

CONTENTS

Introduction ..... 11-1  
Traffic And Transport ..... 11-1  
Air Quality ..... 11-2  
Noise ..... 11-2  
Landscape & Visual ..... 11-3  
Ecology ..... 11-3  
Water Environment ..... 11-4  
Summary ..... 11-4

## INTRODUCTION

- 11.1 This section assesses the potential cumulative impact generated by the development proposals at the Site. Throughout the technical chapters and associated appendices contained within the Environmental Statement (ES), the impacts that the development could potentially have on the Site and the surrounding area has been assessed.
- 11.2 This chapter draws together the findings of all the technical assessments and outlines whether any cumulative impacts may emerge from the interaction between different environmental impacts.
- 11.3 Cumulative impacts relate to the way in which different impacts can affect a particular environmental resource or location incrementally, for example, combined noise, dust and traffic emissions on a dwelling from a new road scheme.
- 11.4 In essence, cumulative impacts are those which result from incremental changes caused by other past, present or reasonable foreseeable actions together with the proposed development. Therefore, the potential impacts of the proposed development cannot be considered in isolation but must be considered in addition to impacts already arising from existing or planned development.
- 11.5 Each technical team (traffic, air quality, noise, landscape, hydro and ecology) have each identified within their studies the outcome of the proposed development and any potential cumulative effects the development could potentially generate.
- 11.6 Drawing on the results of the ES a summary of the potential cumulative impact the proposals could generate is provided below.

## TRAFFIC AND TRANSPORT

- 11.7 Chapter 6 of the ES has considered the effects of the proposed development cumulatively, taking on board the existing ambient traffic flows alongside anticipated growth over the assessment periods.
- 11.8 The assessment has not considered the cumulative effects incorporating allowances for the Arborfield Development for reasons of prematurity.
- 11.9 However, it is noted that any planning application for the Arborfield Development should be considered against a cumulative baseline incorporating the proposed development.
- 11.10 Taking on board the detailed evidence considered by the EIA, the conclusion of the ES Chapter is that, whilst the development proposal will give rise to cumulative effects (by virtue of the anticipated traffic flow increases), the resultant impacts are within acceptable limits, including in the context of highway capacity and safety.

**No significant adverse Traffic and Transport effects have been identified.**

## AIR QUALITY

- 11.11 Impacts on local air quality from traffic emissions have been assessed to be neutral, based on low traffic volumes of a maximum of 136 movements per day during the operational phase and 82 during the construction phase, which is below the screening criteria within the DMRB guidance.
- 11.12 The potential impacts of the development have been assessed in terms of potential emissions of particulates (dust). A qualitative assessment of dust was undertaken which identified a negligible impact at sensitive receptors.
- 11.13 Mitigation measures currently employed at the site are in accordance with the Dust Management Plan. Additional mitigation measures in accordance with best practice and for the construction of the bund have been proposed. The residual impact is considered to be negligible at all receptor locations.
- 11.14 A comprehensive assessment of potential emissions produced by the development has been carried out, which includes a consideration of the existing background levels, it was concluded that there would be no significant adverse air quality effects for both human and ecological receptors.

**No significant adverse Air Quality effects have been identified subject to proposed mitigation measures.**

## NOISE

- 11.15 The noise levels generated by the operational processes have been assessed against standards appropriate for each type of source considered; BS4142 for the operation of the fixed plant associated with the aggregates recycling facility and the existing ambient noise levels for the assessment of HGV traffic movements.
- 11.16 The scope of BS4142 specifically excludes the assessment of mobile noise sources and is not appropriate for the assessment of cumulative impacts.
- 11.17 Table 11-1 (copied from table 8-12 of Noise Chapter) summarises the cumulative impact of fixed plant (specific noise) and HGV movements at Locations 1, 2 and 3.
- 11.18 The cumulative noise levels have been assessed against the existing ambient noise levels and the potential change has been compared to the impact scale adopted for this assessment.

**Table 11-1**  
**Cumulative Impact Assessment of Fixed Plant and HGV Movements, Free-field**  
 **$L_{Aeq,T}$  dB**

Location	Period	Existing Ambient Noise Level	Predicted Ambient Noise Level	Change	Impact
1. Busta Farm	Midweek	59.8	60.0	+0.2	Minor
	Saturday	59.7	59.9	+0.2	Minor
2. Hill House	Midweek	46.7	47.6	+0.9	Minor
	Saturday	52.9	53.1	+0.4	Minor
3. Hawker's Lodge	Midweek	57.1	59.7	+2.6	Minor
	Saturday	64.6	65.2	+0.6	Minor

11.19 It can be seen from the table above that the cumulative impact of the operation of fixed plant at the proposed aggregates recycling facility and the movement of associated heavy goods vehicle movements would, at worst, have a minor, barely perceptible impact at all of the nearest residential noise sensitive receptors assessed.

11.20 In view of the above mitigation measures are considered unnecessary.

**No significant adverse noise cumulative effects have been identified subject to proposed mitigation measures.**

## LANDSCAPE & VISUAL

11.21 A landscape and visual assessment of the proposed development has been completed in accordance with accepted guidance.

11.22 A study of the landscape and visual components of the site and the local area was undertaken through desktop study and fieldwork. This study identified the main landscape and visual receptors and resulted in a baseline appraisal, against which landscape and visual impacts could be assessed.

11.23 The main landscape and visual implications of the development and their potential impacts were identified, and mitigation was developed to minimise these impacts. Comparing the sensitivity of the receptors to the magnitude of predicted change, then allowed the significance of these resultant impacts to be assessed.

**No significant adverse landscape and visual cumulative effects have been identified subject to proposed mitigation measures.**

## ECOLOGY

11.24 No significant residual negative impacts are predicted on the SPA (directly, indirectly or in combination with other projects), the qualifying species for the SPA (nightjar, woodlark and Dartford warbler), or habitats which support

qualifying species (heathland, young plantation woodland, dense gorse scrub).

- 11.25 The proposed development will result in a net benefit to SPA qualifying birds through the long term management of the compensation site.
- 11.26 It is considered unlikely that there would be any likely significant effect upon the interest features of the SPA and as such that an appropriate assessment has not been necessary for this project
- 11.27 The proposed facility will not impact upon any statutory or non-statutory designated nature conservation sites. There will be no significant impact upon ecological receptors in the area. No significant long term adverse effects are predicted as a result of this proposal.
- 11.28 A number of positive biodiversity creation measures through the long term management of the compensation area will provide a positive measure that benefits the wider natural heritage interests of the area.

**No significant adverse ecological cumulative effects have been identified subject to proposed mitigation measures.**

### WATER ENVIRONMENT

- 11.29 With respect to geology, ground conditions, land quality and hydrology it is concluded that, should the mitigation measures detailed be implemented, there will be no significant residual impacts or cumulative effects associated with the proposed redevelopment.

**No significant adverse Geology, Land Quality and Hydrology cumulative effects have been identified subject to proposed mitigation measures.**

### SUMMARY

- 11.30 In summary no significant adverse cumulative effects have been identified as a result of the proposed development.