

APPENDIX 8.4
EMISSIONS MITIGATION STATEMENT

Appendix 8.4: Emissions Mitigation Statement

- 8.4.1 The Sussex Air Quality Guidance requires developments to estimate their associated health damage cost.

Emissions Calculation for Development Traffic

- 8.4.2 Emissions of NO_x and PM_{2.5} (in tonnes per annum) have been estimated for five years of the scheme's operation. Defra's 'Damage Cost Appraisal Toolkit' has been used to calculate the total of any damage costs.

Results of Emissions Calculations for Development Traffic

- 8.4.3 The traffic data provided by Glanville and used within the damage cost calculations are shown below in Table 8.4.1.

Table 8.4.1 Traffic Flows

LDVs	HDV
784	987

- 8.4.4 The average speed for a 10km trip has been assumed as 50km/hr in line with the guidance document. The emissions for the year of the operation of the site have been calculated using the 'Defra Emissions Factor Toolkit (Version 13.1)'. The results of the Damage Cost Calculations are provided in Table 8.4.2.

Table 8.4.2 Monetised Emissions

Pollutant	Emissions (Tonne/year)	Output from Damage cost appraisal toolkit for one year (£) – based on cost values for 'Road Transport Urban Medium'	Total Health Damage Value for 5 years (£)
	2032		
NO _x	1.802	£19,894	£99,470.56
PM _{2.5}	0.272	£21,127	£105,632.59
Total			£205,103.15

Operational Mitigation Measures

- 8.4.5 The Sussex Air Quality Planning Guidance suggests the following mitigation measures to be considered for developments:

Invest in EV charging infrastructure within the development over and above the current recommended parking standards

Provide vouchers for alternatives to private car use

Set up a car club within the development or contribute to the cost of a local car club

Designate parking spaces for car club/car sharing vehicles

Designate parking spaces for low emission vehicles

Improve cycle paths to link to the existing local cycle network

Provide secure cycle storage

Invest in additional evergreen infrastructure to reduce particulates and other pollutants

Set up differential parking charges to favour cleaner vehicles

Provide public transport subsidy for employees

Ensure all new commercial vehicles comply with the latest European Emission Standards

Implement a fleet strategy that reduces emissions

Use zero or ultra-low emission service vehicles

Invest in local walking and cycling initiatives

Contribute to the cost of on-street EV charging

Contribute to unfunded measures identified in air quality action plans Implement a low emission strategy.

Contribute to local low or zero emission vehicle refuelling/recharging infrastructure

Contribute to low emission bus service provision or waste collection services

Contribute to local bike/e-bike hire schemes

Contribute to renewable fuel and energy generation projects

Fund incentives for the take-up of low emission technologies and fuels

8.4.6 Mitigation options will be discussed during the course of the application.