

The risk assessment considers the seven key climate factors as set out in EA guidance 'Hazardous waste and treatment: examples for your adapting to climate change risk assessment', dated 5 October 2023. The format is based on the guidance and regional template.

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, with the potential to reach extreme temperatures as high as over 40°C with increasing frequency based on today's values	a) Increased potential for waste reactions and fires involving heat-sensitive or combustible waste b) Increase in expansion and stress on plant, pipework and fittings – could affect integrity of plant. c) Increased dust emissions - due to drier waste	2	4	8	a) All wastes are treated undercover. b) PPM programme in place for site plant/equipment; regular visual inspections are undertaken. c) Wastes are not inherently dusty. d) Fire alarm in place.	2	4	8

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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	Lower winter temperatures – freezing of equipment and pipework. This would result in a processing issue, not a permit non-compliance as activities would simply have to stop, hence selecting 1 for severity as this is the lowest.	2	1	2	PPM programme in place for site plant/equipment; regular visual inspections undertaken; all treatment is conducted within a buildings.	2	1	2
3. Daily rainfall intensity could increase by up to 20% on today's values	Potential for increased site surface water and flooding - possible damage to plant and/or machinery; contamination of surface water from flood waters picking up hazardous waste materials from the site	2	1	2	The site is located in a flood zone. Rivers and sea risk- very low; Surface water – low. The majority of all treatment and storage of waste within buildings with sealed drainage system which are inspected and maintained.	2	1	2

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4. Average winter rainfall may increase by over 40% on today's averages.	Potential for increased site surface water and flooding - possible damage to plant and/or machinery; contamination of surface water from flood waters picking up hazardous waste materials from the site	2	1	2	The site is located in a flood zone. Rivers and sea risk- very low; Surface water – low. The majority of all treatment and storage of waste within buildings with sealed drainage system which are inspected and maintained. Drainage is in place and maintained.	2	1	2
5. Sea level could be as much as 0.6 m higher compared to today's level.	Risk of flooding - possible damage to plant and/or machinery; contamination of surface water from flood waters picking up hazardous waste materials from the site.	1	1	1	Untreated metal waste is stored in containers or in stockpile externally and these can be moved in the event of a flood. Flood defences are in place (hydrosnakes)	1	1	1

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6. Drier summers, potentially up to 40% less rain than now.	Water supply restrictions due to drought, impacting processes reliant on mains water (dust suppression, fire-fighting, cleaning)	1	1	1	No mains water is used in processing. Water use is reviewed annually and reported annually as per EP condition; requiring efficiency measures to be identified and implemented.	1	1	1
7. The flow in watercourses could be 50% more than now at its peak, and at its lowest it could be 80% less than now.	Potential increased impact of discharge to watercourse from on-site effluent treatment plant due to reduced low flow and effluent dilution	-	-	-	There is no effluent treatment plant with a discharge to controlled waters so site and permit unaffected by this	-	-	-
8. Storms could see a change in frequency and intensity i.e., increased wind speeds, increased rainfall, and lightning.	Storms and high winds could damage building structures with increased potential for fugitive emissions	2	2	4	PPM programme in place for site plant/equipment; regular visual inspections undertaken.	2	2	4



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