

Appendix 12-4 – Climate Risk Register



APPENDIX 12-4 (CLIMATE RISK REGISTER)

Risk Identification					Risk Assessment							Adaptation Measures						Significance			
Risk ID	Climate variable	Risk statement	Project receptors	Impact type	Planned controls	Initial risk rating						Adaptation Measures	Timing & Responsibility	Residual Risk Rating						Significance	
						RCP4.5 (2041-2060) Moderate Risk Scenario			RCP8.5 (2041-2060) High Risk Scenario					RCP4.5 (2041-2060)			RCP8.5 (2041-2060)				
						Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating			Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating		
1	Flood pluvial	Potential risk to pluvial flooding on site	Access roads, landfill, buildings	Flooding	Additional 20% increase in peak flood flows included in design	Rare	Insignificant	Low Risk	Unlikely	Low Risk	Low Risk	Design measures	Adaptation measures to be monitored and reviewed annually to ensure sufficient coverage of likely events.	Rare	Insignificant	Low Risk	Unlikely	Low Risk	Low Risk	Low Risk	Not significant

Risk Identification					Risk Assessment							Adaptation Measures							Significance	
Risk ID	Climate variable	Risk statement	Project receptors	Impact type	Planned controls	Initial risk rating						Adaptation Measures	Timing & Responsibility	Residual Risk Rating						Significance
						RCP4.5 (2041-2060) Moderate Risk Scenario			RCP8.5 (2041-2060) High Risk Scenario					RCP4.5 (2041-2060)			RCP8.5 (2041-2060)			
						Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating			Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating	
2	Extreme Heat	Extended heat events have the potential to impact Integrated Constructed Wetlands and composting facility	Integrated Constructed Wetlands and composting facility	Failure of wetlands and composting facility	Monitoring and reviewed annually to ensure sufficient	Unlikely	Minor	Low Risk	Moderate	Minor	Medium Risk	Consideration of wetlands and composting management for extreme heat periods.	Adaptation measures to be monitored and reviewed annually to ensure sufficient coverage of likely events.	Unlikely	Minor	Low Risk	Moderate	Minor	Medium Risk	Significant

Risk Identification					Planned controls	Risk Assessment						Adaptation Measures						Significance		
Risk ID	Climate variable	Risk statement	Project receptors	Impact type		Initial risk rating			Adaptation Measures	Timing & Responsibility	Residual Risk Rating			Significance						
						RCP4.5 (2041-2060) Moderate Risk Scenario					RCP8.5 (2041-2060) High Risk Scenario				RCP4.5 (2041-2060)			RCP8.5 (2041-2060)		
					Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating			Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating		
3	Extreme Cold	Extended heat events have the potential to impact Integrated Constructed Wetlands and access roads	Integrated Constructed Wetlands and access roads	Ice/snow on roads impacting access and cold impacting wetlands																
					Moderate	Minor	Medium Risk	Moderate	Minor	Medium Risk	Consideration of wetlands and road management for extreme cold periods.	Adaptation measures to be monitored and reviewed annually to ensure sufficient coverage of likely events.	Moderate	Minor	Medium Risk	Moderate	Minor	Medium Risk	Significant	

Risk Identification					Risk Assessment							Adaptation Measures						Significance		
Risk ID	Climate variable	Risk statement	Project receptors	Impact type	Planned controls	Initial risk rating						Adaptation Measures	Timing & Responsibility	Residual Risk Rating						Significance
						RCP4.5 (2041-2060) Moderate Risk Scenario			RCP8.5 (2041-2060) High Risk Scenario					RCP4.5 (2041-2060)			RCP8.5 (2041-2060)			
						Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating			Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating	
4	Drought	Drought events have the potential to impact Integrated Constructed Wetlands and lands capping	Integrated Constructed Wetlands and lands capping	Drought causing impacts to planting in wetlands or lands capping	Adaptation measures to be monitored and reviewed annually to ensure sufficient coverage of likely events	Rare	Minor	Low Risk	Unlikely	Minor	Low Risk	For landscaping use drought resistant planting and rainwater harvesting to provide a backup supply of water.	Adaptation measures to be monitored and reviewed annually to ensure sufficient coverage of likely events.	Rare	Minor	Low Risk	Unlikely	Minor	Low Risk	Not significant

Risk Identification					Risk Assessment							Adaptation Measures							Significance	
Risk ID	Climate variable	Risk statement	Project receptors	Impact type	Planned controls	Initial risk rating						Adaptation Measures	Timing & Responsibility	Residual Risk Rating						Significance
						RCP4.5 (2041-2060) Moderate Risk Scenario			RCP8.5 (2041-2060) High Risk Scenario					RCP4.5 (2041-2060)			RCP8.5 (2041-2060)			
						Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating			Likelihood	Consequence	Risk rating	Likelihood	Consequence	Risk rating	
5	Wind	Wind has the potential to damage some utilities, such as overhead lines, and building on site.	Overhead lines and building	Damage to line or building cladding	Upkeep of buildings to ensure no weak points. Designed to Eurocodes which account for wind loadings.	Unlikely	Insignificant	Low Risk	Moderate	Insignificant	Low Risk	Designed and built to standards that should be resilient to increased wind loading.	In addition to regular annual maintenance to overhead lines and buildings, additional maintenance checks prior to any forecast significant storm.	Unlikely	Insignificant	Low Risk	Moderate	Insignificant	Low Risk	Not significant