

## **D8 EN124/SMFC/CCRA – Climate Change Risk Assessment for St Margaret’s Farm Composting**

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

Name (as on your part A application form): **Friction Energy Ltd St Margarets Farm Combined Composting and Biomass Facility**

Our permit reference number (if you have one): **EA WML 404996**

Your document reference number: **EN124/SMFC/CCRA** 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.

<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>
1. Summer daily maximum temperature may be around 7°C higher compared to average summer temperatures now.	4 Extreme drying of compost surface	4	4	8	Increase damping of compost	2	1	2
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.	2 Freezing of compost surface	2	3	6	Possible need to sheet compost rows in winter	1	2	2
3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity)*.	6 Increased surface washout/runoff	6	3	18	Drainage systems have been designed to address this risk with visual checks in storms	2	2	4
4. Average winter rainfall may increase by 36% on today's averages.	2	3	3	9	Drainage systems have been designed to address this risk	2	1	2
5. Sea level could be as much as 0.6m higher compared to today's level *.	1	1	1	1	Too far from the sea			
6. Drier summers, potentially up to 42% less rain than now.	2	2	2	4	Increase damping of compost. Water supply drawn from existing deep borehole.	1	1	1
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.	1	1	1	1	Too far from the nearest watercourse			

\*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.