assessment

### Risk assessment worksheet for the 2050s

Thames 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.	No negative impact as all wastes storage and operations will be within the onsite building	1	1	1	No mitigation required as low risk	1	1	1
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 as all wastes storage and operations will be within the onsite building	1	1	1	No mitigation required as low risk	1	1	1

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3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity)*.	a)Surface water gulley in yard area maybe overloaded. b)Flooding of yard area during periods of heavy rainfall.	a) 3 b) 3	a) 2 b) 1	a) 6 b) 3	No waste will be stored or sorted within the yard area when the site is operational, therefore localised surface water flooding will not impact waste storage. Site may have to close for waste acceptance if significant flooding occurs, but this is considered to be of low likelihood and will cause minimal disruption. As waste is stored internally there is no risk of localised surface flooding causing leaching of wastes into underlying shallow soils or identified controlled water receptors. Daily inspections of the surface water gulley will ensure peak capacity is maintained at all times. Dedicated water storage tank onsite will be designed to allow for an increased surface water storage capacity.	a) 3 b) 3	a) 1 b) 1	a) 3 b) 3

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)
4. Average winter rainfall may increase by 36% on today's averages.	a)Surface water gulley in yard area maybe overloaded. b)Flooding of yard area during periods of heavy rainfall.	a) 3 b) 3	a) 2 b) 1	a) 6 b) 3	No waste will be stored or sorted within the yard area when the site is operational, therefore localised surface water flooding will not impact waste storage. Site may have to close for waste acceptance if significant flooding occurs, but this is considered to be of low likelihood and will cause minimal disruption. As waste is stored internally there is no risk of localised surface flooding causing leaching of wastes into underlying shallow soils or identified controlled water receptors. Daily inspections of the surface water gulley will ensure peak capacity is maintained at all times. Dedicated water storage tank onsite will be designed to allow for an increased surface water storage capacity.	a) 3 b) 3	a) 1 b) 1	a) 3 b) 3

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)
5. Sea level could be as much as 0.6m higher compared to today's level *.	<p>Environment Agency mapping indicates that the site is in an area of low flood risk. Development is also shown to be in an area benefitting from flood defences, namely the Thames Tidal Defences, and is therefore considered to be at low risk tidal flooding.</p> <p>The Environment Agency's fluvial modelled flood levels for the Development from the Beam, Ingrebourne and Mayes Brook Flood Risk Mapping Study, indicate that the Development would remain free of flooding up to the present day 1 in 100 year event. When accounting for the impacts of climate change, the majority of the Development would remain free of flooding over the lifetime of the Development.</p>	3	3	9	Monitor permanent change to River Levels in Rainham Creek and the River Thames and plan flood defences as appropriate	3	1	3
6. Drier summers, potentially up to 42% less rain than now.	<p>Potentially less water to suppress dust. However, all wastes storage and operations will be within the onsite building, limiting the negative impacts of dust beyond the site boundary.</p>	2	2	4	No mitigation required as score under 5.	2	2	4

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7. At its peak, the flow in watercourses could be 35% more than now, and at its lowest it could be 75% less than now.	<p>Low flow in watercourses will have no negative impact on the site or its operations.</p> <p>Environment Agency mapping indicates that the site is in an area of low flood risk.</p> <p>Development is also shown to be in an area benefitting from flood defences, namely the Thames Tidal Defences, and is therefore considered to be at low risk tidal flooding.</p> <p>The Environment Agency's fluvial modelled flood levels for the Development from the Beam, Ingrebourne and Mayes Brook Flood Risk Mapping Study, indicate that the Development would remain free of flooding up to the present day 1 in 100 year event.</p> <p>When accounting for the impacts of climate change, the majority of the Development would remain free of flooding over the lifetime of the Development.</p>	2	3	6	Monitor permanent change to River Levels in Rainham Creek and the River Thames and plan flood defences as appropriate	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.