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Kent County Council: Draft Minerals and Waste Local Plan 2013-30

Habitats Regulations Assessment

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1. INTRODUCTION

1.1 Scope of the Project

URS Infrastructure & Environment UK Ltd was appointed by Kent County Council to assist the Council in undertaking a Habitats Regulations Assessment (HRA) of the emerging Minerals and Waste Local Plan (MWLP) policies and associated documents. The objective of the assessment was to identify any aspects that would have the potential to cause a likely significant effect on Natura 2000 or European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites), either in isolation or in combination with other plans and projects, and to devise appropriate mitigation strategies where such effects were identified. This current HRA document therefore considers the delivery strategy policies contained within the draft Minerals and Waste Local Plan. URS has already undertaken HRA screening on a Strategy and Policy Directions consultation in 2011.

1.2 Legislation

The need for HRA, sometimes also referred to as Appropriate Assessment or AA is set out within Article 6 of the EC Habitats Directive 1992, and interpreted into British law by the Conservation of Habitats & Species Regulations 2010. The ultimate aim of the Habitats Directive is to "*maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest*" (Habitats Directive, Article 2(2)). This aim relates to habitats and species, not the European sites themselves, although the sites have a significant role in delivering favourable conservation status. European sites (also called Natura 2000 sites) can be defined as actual or proposed/candidate Special Areas of Conservation (SAC) or Special Protection Areas (SPA). It is also Government policy for sites designated under the Convention on Wetlands of International Importance (Ramsar sites) to be treated as having equivalent status to Natura 2000 sites.

The Habitats Directive applies the precautionary principle to protected areas. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. This is in contrast to the SEA Directive which does not prescribe how plan or programme proponents should respond to the findings of an environmental assessment; merely that the assessment findings (as documented in the 'environmental report') should be 'taken into account' during preparation of the plan or programme. In the case of the Habitats Directive, plans and projects may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.
All the European sites mentioned in this document are shown in Figure 1. In order to ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the plan or project in question:

Box 1. The legislative basis for Appropriate Assessment

Habitats Directive 1992

Article 6 (3) states that:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives."

Conservation of Habitats & Species Regulations 2010 (as amended)

The Regulations state that:

"*A competent authority, before deciding to … give any consent for a plan or project which is likely to have a significant effect on a European site … shall make an appropriate assessment of the implications for the site in view of that sites conservation objectives… The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site*".

1.3 Geographic Scope

There is no pre-defined guidance that dictates the physical scope of an HRA of a Development Plan Document (DPD), such as a Minerals and Waste Plan. Therefore, in considering the physical scope of the assessment we were guided primarily by the identified impact pathways rather than by arbitrary 'zones'. Current guidance suggests that the following European sites be included in the scope of assessment:

- All sites within the county of Kent; and
- Other sites shown to be linked to development within the County boundary through a known 'pathway' (discussed below).

Briefly defined, pathways are routes by which a change in activity within the Core Strategy area can lead to an effect upon a European site. In terms of the second category of European site listed above, CLG guidance states that the AA should be '*proportionate to the geographical scope of the* [plan policy]' and that '*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*' (CLG, 2006, p.6).

The European sites of relevance to this assessment are listed in Table 1 below.

Table 1 – European Sites Within Kent

SAC	SPA	Ramsar site
Stodmarsh		
	Medway Estuary and Marshes	
	The Swale	
	Dungeness to Pett Level	
	Thames Estuary and Marshes	
	Thanet Coast and Sandwich Bay	
Dungeness		
Thanet Coast		
Sandwich Bay		
Lydden and Temple Ewell Downs		
Wye and Crundale Downs		
Folkestone to Etchinghill Escarpment		
Blean Complex		
North Downs Woodlands		
Peter's Pit		
Dover to Kingsdown Cliffs		
Parkgate Down		
Queendown Warren		

In addition, the area around Dungeness is currently proposed by Natural England for designation as the Dungeness, Romney Marsh & Rye Bay pSPA and pRamsar site. This site will include the existing Dungness to Pett Level SPA but also a large amount of surrounding farmland. As such, this HRA does take account of this site since it is likely to be designated during the course of the MWLP period. Further information on the interest features of all European sites of relevance to this report are given in Appendix 1.

These European sites are all therefore automatically included within the scope of the HRA (at least at screening) and are subject to consideration within this document as to whether they have links with development within Kent via pathways as described in Chapter 3. No further sites outside Kent have been identified as being connected with waste and minerals development within the county by a relevant pathway.

1.4 This Report

Chapter 2 of this report explains the process by which the HRA has been carried out. Chapter 3 explores the relevant pathways of impact. Chapter 4 covers the screening of the draft Minerals and Waste Local Plan policies. Chapter 5 considers other plans and policies that may act 'in combination.' The key findings are summarised in Chapter 6: Conclusions.

2. METHODOLOGY

2.1 Key Principles

This section sets out the basis of the methodology for the HRA. URS has adhered to several key principles in developing the methodology – see Table 2.

Table 2 - Key principles underpinning the proposed methodology

Principle	Rationale
Use existing information	We make the best use of existing information to inform the assessment. This will include information gathered as part of the SA of the emerging Plan and information held by Natural England, the Environment Agency and others.
Consult with Natural England, the Environment Agency and other stakeholders	We will ensure consultation with Natural England for the duration of the assessment. We will ensure that we utilise information held by them and others and take on board their comments on the assessment process and findings.
Ensure a proportionate assessment	We will ensure that the level of detail addressed in the assessment reflects the level of detail in the Plan (i.e. that the assessment is proportionate). With this in mind, the assessment will focus on information and impacts considered appropriate to the local level.
Keep the process as simple as possible	We will endeavour to keep the process as simple as possible while ensuring an objective and rigorous assessment in compliance with the Habitats Directive and emerging best practice.
Ensure a clear audit trail	We will ensure that the HRA process and findings are clearly documented in order to ensure a clearly discernible audit trail.

The HRA is being carried out in the absence of formal Government guidance. Communities and Local Government released a consultation paper on Appropriate Assessment of Plans in 2006[1] . As yet, no further formal guidance has emerged.

Figure 2 below outlines the stages of HRA according to current draft CLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

[1] CLG (2006) Planning for the Protection of European Sites, Consultation Paper

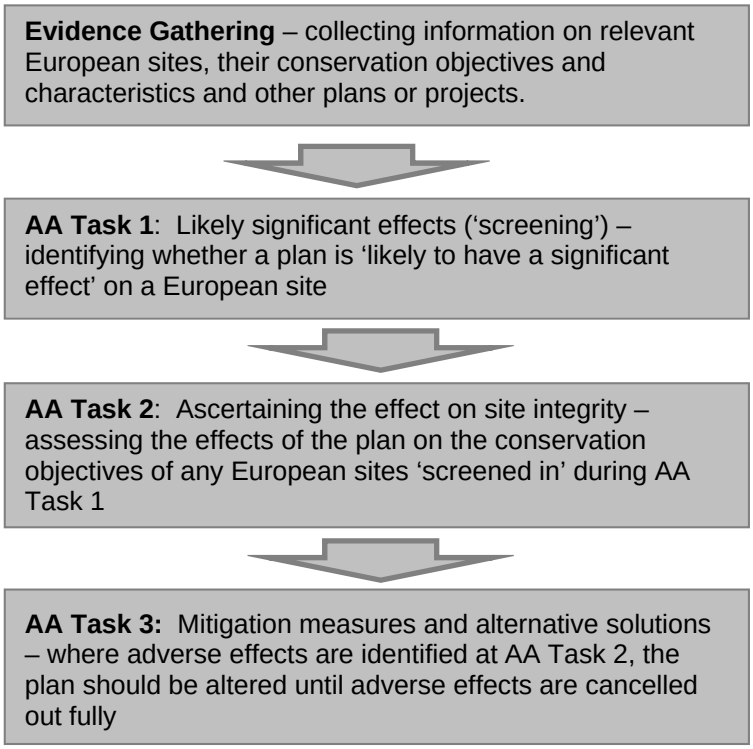

Figure 2 – Four-Stage Approach to Habitat regulations Assessment (Source: CLG, 2006)

2.2 Likely Significant Effects

The first stage of any Habitats Regulations Assessment (AA Task 1) is a Likely Significant Effect (LSE) test - essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

"Is the Plan, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites.

2.3 Confirming Other Plans and Projects that may act In Combination

It is clearly neither practical nor necessary to assess the 'in combination' effects of the Core Strategy within the context of all other plans and projects within the South East. In practice therefore, in combination assessment is of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential. For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key other plans and projects relate to the additional housing, transportation and commercial/industrial allocations proposed for other neighbouring authorities over the lifetime of the Plan.

The Minerals and Waste Local Plan includes two strategic site allocations and a range of minerals and waste policies. Other than the two strategic allocations (both of which are already permitted but are included in the Plan because they will contribute to the Plan strategy and targets) it does not provide any site specificity but rather sets out the overall strategy for

minerals and waste development and the criteria and standards with which all minerals and waste development will need to comply. The Minerals and Waste Local Plan will be followed by a Site Allocations DPD. The Site Allocations document will itself be subject to Habitats Regulations Assessment. One of the key aspects of that Habitats Regulations Assessment will be an analysis of the 'in combination' effects of all proposed minerals and waste sites on traffic flows and a potential new Energy from Waste Facility on European sites within and adjacent to Kent, taking into account background development planned over the same time period (including the two strategic minerals and waste sites). This will utilise transport and air quality modelling.

The principal other plans and projects that have been considered in making the judgements in Chapter 4 are:

Projects

- Lydd Airport expansion;
- Port of Dover expansion (Terminal 2);and
- Decommissioning of Dungeness A and B.

Plans

- East Sussex Minerals and Waste Development Framework
- The London Plan
- Kent Local Transport Plan
- East Sussex Local Transport Plan
- Core Strategies/Local Plans for Kent and Medway authorities
- Environment Agency Catchment Abstraction Management Strategies (CAMS), Catchment Flood Management Plans (CFMPs), and Review of Consents (Stages 3 and 4).
- Water company Water Resources Management Plans for Kent and adjacent authorities
- Environment Agency (2006). Water Resources in the South East report to latest South East Plan housing provision and distribution received from SEERA. May 2006, for commentary to SEERA
- Shoreline Management Plans relevant to Kent.

In preparing this HRA we have utilised data held on the following sources in order to inform on the current ecological status of relevant European sites:

- The UK Air Pollution Information System (www.apis.ac.uk); and
- Nature on the Map and its links to SSSI citations and the JNCC website (www.natureonthemap.org.uk)

3. PATHWAYS OF IMPACT

3.1 Introduction

In carrying out an HRA it is important to determine the various ways in which land use plans can impact on European sites by following the pathways along which development can be connected with European sites, in some cases many kilometres distant. Briefly defined, pathways are routes by which a change in activity associated with a development can lead to an effect upon a European site.

3.2 Atmospheric Pollution

Current levels of understanding of air quality effects on semi-natural habitats are not adequate to allow a rigorous assessment of the likelihood of significant effects on the integrity of key European sites.

Table 3. Main sources and effects of air pollutants on habitats and species

Pollutant	Source	Effects on habitats and species
Acid deposition	SO_2, NO_x and ammonia all contribute to acid deposition. Although future trends in S emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, it is likely that increased N emissions may cancel out any gains produced by reduced S levels.	Can affect habitats and species through both wet (acid rain) and dry deposition. Some sites will be more at risk than others depending on soil type, bed rock geology, weathering rate and buffering capacity.
Ammonia (NH_3)	Ammonia is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but levels have increased considerably with expansion in numbers of agricultural livestock. Ammonia reacts with acid pollutants such as the products of SO_2 and NO_X emissions to produce fine ammonium (NH_4^+)- containing aerosol which may be transferred much longer distances (can therefore be a significant trans-boundary issue.)	Adverse effects are as a result of nitrogen deposition leading to eutrophication. As emissions mostly occur at ground level in the rural environment and NH_3 is rapidly deposited, some of the most acute problems of NH_3 deposition are for small relict nature reserves located in intensive agricultural landscapes. Ammonia is also produced through some industrial process and by the composting of organic matter on waste sites.
Nitrogen oxides NO_x	Nitrogen oxides are mostly produced in combustion processes. About one quarter of the UK's emissions are from power stations, one-half from motor vehicles, and the rest from other industrial and domestic combustion processes.	Deposition of nitrogen compounds (nitrates (NO_3), nitrogen dioxide (NO_2) and nitric acid (HNO_3)) can lead to both soil and freshwater acidification. In addition, NO_x can cause eutrophication of soils and water. This alters the species composition of plant communities and can eliminate sensitive species.

Pollutant	Source	Effects on habitats and species
Nitrogen (N) deposition	The pollutants that contribute to nitrogen deposition derive mainly from NO_X and NH_3 emissions. These pollutants cause acidification (see also acid deposition) as well as eutrophication.	Species-rich plant communities with relatively high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication, due to its promotion of competitive and invasive species which can respond readily to elevated levels of N. N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O_3)	A secondary pollutant generated by photochemical reactions from NO_x and volatile organic compounds (VOCs). These are mainly released by the combustion of fossil fuels. The increase in combustion of fossil fuels in the UK has led to a large increase in background ozone concentration, leading to an increased number of days when levels across the region are above 40ppb. Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O_3 above 40 ppb can be toxic to humans and wildlife, and can affect buildings. Increased ozone concentrations may lead to a reduction in growth of agricultural crops, decreased forest production and altered species composition in semi-natural plant communities.
Sulphur Dioxide SO_2	Main sources of SO_2 emissions are electricity generation, industry and domestic fuel combustion. May also arise from shipping and increased atmospheric concentrations in busy ports. Total SO_2 emissions have decreased substantially in the UK since the 1980s.	Wet and dry deposition of SO_2 acidifies soils and freshwater, and alters the species composition of plant and associated animal communities. The significance of impacts depends on levels of deposition and the buffering capacity of soils. Major SO2 problems now only tend to occur in cities in which coal is still widely used for domestic heating, in heavy industry and in power stations[2].

Additionally, waste sites (particularly incinerators and landfill sites) can generate the following pollutants:

- Methane (CH_4) - Methane is produced when organic matter is broken down in the absence of oxygen and large quantities are produced by livestock, the spreading of animal manure and landfill sites. Waste treatment, including landfill, released nearly 22% of the UK's methane emissions in 2003, about 2% of all greenhouse gas emissions (in terms of carbon equivalents)[3].

[2] Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. http://www.airquality.co.uk/archive/index.php
[3] Environment Agency website

- Carbon Dioxide (CO_2) - Carbon dioxide is one of the major combustion products from burning fossil fuels. It is also produced in certain non-combustion chemical reactions, for instance in the manufacture of cement. Carbon dioxide is a long-lived pollutant and will remain in the atmosphere for between 50 and 200 years. Carbon dioxide contributes to the greenhouse effect[4].
- Hydrogen chloride and hydrogen fluoride (HCl and HF) – Both of these chemicals are produced in small amounts as a result of certain energy from waste facilities, principally incineration. HF is the most phytotoxic of all air pollutants. It accumulates in very high concentrations in the margins of leaves. In sensitive species this may lead to distortion of the leaf shape, chlorosis (yellowing), red colouration and, in extreme cases, death of tissues. HCl can also have local, direct, effects on plants, but there is little information available about dose-response relations[5].
- Dioxins - These are long-lived organic compounds, which form when chlorinated substances in the waste, such as PVC plastic, are burnt and accumulate in the human food chain. Dioxin emissions to air from incinerators are thought to have decreased significantly in recent years. Four sources account for 74% of the total air emissions. These are legal municipal waste incineration (26%), sinter plants (18%), residential wood combustion (boilers, stoves, fireplaces, 16%) and incineration of hospital waste (14%). The incineration of hazardous industrial waste contributes less than 1%.[6]
- Heavy metals – specifically Cadmium (Cd), which is a normal constituent of soil and water at low concentrations. The main sources of cadmium emissions are from waste incineration, and iron and steel manufacture[7]. Cadmium and other heavy metals are mainly present in the ash produced by incinerators, but some is released directly to atmosphere via the exhaust stack. Emissions of cadmium have declined substantially over recent years; this is mainly attributable to the decline in coal combustion to generate power. Environmentally, cadmium is dangerous because many plants and some animals absorb it easily and it becomes concentrated in tissues.

Migration of landfill gas outside the perimeter of landfill sites taking biodegradable waste can occur, but only where sites have been inadequately engineered. In such circumstances the gas will exclude oxygen from the soil and lead to the exposure and possible death of plants and soil fauna. Such effects are unlikely beyond a 0.5km radius[8] in any case, but since they are a result of poor engineering design, and any current landfill sites will be required to conform to all modern authorisations, they are not considered further in this assessment.

For the following reasons, only NOx and ammonia are considered further as specific pollutants in this assessment:

[4] UK Air Pollution Information System www.apis.ac.uk
[5] ERM. 2007. Appropriate Assessment of the Surrey Waste Development Framework. Surrey County Council
[6] Chlorine Online Information Resource website http://www.eurochlor.org/upload/documents/document57.pdf
[7] National Atmospheric Emissions Inventory www.aeat.co.uk/netcen/airqual/naei/annreport/annrep96/sect6_3.htm
[8] Scottish Environment Protection Agency. 2003. Technical Guidance Note - Habitats Regulations & The Landfill Regulations Guidance http://www.sepa.org.uk/pdf/guidance/landfill_directive/habitats_landfill_regulations_guidance.pdf

- Despite the general association with nitrogen dioxide, ozone levels are not as high in urban areas (where high levels of nitrogen dioxide are emitted) as in rural areas. This is largely due to the long-range nature of this pollutant, which is sufficiently great that the source of emission and location of deposition often cross national boundaries. As such, low-level ozone can only be practically addressed at the national and international level.

- Although methane and carbon dioxide are important greenhouse gases, it is not possible to relate quantities of these gases to particular effects on specific European sites. It is therefore not possible to consider these within the scope of this HRA other than by noting that increased emission of these chemicals will contribute at a global scale to accelerating rates of climate change.

- Sulphur dioxide concentrations are overwhelmingly influenced (82% of emissions[9]) by the output of power stations and industrial processes that require the combustion of coal and oil. None of these activities will be associated with developments under the MWLP and indeed the use of Energy from Waste technology will reduce reliance on conventional power stations and therefore contribute to a reduction in SO_2 emissions.

- There is an enormous range in sensitivity to hydrogen chloride and hydrogen fluoride between species, and there are no commonly available critical levels for avoidance of visible injury to vegetation. Coupled with the fact that quantities emitted by incinerators will typically result in ground-level concentrations lower than the concentration that will harm vegetation[10], these chemicals are not considered further in this assessment.

- As with ozone, the distance from emission to deposition of dioxins can be many hundreds of miles, potentially crossing trans-national boundaries, and is dependent upon meteorological conditions. Most importantly, amounts of dioxins formed in incinerators depend primarily on the design and operating temperatures of the facility[11]. It is therefore not possible to consider dioxin emissions in detail within this assessment. However, it is important to note that dioxins are only emitted by incineration and that incinerators are required by law to control their dioxin emissions below set thresholds.

Since ammonia is of relevance to European sites primarily through its effect upon nitrogen deposition, it is not considered independently of nitrogen deposition in this assessment. Since NOx can be directly toxic to plants, it is considered separately from its influence on nitrogen deposition in this assessment.

Eutrophication of sensitive habitats through atmospheric deposition is a widely acknowledged phenomenon, although it is extremely difficult to measure as its effects are often hidden by changes in local nutrients (i.e. via direct fertilisation) or changes in grazing pressure.

In well-managed sites, the effects of eutrophication may be to some extent counteracted through an increase in grazing pressure. Bobbink et al.[12] suggest that sites with low intensity management may have lower critical thresholds than those in higher levels of management.

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[9] Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. http://www.airquality.co.uk/archive/index.php

[10] ERM. January 2007. Appropriate Assessment of the Surrey Waste Development Framework. Surrey County Council

[11] Chlorine Online Information Resource website. http://www.eurochlor.org/upload/documents/document57.pdf

[12] Bobbink, Ashmore, Braun, Fluckiger and Vanden Wyngaert. 2002. Work on critical loads for natural and semi-natural systems ("*Empirical nitrogen critical loads for natural and semi-natural ecosystems 2002 update*")

Reintroducing grazing into ungrazed or under-grazed sites can help to counteract changes in vegetation due to nitrogen deposition; however increasing grazing on sites that are already well-grazed may have a direct adverse impact on the plants for which the site was designated.

Furthermore, air pollution can act synergistically with insufficient grazing to exacerbate management problems and lead to a coarser species-poor sward. A changing climate (i.e. rising temperatures and reduced summer rainfall) is further exacerbating the situation by putting sensitive habitats and species under increasing stress, in turn reducing their competitive ability and increasing susceptibility to pathogens.

3.2.1 *Oxides of nitrogen and nitrogen deposition*

The most acute impacts of NOx take place close to where they are emitted, but individual sources of pollution will also contribute to an increase in the general background levels of pollutants at a wider scale, as small amounts of NOx and other pollutants from the pollution source are dispersed more widely by the prevailing winds.

The main sources of NOx in the UK are[13]:

- Road and other transport (approximately 47%; greater in urban areas);
- Public power generation using fossil fuels (22%).
- Combustion in industrial processes[14] (14%).
- Domestic and commercial sources (4%), e.g. commercial boilers in schools, hospitals etc.

Therefore, when considering the ecologically relevant impacts of the MWLP, by far the largest contribution to NOx will generally be made by the associated road traffic.

The following air pollution limit value applies for the protection of vegetation and ecosystems from NOx:

- World Health Organisation 30 μgm^{-3} annual average; EU Air Quality Framework Directive 30 μgm^{-3} annual average away from areas close to main roads, built up areas or major industrial sites; Natural England policy in agreement with the Environment Agency in their Review of Consents process is that the 30 μgm^{-3} threshold should apply to all designated sites, due to the sensitivity of the habitats within the sites.

3.2.2 *Transport exhaust emissions*

In an appropriate assessment of potential impacts of proposed waste facility sites in Surrey, a dispersion model was used to quantify the effects of emissions from operational vehicles travelling to and from a theoretical incinerator. It was shown that at distances greater than 55 metres from the kerbside, ground level concentrations of NOx represent less than 1% of the critical level[15]. Inevitably however, the distance to which the pollutants will disperse depends

[13] Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. http://www.airquality.co.uk/archive/index.php
[14] Combustion of coal and oil, some refinery processes and the production of sulphuric acid and other chemicals
[15] 1% being the level defined in the EU Habitats Directive Handbook at which emissions are not likely to have a significant effect alone or in combination, irrespective of background levels

upon the parameters of the model and prevailing meteorological conditions. Moreover, it is clear from other research that there is no such thing as a 'typical' waste site.

The actual scale of heavy vehicle movement associated with waste facilities is entirely dependent upon both the type and scale of the facility, neither of which can be prescribed by the Minerals & Waste Plan except at the broadest scale. It is therefore impossible to give meaningful "typical" values for waste sites. A review of a number of waste schemes[16] identified that:

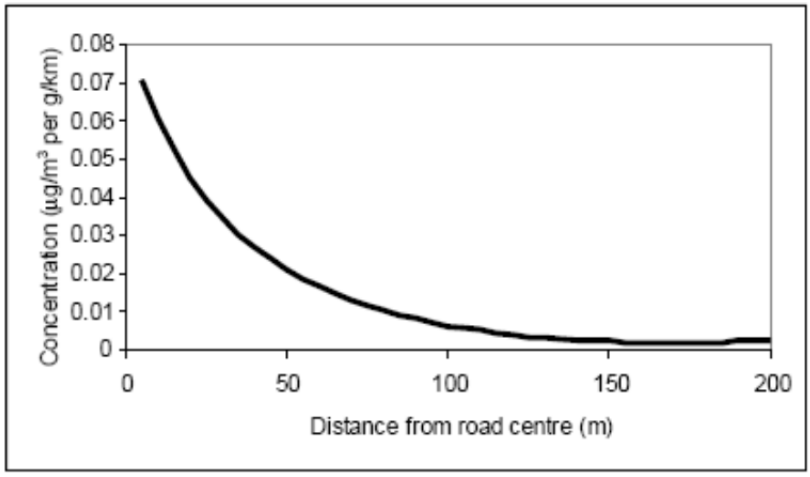
- A Household Waste Recycling Centre may have very small numbers of heavy vehicle movements (4 per day) but can have a very large number of car movements associated with the general public bringing waste to the site – 150 cars per day at the site considered in the cited example;
- Thermal Treatment and Energy from Waste facilities will generally have a much greater number of heavy vehicle movements (perhaps 100 to 200 per day) due to their generally large size, but will also have a much smaller number of cars travelling to the site, as they do not accept waste from the general public and are heavily automated;
- Most other forms of waste treatment (including landfill) fall between these two extremes depending as much upon their size as their type;
- The situation can become considerably more complex if various forms of waste treatment facility are co-located on the same site. The ERM (2007) study gathered data from one site that combined a Waste Transfer Station with a Household Waste Recycling Centre, which as a result showed both higher numbers of HGV traffic (66 per day) and public car traffic (up to 1,000 per day at peak times of the year) than either form of waste facility might be expected to attract individually.

It is clear from the above that the situation regarding vehicular exhaust emissions associated with waste treatment sites is considerably more complex than it might appear at face value. The only general conclusion that can be safely drawn is that all new waste sites are likely to result in a local increase in vehicle movements and that this increase may be greater where multiple types of waste treatment facility are provided in the same location. It is also true that the distance vehicles travel may be as important as the numbers or type of vehicle in contributing to deteriorating atmospheric deposition of European sites, if the route leads the traffic within close proximity of multiple European sites.

According to the Department of Transport's Transport Analysis Guidance, "*Beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant*"[17].

[16] ERM. January 2007. Appropriate Assessment of the Surrey Waste Development Framework. Surrey County Council
[17] www.webtag.org.uk/archive/feb04/pdf/feb04-333.pdf

Figure 3 – Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT)



Consequently this is the distance that has been used throughout this screening report in order to determine whether European sites are likely to be significantly affected by development under the MWLP.

The following European sites in Kent lie within 200m of a major road which could be used as a strategic transport route for minerals and waste traffic:

- Lydden & Temple Ewell Downs SAC – a portion of which is located within 200m of the A2;
- Dover to Kingsdown Cliffs SAC – a portion of which is located within 200m of the A20;
- Folkestone to Etchinghill Escarpment SAC – a portion of which is located within 200m of the A20/M20;
- The Swale SPA & Ramsar site – a portion lies within 200m of the A249 and A299;
- Medway Estuary & Marshes SPA/Ramsar site – a portion lies within 200m of the A249;
- North Downs Woodlands SAC – a portion lies within 200m of the A249; and
- Thames Estuary & Marshes SPA/Ramsar site - a portion lies within 200m of the A228.

3.2.3 *Energy from Waste*

While traffic makes the largest overall contribution to NOx, some individual point sources can also result in substantial increases in the local NOx concentration. Of those point sources associated with waste treatment, thermal treatment / Energy from Waste facilities[18] have the potential to emit the greatest amounts, as any form of thermal treatment involves the emission of exhaust gases.

[18] Energy from Waste (or Waste to Energy) refers to those types of thermal treatment that incorporate energy recovery technology.

The Environment Agency guidance on screening point-source pollution emitters for more detailed assessment[19] lists the presence of a Natura 2000 site within 10km as one of the indicators that detailed assessment (i.e. dispersion-modelling) may be required for a planning application/IPCC consent. The implication of this is that the emissions of a point-source can normally be considered effectively inconsequential on sites located more than 10km distant. While this would not apply to major emitters such as large power stations, refineries and steel works, it would apply to smaller ones such as thermal waste treatment facilities.

For this screening exercise, we have therefore used the 10km figure as a basis on which to screen issues in and out of assessment regarding their possible use as a location for an Energy from Waste facility. If sites that may be suitable for EfW are located within 10km of a European site, they have been screened in for further consideration.

3.2.4 *Landfill*

A landfill gas flare (or utilisation engine) will produce an emission of exhaust gases such as sulphur dioxide, NOx, unburnt hydrocarbons, carbon monoxide and hydrogen chloride. However, the volume of exhaust gases is likely to be small in comparison to other combustion facilities and at a distance of >1km from the European site may well be inconsequential[20]. We have therefore used the 1km figure throughout this screening report as a basis on which to screen landfill issues in or out of assessment with regard to air quality issues.

3.2.5 *Other types of waste facility*

Atmospheric emissions of NOx from other types of facility are negligible. For example, anaerobic digestion[21] does result in the generation of biogas but not NOx. The emissions to the air are well controlled; some emissions may arise from biogas under positive pressure in the tank, but under normal operating conditions biogas is not released direct to air[22]. Equally, waste transfer stations[23] and mechanical biological treatment[24] plant can incorporate a number of different processes in a variety of combinations and can be built for various purposes, but air emissions and health impacts are most likely to be linked to traffic movements. In general therefore, the view has been taken in this screening report that waste sites other than landfill and Energy from Waste facilities are unlikely to have a significant air quality effect on European sites (other than through associated vehicle exhaust emissions).

3.2.6 *Biopathogen emissions*

Some composting sites can result in the production of bio-pathogens, which if released into the environment can result in adverse effects on vegetation within European sites located close to the facility. In previous work in Sussex we have agreed with Natural England a screening distance of 1km to be applied to such facilities.

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[19] Environment Agency. 2012. Integrated Pollution Prevention and Control - Environmental Assessment and Appraisal of BAT. Horizontal Guidance Note IPPC H1

[20] Scottish Environment Protection Agency. 2003. Technical Guidance Note - Habitats Regulations & The Landfill Regulations Guidance. http://www.sepa.org.uk/pdf/guidance/landfill_directive/habitats_landfill_regulations_guidance.pdf

[21] The biological treatment of biodegradable organic waste in the absence of oxygen, utilising microbial activity to break down the waste in a controlled environment

[22] Defra. 2004. Review of Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes. Defra Publication, London, UK

[23] In which waste is transported from waste producers (industry, commerce and the general public) to be treated, recycled and/or disposed

[24] A generic term for an integration of several processes commonly found in other waste management technologies, such as Materials Recovery Facilities, sorting and composting plant

3.2.7 *Quarries and minerals sites*

Atmospheric pollutants generated by minerals sites are more straightforward than with waste sites and generally resolve themselves into dust and traffic exhaust emissions. Vehicle exhaust emissions have already been discussed. Effects of dust will depend on the prevailing wind direction and the transport distance is related to particle size; large particles (>30µm) will mostly deposit within 100m of the source, intermediate particles (10-30µm) are likely to travel up to 200 - 500m. Smaller particles (<10µm) can travel up to 1km from the source[25]. With regard to the interest features of European sites, it is likely to be the large and intermediate size particles that are of most interest since if present in sufficient quantities they can smother vegetation, preventing light penetration to the chloroplasts and blocking stomata thus interrupting photosynthesis and transpiration. In prolonged cases, death can result.

Dust impacts will be considered further in this assessment, but cannot be quantified beyond the broad potential distances identified above for different particle sizes. For the purposes of screening, minerals sites that concern areas more than 500m from a European site have been 'screened out' as being unlikely to contribute significant dust impacts even without special mitigation such as 'wetting'.

3.2.8 *Diffuse air pollution*

In addition to the contribution to local air quality issues, development can also contribute cumulatively to an overall deterioration in background air quality across an entire region. In July 2006, when this issue was raised by Runnymede District Council in the South East, Natural England advised that they 'can only be concerned with locally emitted and short range locally acting pollutants'[26] as this is the only scale which falls within a local authorities remit. It is understood that this guidance was not intended to set a precedent, but it inevitably does so since (as far as we are aware) it is the only formal guidance that has been issued to a Local Authority from any Natural England office on this issue.

In the light of this and our own knowledge and experience, it is considered reasonable to conclude that diffuse pan-authority air quality impacts are the responsibility of central Government, both since they relate to the overall quantum of development across the UK and since this issue is best addressed at the highest pan-authority level. Diffuse air quality issues will not therefore be considered further within this HRA.

3.3 Water Quality and Flows

The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:

- At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour.
- Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition

[25] Scottish Environment Protection Agency. 2003. Technical Guidance Note - Habitats Regulations & The Landfill Regulations Guidance
[26] English Nature (16 May 2006) letter to Runnymede Borough Council, 'Conservation (Natural Habitats &c.) Regulations 1994, Runnymede Borough Council Local Development Framework'.

of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing available nitrogen; phosphorus is the limiting nutrient in most freshwater environments.

- Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.

Water quality may be adversely affected by waste sites through:

- Pollution through water runoff from hard surfaces carrying oils, heavy metals and/or de-icing compounds. While these effects can be dispersed throughout the downstream water catchment, they will be most visibly manifested within tens of metres to a few hundred metres of the site[27]; and

- Discharges of leachate from landfill sites can add ammonia, other nutrients and chemical pollutants to surface water bodies. Leachate can also penetrate groundwater. Leachate can escape from landfill sites by leakage through a barrier / containment system, break out through a cap, or overtopping containment.

There are several ways in which quarrying / mining can affect water quality/resources:

- Quarries and mines that are below the water table will require dewatering on a regular basis. Dewatering[28] can lead to a reduction in the water table and “draw down” from hydraulically linked groundwater dependent habitats (including streams and rivers);

- The physical presence of a new quarry in the unsaturated zone (i.e. above the water table) can increase the possibility of aquifer contamination and result in a direct reduction in temporary groundwater storage capacity;

- If the water that is pumped from a quarry as a result of dewatering has a high proportion of clays and suspended particles, or is contaminated with metals, it can reduce water quality within those watercourses that receive the water; and

- Backfilling a dormant quarry with overburden or imported fill may cause changes to groundwater levels, quality and flow paths in adjoining areas.

In or near Kent there are ten European sites that have a particular hydrological sensitivity:

- Medway Estuary and Marshes SPA & Ramsar site;

- The Swale SPA and Ramsar site;

- Dungeness SAC;

- Dungeness to Pett Level SPA;

[27] Scottish Environment Protection Agency. 2003. Technical Guidance Note - Habitats Regulations & The Landfill Regulations Guidance. http://www.sepa.org.uk/pdf/guidance/landfill_directive/habitats_landfill_regulations_guidance.pdf

[28] Dewatering is most commonly carried out by intermittent pumping from a sump located in the deepest part of the quarry, to keep pace with the inflow of groundwater.

- Thames Estuary and Marshes SPA and Ramsar site;
- Thanet Coast and Sandwich Bay SPA and Ramsar site
- Thanet Coast SAC;
- Stodmarsh SAC, SPA and Ramsar site;
- Peter's Pit SAC; and
- Dungeness, Romney Marsh and Rye Bay pSPA and pRamsar site.

3.4 Predation

In addition to disturbance due to activities taking place on site, landfill sites can attract large numbers of gulls, corvids (members of the crow family) and rats, which can disturb and prey on the young of bird species for which Special Protection Areas and/or Ramsar sites have been designated. In the case of Kent, this is of particular relevance to five sites, all of which were designated in part for their populations of breeding water birds:

- Medway Estuary and Marshes SPA & Ramsar site – as well as its wintering bird interest, the SPA is designated for breeding avocet, common tern and little tern. Common tern and little tern are known to be particularly vulnerable to gull predation;
- Dungeness to Pett Level SPA - as well as its wintering bird interest, the SPA is designated for breeding Mediterranean gull, common tern and little tern. Common tern and little tern are known to be particularly vulnerable to gull predation;
- The Swale SPA & Ramsar site – as well as its wintering bird interest the SPA is designated for breeding avocet; and
- Thanet Coast and Sandwich Bay SPA and Ramsar site - as well as its wintering bird interest, the SPA is designated for breeding little tern. Little tern are known to be particularly vulnerable to gull predation.
- Dungeness, Romney Marsh and Rye Bay pSPA and pRamsar site - in addition to its wintering bird interest, the SPA would be designated for breeding terns, gulls, raptors and waders

Environment Agency and Scottish Environmental Protection Agency guidance indicate that 5km is the limit within which gull predation associated with landfill sites may be an issue for designated sites with breeding birds (particularly ground nesting species). As such, for this screening report, issues concerning landfill site with potential locations within 5km of the Natura sites listed above have been screened in for further assessment.

3.5 Disturbance

Waste sites can share many noise and visual disturbance issues with other industrial operations (e.g. heavy vehicle movements and loud machinery). Birds are the faunal group that is most often considered in relation to disturbance, largely as this is the group on which disturbance impacts have been most studied.

Concern regarding the effects of disturbance on birds stems from the fact that they are expending energy unnecessarily and the time they spend responding to disturbance is time that is not spent feeding[29] . Disturbance therefore risks increasing energetic output while reducing energetic input, which can adversely affect the 'condition' and ultimately survival of the birds. In addition, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites, as they have to sustain a greater number of birds[30]. Moreover, the more time a breeding bird spends disturbed from its nest, the more its eggs are likely to cool and the more vulnerable they are to predators.

Human activity can affect birds either directly (e.g. through causing them to flee) or indirectly (e.g. through damaging their habitat). The most obvious direct effect is that of immediate mortality such as death by shooting, but human activity can also lead to behavioural changes (e.g. alterations in feeding behaviour, avoidance of certain areas etc.) and physiological changes (e.g. an increase in heart rate) that, although less noticeable, may ultimately result in major population-level effects by altering the balance between immigration/birth and emigration/death[31].

The degree of impact that varying levels of noise will have on different species of bird is poorly understood except that a number of studies have found that an increase in traffic levels on roads does lead to a reduction in the bird abundance within adjacent hedgerows - Reijnen et al (1995) examined the distribution of 43 passerine species (i.e. 'songbirds'), of which 60% had a lower density closer to the roadside than further away. By controlling vehicle usage they also found that the density generally was lower along busier roads than quieter roads[32] .

Activity will often result in a flight response (flying, diving, swimming or running) from the animal that is being disturbed. This carries an energetic cost that requires a greater food intake. Relatively little detailed research has been conducted concerning the energetic cost to wildlife of disturbance, but such evidence as exists indicates a significant negative effect.

Quarrying and mining share many noise and visual disturbance issues (e.g. heavy vehicle movements and loud machinery) with other industrial operations; however, quarrying can also result in disturbance through the controlled blasting of rock in order to extract it for processing. This can result in ground vibration that can be perceived a considerable distance from the point of blasting. In addition, the shockwaves will travel through the air (known as overpressure) and, if the blasting takes place near water, the shockwaves can be perceived at even greater distances.

Disturbing activities are on a continuum. The most disturbing activities are likely to be those that involve irregular, infrequent, unpredictable loud noise events, movement or vibration of long duration. Birds are least likely to be disturbed by activities that involve regular, frequent, predictable, quiet patterns of sound or movement or minimal vibration. The further any activity is from the birds, the less likely it is to result in disturbance.

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[29] Riddington, R. *et al*. 1996. The impact of disturbance on the behaviour and energy budgets of Brent geese. *Bird Study* 43:269-279

[30] Gill, J.A., Sutherland, W.J. & Norris, K. 1998. The consequences of human disturbance for estuarine birds. *RSPB Conservation Review* 12: 67-72

[31] Riley, J. 2003. Review of Recreational Disturbance Research on Selected Wildlife in Scotland. Scottish Natural Heritage.

[32] Reijnen, R. et al. 1995. The effects of car traffic on breeding bird populations in woodland. III. Reduction of density in relation to the proximity of main roads. Journal of Applied Ecology 32: 187-202

The factors that influence a species response to a disturbance are numerous, but the three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity.

3.5.1 *Sensitivity of species – birds*

The distance at which a species takes flight when approached by a disturbing stimulus is known as the 'tolerance distance' (also called the 'escape flight distance') and differs between species to the same stimulus and within a species to different stimuli. No data could be sourced on the tolerance distances of birds in response to waste site specifically. The regular mechanized noise that is associated with waste sites is likely to be less disturbing that the presence of visible human activity in areas in which the birds are not used to observing such activity. There is unlikely to be any blasting associated with minerals extraction in Kent.

Six European sites in or near Kent have been designated at least in part for their bird interest:

- Medway Estuary and Marshes SPA and Ramsar site;
- The Swale SPA and Ramsar site;
- Dungeness to Pett Level SPA;
- Thames Estuary and Marshes SPA and Ramsar site;
- Thanet Coast and Sandwich Bay SPA and Ramsar site;
- Stodmarsh SPA and Ramsar site.
- Dungeness, Romney Marsh and Rye Bay pSPA and pRamsar site.

For the purposes of screening we have used the precautionary distance of 1km from either the site or known/probable areas of important supporting habitat as a basis on which to screen waste and minerals sites in or out of consideration with regard to the potential for disturbance (i.e. noise and visual) impacts.

3.6 Direct Landtake

Issues of direct landtake from terrestrial European sites generally relate to existing permissions (often associated with mineral extraction) that were granted prior to the designation of the site and which have not yet reached completion. In some cases, the process of mineral extraction can be partly responsible for creating the interest of the European site in the first place. This is partly the case with Dungeness SAC and Dungeness to Pett Level SPA, and Dungeness, Romney Marsh and Rye Bay pSPA and pRamsar site where former mineral workings now form important lagoon habitat. At this stage we have not identified any European sites that may be subject to direct landtake as a result of minerals operations in Kent.

3.7 Coastal Squeeze

Rising sea levels can be expected to cause intertidal habitats (principally saltmarsh and mudflats) to migrate landwards. However, in built-up areas, such landward retreat is often rendered impossible due the presence of the sea wall and other flood defences.

In addition, development frequently takes place immediately behind the sea wall, so that the flood defences cannot be moved landwards to accommodate managed retreat of threatened

habitats. The net result of this is that the quantity of saltmarsh and mudflat adjacent to built-up areas will progressively decrease as sea levels rise. This process is known as 'coastal squeeze'. In areas where sediment availability is reduced, the 'squeeze' also includes an increasingly steep beach profile and foreshortening of the seaward zones.

Waste and minerals sites (particularly landfill) can contribute to coastal squeeze as much as any other development by restricting opportunities for managed realignment. The following European sites have the potential to be affected by coastal squeeze:

- Medway Estuary and Marshes SPA and Ramsar site;
- The Swale SPA and Ramsar site;
- Dungeness SAC;
- Dungeness to Pett Level SPA;
- Thames Estuary and Marshes SPA and Ramsar site;
- Thanet Coast and Sandwich Bay SPA and Ramsar site;
- Thanet Coast SAC; and
- Sandwich Bay SAC.
- Dungeness, Romney Marsh and Rye BaypSPA and pRamsar site.

3.8 Screening Distance Summary

The table below summarises the screening distances used for each source of impact. The 'screening distance' is the distance within which (using the guidance on pathways available from the Environment Agency and other sources) different sources of impact or types of waste/minerals site should be taken forward for more detailed consideration of impacts. The screening distance does not imply that all sites within that zone will lead to an adverse effect on a European site, merely that impacts/effects cannot be screened out.

Table 4 – Screening distances used for each source of impact

Pathway	Screening distance
Air quality – Energy from Waste	10km from European site.
Air quality – landfill gas flares	1km from European site.
Air quality - biopathogens	1km from European site
Air quality - dust	500m from European site.
Air quality – vehicle exhaust emissions	200m from European site.
Water quality and flows	No standard distance – use Source/Pathway/Receptor approach.
Disturbance (noise/visual)	1km from European site supporting disturbance sensitive species/populations.
Gull/corvid predation (non-inert landfill only)	5km from European site supporting sensitive ground-nesting breeding species (e.g. terns).

Pathway	Screening distance
Coastal squeeze	No standard distance – evaluate on case by case basis.

4. SCREENING

The following tables present the screening assessments for each of the proposed policies contained within the Draft Minerals and Waste Local Plan document. Within the table green shading in the final column indicates an issue that has been screened out of further consideration due to the absence of any mechanism for an adverse effect on European sites.

Table 5 – Screening assessment for each proposed policy

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
Minerals	
CSM1 – Sustainable Development When considering mineral development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. Mineral development that accords with policies in this Plan and subsequent Plans will be approved without delay, unless material considerations indicate otherwise. Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise - taking into account whether: • Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or • Specific policies in that Framework indicate that development should be restricted.	This policy reflects the position of the NPPF in the presumption in favour of sustainable development. However, there is an explicit caveat within the NPPF that makes it clear that the presumption in favour of sustainable development does not apply to European sites. Therefore, this policy will not lead to any likely significant effects.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSM2 – Supply of Land Won Minerals in Kent **Supply of Land-won Minerals in Kent** Mineral working at specific sites identified in the Mineral Sites Plan will be permitted subject to meeting the requirements of relevant development management policies and any criteria set out in the relevant site schedule in the Mineral Sites Plan. **1. Aggregates** Provision will be made for the maintenance of landbanks of land-won aggregates of at least 7 years for sand and gravel and at least 10 years for crushed rock. A rolling average of 10 years sales data and other relevant information will be used to assess landbank requirements. Sufficient Specific Sites will be identified in the Mineral Sites Plan in order to facilitate the maintenance of aggregate landbanks at the required levels throughout the plan period. In the case of crushed rock (ragstone), the landbank is sufficient for the plan period and so no crushed rock (ragstone) sites will be identified as Specific Sites. **2. Brickearth and Clay for Brick and Tile Manufacture** Sufficient Specific Sites will be identified for brickearth to enable the maintenance of landbanks of permitted reserves equivalent to at least 25 years of production based on past sales. The stock of planning permissions for clay for brick and tile making is sufficient for the plan period. **3. Silica Sand** Sufficient Specific Sites will be identified for silica sand production in order to maintain landbanks at existing sites of 10 years and at any suitable new sites of 15 years, subject to: • All environmental impacts being capable of being controlled to ensure that there are no significant impacts on the environment, the landscape, biodiversity interests or local communities. • If the development is in a designated AONB, applicants must demonstrate how the proposed development meets the	This policy identifies the scale of land-won minerals extraction in Kent but does not specifically identify any sites (these will be identified through the Minerals Sites Plan which will be subject to its own HRA). As such, depending on the sites which came forward there is potential for minerals development that achieves the targets set out in this policy to lead to likely significant effects on European sites without appropriate safeguards. The policy does state that one of the provisos to which silica sand extraction will be subject is '*All environmental impacts being controlled to ensure that there are no detrimental effects on the environment …*'However, in the policy as currently worded this only relates to silica sand. Moreover, it is considered that the key phrase in the above text '*no detrimental effects'* is not by itself sufficiently in line with the wording of the Conservation of Habitats & Species Regulations 2010. However, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
requirement for exceptional circumstances and why it is demonstrated to be in the public interest. Such applications must include consideration of: (i) the need for the development, including in terms of any national considerations and the impact of permitting it, or refusing it, upon the local economy; (ii) the cost of, and scope for developing elsewhere outside the designated area, or meeting the need in some other way; and (iii) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be mitigated. • Applications for silica sand developments will also be required to demonstrate: (i) how the development meets technical specifications required for silica sand (industrial sand) end uses; and (ii) how the mineral resources will be used efficiently so that high grade sand deposits are reserved for industrial end uses. **4. Chalk for Agriculture and Engineering Purposes** A Specific Site will be identified to enable sufficient chalk extraction to continue through the plan period to supply Kent's requirements for agricultural and engineering chalk. **5. Clay for Engineering Purposes** A Specific Site will be identified to enable clay extraction to continue throughout the plan period to supply Kent's requirements for engineering clay.	
CSM3 – Cement Mineral Extraction and Manufacture in Kent The site of the proposed Medway Cement Works, Holborough and its permitted mineral reserves are together identified as the Strategic Site for Minerals in Kent.	The only site to which this policy relates is Medway Works, Holborough. This site is already permitted through an extant permission granted in 2001 and it is therefore not being proposed in the Plan as a 'new' site but included because the implementation of the existing permission will enable the Minerals and Waste Local Plan to achieve its targets. A fresh planning permission would be required to amend aspects of the design, layout and

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
Mineral working and processing at the Strategic Site for Cement Minerals will be permitted subject to meeting the requirements of relevant development management policies.	operating life of the actual cement plant itself but there will be no change to the location or scale of minerals operations/movements compared to that already permitted. The south-western extent of the 'extraction area' is immediately adjacent to North Downs Woodlands SAC (specifically, the 'Halling to Trottiscliffe SSSI' component of the SAC), although this does not mean that it is proposed to actually extract minerals up to the boundary line; rather the 'extraction area' essentially defines the extent of the minerals safeguarding area. The key issue associated with future extraction at this site will therefore be dust deposition on the adjacent woodland. Although most excavation will be below the level of the woodland which will reduce dust impacts, large particles (>30µm) make up the greatest proportion of dust and generally deposit within 100 metres of the source if no dust control measures are applied, although smaller particles can periodically coat vegetation up to 500m from minerals workings[33]. Approximately 17.5ha of the SAC lies within 500m of the 'extraction area', equivalent to 6% of the total area of the SAC, although in practice only the outer layers of trees would be likely to be subject to coating in the absence of mitigation, as they would prevent the dispersal of dust into the remainder of the wood. Nonetheless, it is considered imperative that a Dust Action Plan is devised for the site and contains adequate measures to ensure that dust deposition outside the quarry is rendered negligible. There are a range of standard measures used throughout the minerals industry which are effective in eliminating dust dispersal; these include: • a tractor hauled water bowser is available at all time for use in the Site;

[33] It should be noted that the rate of dust deposition is not the only factor influencing whether an effect on vegetation will occur; for an adverse effect to occur not only must deposition rates be high but there must be lengthy periods without rainfall, such that the dust will remain undisturbed on the leaves for a long enough period to prevent photosynthesis and cause chlorosis.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
	• in order to control dust from internal traffic movements, as necessary, all haul roads within the Site are kept moist during periods of continuous dry weather; • if during adverse weather, conditions (e.g. strong winds combined with dry weather) create or have the potential to create a nuisance by way of dust being carried to nearby residential properties or the SAC as a result of soil movement and/or stone movement/placement then that activity shall be temporarily stopped; and • sheeting of stockpiles and open trucks, wetting of haul routes and extraction areas as necessary Even with these measures some small-scale dust deposition can occur and it is therefore recommended that there should also be a 25m standoff between the SAC and the active quarry (unless subsequent analysis can prove this is not necessary)[34]. In addition, the Dust Action Plan should require dust deposition monitoring (e.g. using frisbee gauges) to confirm that the measures are effective and increase their application if necessary. Research has indicated that significant impacts on vegetation are unlikely to occur except at very high deposition rates of greater than 1000 $mg/m^2/day$[35]; therefore monitoring could use a lower threshold (e.g. 750 $mg/m^2/day$) as the monitoring threshold – in the unlikely event that deposition on the edge of the SAC exceeded this threshold additional measures (e.g. additional use of wetting) would be introduced; works within 100m of the SAC would need to cease until such measures were devised and agreed. The requirement to produce a Dust Management Plan is already one of the

[34] Based on previous experience this is the distance within which dust deposition can occasionally still occur even using dust control techniques
[35] Highways Agency (2007), Design Manual for Roads and Bridges (DMRB) – Part 1, HA 207/07, Volume 11, Section 3

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
	conditions of the planning permission. Therefore, it is possible to screen out the policy as there is no pathway linking this minerals site to other European sites.
CSM4 – Exceptions Policy for Land Won Minerals Applications for mineral extraction other than the strategic site for cement minerals and specific sites identified in the Mineral Sites Plan will only be permitted if they can demonstrate that there are overriding benefits which justify extraction at the exception site. Applications for mineral working outside specific sites identified in the Mineral Sites Plan or the Strategic Site for Cement Minerals will need to include information to demonstrate the overriding benefits and how they meet the requirements of relevant development management policies.	Following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSM5 – Land Won Mineral Safeguarding Economic mineral resources will be safeguarded from being unnecessarily sterilised by other development by the identification of:- • Mineral Safeguarding Areas for the areas of known, remaining brickearth, sharp sand and gravel, soft sand (including silica sand), ragstone and building stone. A mineral safeguarding area is also established for the Strategic Site cement minerals at Medway Works, Holborough. • A Mineral Consultation Area adjacent to the Strategic Site for Cement Mineral Extraction and Manufacture at Medway Works, Holborough • Specific Sites for mineral working within the plan period which will be defined in the Mineral Sites Plan.	This policy does not allocate any sites for extraction – it merely seeks to ensure that the key reserves within the County are not 'sterilised' by the presence of conflicting development. It carries no presumption that permission will be granted for the extraction of any minerals covered by this policy or safeguarding areas. As such, it is considered that it can be screened out. Individual application for future minerals extraction will of course need to be subject to HRA screening through the normal development control process.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSM6 – Secondary and Recycled Aggregates Secondary and recycled aggregate production and processing will be permitted at the Specific Sites identified in the Mineral Sites Plan subject to meeting the requirements of relevant development management policies and any criteria set out in the relevant site schedule in the Mineral Sites Plan. Sufficient Specific Sites will be identified to provide capacity to recycle at least 1.4million tonnes per annum (mtpa) of secondary and recycled aggregates rising to at least 1.56mtpa from 2020. Outside identified Specific Sites, recycling facilities for secondary and recycled aggregate production will be granted planning permission if they are well located in relation to the source of materials, have good transport infrastructure links and accord with the other relevant policies in the Minerals and Waste Local Plan, at the following types of sites:- • temporary demolition, construction, land reclamation and regeneration projects. • temporary highways developments. • appropriate mineral operations (including wharves and railheads) for the duration of the host site where there is either connectivity with the sale of aggregates from the host site or where the host site will be use the residual waste form the recycling in the restoration of the site. • appropriate waste management operations for the duration of the host site. • industrial estates. • other appropriately located sites close to the source of materials with good infrastructure links. Where environmental impacts can be controlled to an acceptable level,	This site identifies the required scale of secondary and recycled aggregates capacity in Kent but does not specifically identify any sites (these will be identified through the Minerals Sites DPD which will be subject to its own HRA). As such, secondary and recycled aggregate sites could (depending on the sites which came forward) lead to significant effects on European sites without appropriate safeguards. However, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
planning permission will be granted to re-work old inert landfills and dredging disposal sites if net gains in landscape and biodiversity or amenity can be achieved by the operation.	
CSM7 – Building Stone Planning permission will be granted for small scale proposals**(79)** that are necessary to provide a supply of suitable local building stone necessary for restoration work associated with the maintenance of Kent's historic buildings and structures and new build projects in conservation areas, subject to: • development taking place in appropriate locations where the proposals do not have unacceptable amenity or environmental impacts; • there being no other suitable, sustainable sources of the stone available; • all environmental impacts being managed to acceptable levels to ensure that there is no significant effect upon sensitive receptors; and • the site is restored to a high quality standard and acceptable after-use.	This policy provides for small scale building stone extraction in Kent but does not specifically identify any sites. As such, building stone sites could (depending on the sites which came forward) lead to significant effects on European sites without appropriate safeguards. The policy does state that one of the provisos to which extraction will be subject is '*All environmental impacts being managed to acceptable levels to ensure that there is no significant effect upon sensitive receptors*'. Following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSM8 – Oil, Gas and Coal Bed Methane Planning permission will be granted for proposals associated with the exploration, appraisal and development of oil, gas (including shale gas and natural gas), coal-bed methane, abandoned mine methane and underground coal seam gasification subject to:	This policy does not specifically identify any sites, in part because exploration work would need to be undertaken before it was known where economically viable reserves are located. As such, oil, gas and coal bed methane sites could (depending on the exploration/development areas which came forward) lead to significant

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
• development taking place in appropriate locations where the proposals do not have unacceptable amenity, environmental or biodiversity impacts; and • there being no significant impact upon sensitive water receptors including groundwater, water bodies and wetland habitats; and • all other environmental impacts being mitigated to ensure that there is not an unacceptable effect upon the local environment or communities; and • exploration and appraisal operations are for an agreed, temporary length of time; and • the drilling site and any associated land being restored to a high quality standard and acceptable after-use.	effects on European sites. The policy does state that one of the provisos to which extraction will be subject is '*all other environmental impacts being mitigated to ensure that there is not an unacceptable effect upon the environment or communities*', following specific reference to water receptors. The policy also commits to no unacceptable biodiversity impacts. Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSM9 – Underground Limestone Planning permission will be granted at suitable locations for the drilling operations associated with the prospecting for underground limestone resources in East Kent subject to: • the proposals not having unacceptable amenity, environmental or biodiversity impacts; and • there being no significant impact upon sensitive water receptors including groundwater, water bodies and wetland habitats; and • all other environmental impacts being mitigated to ensure that there is not an unacceptable effect upon communities or other environmental receptors; and • exploration operations are for an agreed, temporary length of time;	This policy does not specifically identify any sites. As such, underground limestone extraction could (depending on the exploration/development areas which came forward) lead to significant effects on European sites without appropriate safeguards. The policy does state that one of the provisos to which extraction will be subject is '*environmental impacts being mitigated to ensure that there is not an unacceptable effect upon communities or other environmental receptors*.' It is noted that in the Plan (although not in policy) a site near Sandwich is identified (although it is not allocated). This site, the East Kent Limestone Mine, is within 1km of the Sandwich Bay SAC/Thanet Coast & Sandwich Bay SPA/Ramsar site. However, policy CSM8 only permits prospecting and the identified site is very large; the furthest limits of the site are 4km from the SAC/SPA/Ramsar site. It would therefore be entirely possible to

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
and • the drilling site being restored to a high quality standard and an acceptable after-use.	undertake prospecting it in a location well away from the SAC/SPA/Ramsar site. Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSM10 – Sustainable Transport of Minerals Planning permission for any new wharf and railhead importation operations or for wharves and railheads which have been operational in the past (which have since fallen out of use) which include the transport of the minerals by sustainable means (i.e. Sea, river or rail) as the dominant mode of transport will be granted, where: • they are well located in relation to the Key Arterial Routes across Kent; and • environmental impacts can be controlled so that there are no unacceptable effects upon communities or the environment.	This policy encourages the sustainable transport of minerals, particularly via rail or river/sea. Since it is an aspirational policy it is not possible to analyse its implications in detail since it cannot be known what tonnage of minerals would be transported from which minerals sites to which wharfs and what scale of shipping/barge movements would be involved, as these will all be based on commercial decisions by site operators at unspecified points in the future. However, since the policy seeks to minimise road transport it is generally likely to improve air quality within Kent. Since specific new wharves and railheads are not identified in policy it is possible that such sites could lead to significant effects on European sites without appropriate safeguards, depending on location. The policy does state that one of the provisos to which the development of new wharves and railheads will be subject is '*environmental impacts can be controlled so that there are no unacceptable effects upon communities or the environment*'. Unacceptable effects on the environment would clearly involve adverse effects on the integrity of European sites.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
	Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSM11 – Safeguarded Wharves and Railheads The following sites are safeguarded for their continued use for the importation of minerals into Kent: • Allington Rail Sidings. • Sevington Rail Depot. • Hothfield Works. • East Peckham. • Ridham Dock (both operational sites). • Johnson's Wharf Greenhithe. • Robins Wharf, Northfleet (both operational sites). • Denton Marine Terminal. • East Quay, Whitstable. • Red Lion Wharf. • Ramsgate Harbour. • Wharf 42, Northfleet (including Northfleet Cement Wharf). • Dunkirk Jetty (Dover Western Docks). • Sheerness. • Botany Marshes (Northfleet Wharf).	This policy merely seeks to ensure that the key existing wharves and railheads within the County are not 'sterilised' by re-development which would conflict with their use in sustainable minerals transport. It carries no presumption that permission will be granted for any changes to the operation of any wharves/railheads covered by this policy, even for minerals use. As such, it is considered that it can be screened out. Individual application for any changes to the operation, layout or duration of these wharves/railheads will of course need to be subject to HRA screening through the normal development control process.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
Planning applications for development adjacent to or opposite the safeguarded importation facilities listed above will need to demonstrate that acceptable levels of noise, dust, light and air emissions derived from the current mineral importation site would be experienced at the development and that vehicle access to andfrom the wharf or railhead would not be jeopardised by the development.	
CSM12 – Safeguarding other Mineral Plant Infrastructure Existing concrete, asphalt, mortar plants as well as existing secondary and aggregate recycling facilities in Kent are safeguarded for their ongoing use. Where these facilities are situated within a host quarry, wharf or railhead facility, they are safeguarded for the life of the host site. If a concrete, asphalt, mortar plant or secondary/recycled aggregate facility has a permanent planning permission and is no longer needed for its current use and the site is to be redeveloped for non mineral uses, it will need to be demonstrated that replacement capacity for the same type of operation at a suitable alternative site is available which is similar or better than the facility that it is replacing in terms of accessibility, location in relation to the market, suitability/size of adjacent available land for processing and stockpiling of minerals, and that there are no incompatible developments in close proximity which could jeopardise the operation of the replacement site.	This policy merely seeks to ensure that the key existing minerals infrastructure within the County are not 'sterilised' by re-development which would conflict with their use in sustainable minerals extraction. It carries no presumption that permission will be granted for any changes to the operation of any infrastructure covered by this policy, even for minerals use. As such, it is considered that it can be screened out. Individual application for any changes to the operation, layout or duration of such infrastructure will of course need to be subject to HRA screening through the normal development control process.
Waste	

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSW1 – Sustainable Development When considering waste development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework and Planning Policy Statement 10: Planning for Sustainable Waste Management. Waste development that accords with policies in this Plan and subsequent Plans will be approved without delay, unless material considerations indicate otherwise. Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise - taking into account whether: • Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or • Specific policies in that Framework indicate that development should be restricted.	This policy reflects the position of the NPPF in the presumption in favour of sustainable development. However, there is an explicit caveat within the NPPF that makes it clear that the presumption in favour of sustainable development does not apply to European sites. Therefore, this policy will not lead to any likely significant effects.
CSW2 – Waste Hierarchy In order to deliver sustainable waste management solutions for Kent, proposals for waste management must demonstrate how waste is being driven to ascend the waste hierarchy.	This policy directs waste managers to adhere to the waste hierarchy. There is no mechanism whereby it can conflict with any European sites. This policy is therefore screened out.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSW3 – Waste Reduction All new development should minimise the production of construction, demolition and excavation waste and manage any waste sustainably. New development should incorporate into its design adequate space for the occupiers of the proposed buildings to store waste separately from recyclable and compostable materials prior to their collection. The following details shall be submitted with the planning application: (a) The measures to be taken to show compliance with this policy on waste reduction; and (b) A construction waste plan detailing the nature and quantity of any construction, demolition and excavation waste to be sent off site and the destinations.	This policy requires all waste generators to reduce the amount of waste they generate. As such it can only have a neutral or positive effect on European sites and can therefore be screened out.
CSW4 – Strategy for Waste Management Capacity The strategy for waste management capacity in Kent is to provide sufficient waste management capacity to manage at least the equivalent of the waste arising in Kent plus a declining amount of waste from London. As a minimum it is to achieve the targets for recycling and composting, reuse and landfill diversion identified in the Kent Joint Municipal Waste Management Strategy and the partially revoked Regional Spatial Strategy	This site identifies the overall strategy for waste management capacity in Kent but does not specifically identify any sites (these will be identified through the Waste Sites DPD which will be subject to its own HRA). As such, waste sites that come forward to deliver this strategy (depending on the sites which came forward) could lead to significant effects on European sites without appropriate safeguards. However, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSW5 – Strategic Site for Waste The proposed extension areas for Norwood Quarry and Landfill Site, Isle of Sheppey are together identified as the Strategic Site for Waste in Kent. Planning permission will not be granted for any other development other than mineral working with restoration through the landfilling of hazardous flue dust from energy from waste plants in Kent unless it can be demonstrated that the equivalent capacity for treatment or disposal can be provided elsewhere in Kent. Mineral working and restoration by hazardous landfill and any ancillary treatment plant at the Strategic Site for Waste will be permitted subject to meeting the requirements of relevant development management policies and the following criteria: • An assessment has been made that alternative treatment technologies for hazardous flue dust from energy from waste plants are not economically viable; • An air quality assessment has been made of the impact of the development and its associated traffic movements on the Medway Estuary and Marshes SPA and The Swale SPA sites and if necessary mitigation measures are required through planning condition and/or planning obligation.	The planning permission for the Norwood Farm site requires its restoration by 2016, and only ash from Allington is allowed to be accepted at present. The operators have promoted a physical and time extension to this site through the 'Call for Sites'. This site lies approximately 2km north of The Swale SPA/Ramsar site. The proposed extension lies further from the SPA/Ramsar site than the current operation and there are no impact pathways linking this strategic waste site to that SPA/Ramsar site. Vehicles using this site are very likely to use the A249 (as this is the only major road off the Isle of Sheppey) which lies within 200m of the Medway Estuary & Marshes SPA/Ramsar site and The Swale SPA/Ramsar site. <u>However</u>, the planning permission limits heavy duty vehicle movements to 200/day; there will therefore be no change in vehicle flows on the network as a result of allocating this site and thus no change in baseline air quality as a result of this site. Notwithstanding that there will be no change in heavy duty vehicle movements the policy specifically requires an assessment of air quality impacts on the Medway Estuary & Marshes SPA and The Swale SPA sites, providing a further safeguard.
CSW6 – Location of Non-Strategic Waste Sites Permission will be granted at sites for non strategic waste facilities in the following locations, providing that there is no unacceptable harm to sensitive receptors (the locational types (a) to (g) below are not listed in any particular order of priority): (a) Land within or adjacent to an existing mineral or waste management use.	This site does not specifically identify any sites (these will be identified through the Waste Sites DPD which will be subject to its own HRA). As such, non-strategic waste sites could (depending on the sites which came forward) lead to significant effects on European sites without appropriate safeguards. However, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
(b) Land forming part of a new major development for employment, leisure, commerce and/or residential uses proposal providing waste management operations are to be enclosed within a building. (c) Land within industrial estates identified in the Waste Sites Plan providing waste management operations are to be enclosed within a building unless it can be demonstrated that there would be no significant adverse effects from noise, dust or odour. (d) Other previously developed land. (e) Contaminated or derelict land. (f) Redundant agricultural and forestry buildings and their curtilages. (g) Sites identified in the Waste Sites Plan Waste development on a greenfield site other than in the circumstances of (b) above will only be permitted if: (i) it can be demonstrated that there are no suitable locations identifiable from categories (a) to (g) above within the catchment area of waste arisings which are to be managed at the proposed facility, or (ii) if the nature of the waste management requires an isolated location;	are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSW7 – Municipal Solid Waste A site will be identified in the Waste Sites Plan for (a) a Household Waste Recycling Centre to serve the Borough of Tonbridge and Malling	This policy identifies part of the scope of the Waste Sites Plan rather than making an allocation. It identifies one broad area in which a new site will be required – a recycling centre in Tonbridge and Malling district. Part of the North Downs Woodlands SAC does lie in within the northern boundary of Tonbridge and Malling, but this is in a rural area several kilometres from the strategic road network and the main population centres of the district. It is highly unlikely that a site close to the SAC would be chosen for a waste transfer station and there are many possible alternatives in the district. Given that a) the Plan merely identifies the need for afacility at this stage, b) that the European site in Tonbridge & Malling islocated in an area that is highly unlikely to be suitable for this new facility and c) there are many alternative locations for this facility, it is considered that this policy will not

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
	lead to a likely significant effect on any European sites. Once specific sites are identified, these will be subject to HRA as part of the Waste Sites Plan.
CSW8 – Approach to Waste Management for Non Hazardous Waste In seeking to be as self sufficient as possible in managing non hazardous waste arisings in Kent, and for providing for limited amounts of non hazardous waste from London, sufficient sites for waste management facilities will be identified in the Waste Sites Plan to meet identified needs as a minimum, including the following capacity. Waste management capacity for non hazardous waste will be provided through sites for managing waste, including EfW, recycling, in-vessel (enclosed) composting facilities and Anaerobic Digestion (AD). Sites for AD, composting, EfW, mechanical-biological treatment (MBT) and other energy & value recovery technologies that assist Kent in meeting the capacity gap identified in this policy will be permitted provided that: (i) pre-sorting of the waste is carried out. (ii) recovery of by-products and residues is maximised. (iii) energy recovery is maximised (utilising both heat and power). (iv) any residues produced can be managed or disposed of sustainably. (v) the proposal does not result in unacceptable harm to any sensitive receptors. (vi) Sites for the management of green waste and/or kitchen waste in excess of 100 tonnes per week are Animal By Product Regulation	Although this policy identifies a range of districts in which new Household Waste Recycling Centres and Waste Transfer Stations are required, it does not seek to allocate any sites or provide location specifics; that will be the role of the Waste Sites Plan. As such, the non-strategic waste sites could theoretically lead to significant effects on European sites without appropriate safeguards depending on the sites which came forward. It is noted that sites for AD, composting, EfW, mechanical-biological treatment (MBT) and other energy & value recovery technologies are all given the proviso '… *as long as there is no unacceptable harm to sensitive receptors.*' Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

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compliant (such as in-vessel composting or AD). (vii) Sites for small scale open composting of green waste which are facilities of less than 100 tonnes per week which are located within a farm unit and the compost is used within that unit.	
CSW9 – Energy from Waste Facilities Sites for additional EfW facilities will be identified in the Waste Sites Plan to treat a capacity of 562,500 tonnes per year. Permission will be granted for a maximum of 437,500 tonnes in total at new EfW facilities until such time that the results of annual monitor indicate that this restriction would result in the loss of all non hazardous landfill capacity in the county before the end of the plan period. EfW facilities will be permitted if they are recovery facilities that are designed to meet or exceed the energy efficiency ratio of 0.65 (as defined by Annex II of the Revised Waste Framework Directive) and are designed for both the production of heat and power. When an application for an EfW facility has no proposals for use of the heat when electricity production is commenced, the development will be permitted if it is located in an area that has potential users for the heat and the applicant and landowner enter into a planning agreement to market the heat and to make an annual public report on the progress being made toward finding users for the heat.	The policy does not specifically identify any locations for new EfW facilities. As such, new EfW facilities could theoretically lead to significant effects on European sites without appropriate safeguards depending on the sites which came forward. However, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSW10 – Non-Hazardous Waste Landfills The strategy for non-hazardous waste landfill is only to grant planning permission for new sites or extensions to existing sites if:- • it can be demonstrated that the waste stream that needs to be landfilled cannot be managed through alternative technologies which are higher in the waste hierarchy or disposed of at existing sites; • environmental benefits are to be secured by the development; and • the proposal does not cause unacceptable harm to any sensitive receptors.	The policy does not specifically identify any locations for new facilities, as these will emerge from the Waste Sites Plan which will be subject to its own HRA. As such, non-hazardous landfill could theoretically lead to significant effects on European sites without appropriate safeguards depending on the sites which came forward. However, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSW11 – Closed Landfill Sites Permission will be granted for development that reduces the effects on the environment of closed landfill sites for any of the following purposes: • development for the improvement of restoration for an identified after use for the site; • development for the reduction of emissions of gases or leachate to the environment; or • development making use of gases being emitted and which will reduce the emission of gases to the environment; and	This policy can be screened out since it concerns itself with promoting developments that will result in a reduction in the impact of closed biodegradable landfill sites on the environment.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
• development avoids causing unacceptable harm to the environment or communities.	
CSW12 – Disposal of Inert Waste In order to be self sufficient in the management of inert waste, sufficient sites for waste management facilities for inert waste will be identified in the Waste Sites Plan to meet identified needs as a minimum, including the following capacity *[capacity table not reproduced from Plan]*. This policy shows the minimum requirement as the aim of the MWLP is to enable a far greater rate of recycling. In order to restore quarries which have a capacity and a need for inert waste landfill for restoration purposes, the non-recyclable fractions of Construction, Demolition and Excavation (CDE) wastes will be targeted for quarry restoration projects as a priority. Planning permission for the disposal of inert waste will be granted where: (a) it can be demonstrated that the waste cannot be managed in a more sustainable way; (b) it is for the restoration of a mineral working (d) environmental benefits will result from the development; (e) that sufficient material is available to restore the site within agreed timescales; and (f) the proposal avoids causing unacceptable harm to the environment or communities.	The policy does not specifically identify any locations for new facilities, as these will emerge from the Waste Sites DPD which will be subject to its own HRA. As such, inert waste landfill sites could potentially lead to significant effects on European sites without appropriate safeguards depending on the sites which came forward. However, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). it is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSW13 – Hazardous Waste Management In order to be self sufficient in the management of hazardous waste, developments for hazardous waste management facilities will be permitted in the appropriate locations for non strategic waste sites regardless of whether their catchment areas for waste extend outside Kent and a site will be identified in the Waste Sites Plan for the landfilling of asbestos waste to enable the continuation of asbestos disposal within the county for the plan period.	The policy does not specifically identify any locations for new facilities, as these will emerge from the Waste Sites DPD which will be subject to its own HRA. As such, hazardous waste management sites could theoretically lead to significant effects on European sites without appropriate safeguards depending on the sites which came forward. However, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). it is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSW14 - Remediation of Brownfield Land Permission will be granted for a temporary period for waste developments on brownfield land which facilitate its redevelopment by reducing or removing contamination from previous development if: • the site is identified in a Local Plan for redevelopment or has planning permission for redevelopment; or • the site is part of a network of brownfield sites which are identified in a Local Plan or Local Plans for redevelopment or which have planning permission for redevelopment and is to receive waste for treatment from those sites as well as treating the land within the site; and • the development avoids causing unacceptable harm to the environment	The remediation of contaminated land is a positive environmental measure. It is noted that this policy identifies one of the provisos regarding such remediation as being that '*the development avoids causing unacceptable harm to the environment'*. In addition, the first two bullet points in the policy show that the site has to have planning permission such that the impact of developing the site will have been covered by the 'construction stage' section of the ecological impact assessment which will accompany such an application. As such, it is considered that this policy can be screened out.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
or communities.	
CSW15 – Disposal of Dredgings A site for the disposal of dredgings will be identified in the Waste Sites Plan and the site will safeguarded from other development. Planning permission will be granted for new sites for the disposal of dredging materials where it can be demonstrated that:- • The re-use of the material to be disposed of is not practicable; • There are no opportunities to use the material to enhance the biodiversity of the Kent estuaries; and • The proposal does not cause unacceptable harm to the environment or communities.	The policy does not specifically identify any locations for new facilities, as these will emerge from the Waste Sites DPD which will be subject to its own HRA. As such, dredging arising disposal sites could theoretically lead to significant effects on European sites without appropriate safeguards depending on the sites which came forward. However, It is noted that this policy identifies one of the provisos regarding such remediation as being that '*the development avoids causing unacceptable harm to the environment'* and such unacceptable harm would clearly include adverse effects on the integrity of European sites. Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSW16 – Waste Water Development Waste water treatment works and sewage sludge treatment and disposal facilities will be granted planning permission, subject to: (a) there being a proven need for the proposed facility; and (b) the proposal avoids causing unacceptable harm to the environment or communities.	The policy does not specifically identify any locations for new facilities, as these will be determined on a need basis by the statutory water companies and will be subject to project-level HRA. However, the policy clearly prohibits proposals that will cause *'unacceptable harm to the environment...*', which would certainly include a proposal that would lead to an adverse effect on the integrity of a European site. It must also be noted that the *timely* delivery of wastewater treatment facilities could also assist in the *avoidance* of likely significant effects on European sites. Following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
CSW17 – Safeguarding Permitted Waste Sites Planning permission will not be granted for development of sites which have permanent planning permission for waste management or which are identified in the Waste Sites Plan unless this does not reduce the existing waste management capacity of the site or an equivalent annual capacity can be provided at an alternative site within Kent. •	This policy merely seeks to ensure that the key existing waste sites within the County are not lost to re-development which would conflict with their use in sustainable waste treatment. It carries no presumption that permission will be granted for any changes to the operation of any sites covered by this policy, even for waste treatment use. As such, it is considered that it can be screened out. Individual application for any changes to the operation, layout or duration of such infrastructure will of course need to be subject to HRA screening through the normal development control process.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSW18 – Nuclear Waste Treatment and Storage at Dungeness Facilities for the storage and/or treatment of radioactive waste generated at Dungeness will be acceptable within the Nuclear Licensed area at Dungeness where: • This is consistent with the national strategy for managing radioactive waste and discharges; • The outcome of environmental assessments justify it being managed on site; and • Facilities are located and designed in order to minimise adverse impacts on the environment. The only waste arisings from Dungeness Nuclear Licensed Site which will be acceptable as fill material for the back-filling of voids within the nuclear licensed site are inert (non-radioactive) wastes which are generated by the demolition of existing buildings and structures. Landfill or landraise activities which utilise radioactive wastes within the nuclear licensed site will not be permitted.	The decommissioning of Dungeness A and B are committed processes that are already taking place and are beyond the control of the waste planning authority. They are not addressed by policy CSW19, which confines itself to setting terms for the acceptability of nuclear waste storage and treatment. The exact location of the nuclear treatment and storage facility (except that it will either be at Dungeness A, Dungeness B or both) will not be determined until completion of a study commenced in 2012. There is no further information available regarding the extent, depth, construction methods or details of the facilities at this time. As such, a detailed assessment is not possible for this Plan HRA. However, it is noted that the policy makes two provisos for this treatment: • The outcome of environmental assessments justify it being managed on site; and • Facilities are located and designed in order to minimise adverse impacts on the environment. The 'environmental assessments' identified in the policy would clearly involve HRA. It is considered that with regard to European sites this wording requires clarification since simply 'minimising' adverse impacts may not be in accordance with the Conservation of Habitats & Species Regulations 2010 which requires there to be no '*adverse effects on the integrity'* (i.e. structure and function) of European sites unless there are no alternatives, Imperative Reasons of Overriding Public Interest (IROPI) and adequate compensatory provision. Following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
	requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications. The Dungeness Power Stations are surrounded by coastal vegetated shingle which constitutes the key habitat of the Dungeness Special Area of Conservation; some of this is actually within the boundary of the power station site. Construction of the facilities must not have an adverse effect on the integrity of this habitat; this would therefore require new waste disposal/treatment facilities to located away from the shingle habitat and would require the use of existing access routes to the Power Stations by construction traffic. Environmental studies such as Habitat Regulations Assessment would be needed to confirm that the development of new waste storage/treatment facilities would not indirectly affect the SAC through air quality (principally from construction traffic associated with the waste storage facilities) or hydrological impacts. These studies are not possible until detailed designs of the facilities are prepared. The power stations are also approximately 600m from the Dungeness to Pett Level SPA/Ramsar site and proposed Dungeness, Romney Marsh and Rye Bay pSPA/pRamsar site. The potential for disturbance of SPA birds (and measures to avoid this) would therefore also need to be covered by the environmental studies and measures taken to ensure that no disturbance would occur (e.g. through careful routing of construction/demolition traffic and if necessary controls on overall Heavy Duty Vehicle flows (in terms of vehicles per day) associated with the power stations.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
CSW19 – Non Nuclear Radioactive LLW Waste Management Planning permission will be granted for facilities which manage non-nuclear LLW and VLLW waste arisings where they meet the requirements of all other relevant policies within the Minerals and Waste Local Plan, in the following circumstances:- • where there is a proven need for the facility; and • the source material to be managed predominantly arises from within Kent; and • the proposal avoids causing unacceptable harm to the environment or communities.	The policy does not specifically identify any locations for new facilities.. As such, non-nuclear radioactive LLW sites could theoretically lead to significant effects on European sites without appropriate safeguards depending on the sites which came forward. However, '*unacceptable harm to the environment'* would clearly include adverse effects on the integrity of European sites. Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
Development Management	
DM1 – Sustainable Design Proposals for minerals and waste development will be required to demonstrate that they have been designed to avoid causing unacceptable impact on the environment and communities by appropriate measures to: • minimise greenhouse gas emissions and other forms of emissions; • minimise levels of energy and water consumption and incorporate measures for renewable energy technology and design in new facilities; • minimise production of waste during construction and operation;	This policy is unlikely to lead to significant effects on European sites.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
• maximise the re-use or recycling of materials; • utilise sustainable drainage systems wherever practicable; • protect and enhance the character and quality of the site's location and its biodiversity interests; and • ensure that the proposal does not cause unacceptable harm to the environment or communities.	
DM2 – Sites of International, National and Local Importance Proposals for minerals and waste development will be required to ensure that there is no significant adverse effect on the integrity, character, appearance, biodiversity interests, geological interests, heritage interests or amenity value of sites of international, national and local importance, including: • Internationally designated sites including Ramsar, SPAs and SACs (European sites); • Sites of Special Scientific Interest (SSSIs); • Local Wildlife Sites (LWS); • Local Nature Reserves (LNRs); • Biodiversity Action Plan priority habitats; • land that is of regional or local importance as a wildlife corridor or for the conservation of biodiversity; • Areas of Outstanding Natural Beauty and their setting; • Regionally Important Geological sites (RIGs); • Protected woodland areas including ancient woodland and aged and veteran trees; • Country parks, common land and village greens and other important areas of open space or green areas within built-up areas; • Local waterbodies; • Conservation areas and locally listed buildings (including their setting);	This policy is unlikely to lead to significant effects on European sites. This will be the key policy protection mechanism for European sites

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
• World Heritage Sites, scheduled monuments and non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments; • Registered historic parks and gardens; and • Land or buildings in sport, recreational or tourism use. Unless it can be demonstrated that there is an overriding need for the development and any impacts can be mitigated or compensated for, such that there is a net gain or improvement to their condition. In the case of minerals and/or waste proposals within or considered likely to have significant effects on a European site, impacts will need to be evaluated in combination with other projects and plans; it will also be necessary to demonstrate that:- there are no alternatives; and a robust case will need to establish why there are imperative reasons of overriding public interest (IROPI); and there is sufficient provision for adequate timely compensation before any proposal that would have an adverse effect on the integrity of the European sites will be permitted.	
DM3 – Ecological Impact Assessment Proposals for minerals and waste developments will be required to ensure that they result in no significant adverse effect on Kent's important biodiversity assets. These include internationally, nationally and locally designated sites,	Policy DM2 above specifically seeks to protect European designated sites from inappropriate development. This policy (DM2A) provides some further clarification on how the assessment of likely significant impacts will be undertaken.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
European and nationally protected species, and habitats and species of principle importance for the conservation of biodiversity / Biodiversity Action Plan habitats and species. Proposals which are likely to affect important biodiversity assets will need to demonstrate that an adequate level of ecological assessment has been undertaken and will only be granted planning permission following: (a) an ecological assessment of the site, including preliminary ecological appraisal and, where likely presence is identified, specific protected species surveys; (b) consideration of the need for, and benefits of, the development and the reasons for locating the development in its proposed location; (c) the identification and securing of measures to mitigate any adverse impacts (direct, indirect and cumulative); (d) the identification and securing of compensatory measures where adverse impacts cannot be avoided or mitigated for; and (e) the identification and securing of opportunities to make a positive contribution to the protection, enhancement, creation and management of biodiversity.	
DM4 – Green Belt Proposals for mineral extraction situated in the Green Belt will be acceptable if it is in accordance with all other relevant development management policies, and it can be demonstrated that the development will enhance the Green Belt by:- • providing opportunities for access to the open countryside; • providing opportunities for outdoor sport and recreation; • retaining and enhancing landscapes, visual amenity and biodiversity,; and/or • improving damaged and derelict land.	This policy is unlikely to lead to significant effects on European sites as it simply sets the requirements for any minerals or waste development in the Green Belt.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
Proposals for minerals and waste developments situated within the Green Belt will have to establish and implement measures to maintain its open character and the integrity of the countryside location and implement extremely high operational environmental standards.	
DM5 –Heritage Assets Proposals for minerals and waste developments will be required to ensure that Kent's heritage assets and their settings, including historic landscapes, historic parks and gardens, historic buildings, historic towns, conservation areas, monuments, archaeological sites and features, and defined heritage coastline are conserved in a manner appropriate to their significance. Proposals should result in no significant adverse effect on Kent's historic environment and wherever possible opportunities must be sought to maintain or enhance historic assets affected by the proposals.	This policy is unlikely to lead to significant effects on European sites.
DM6 – Historic Environment Assessment Proposals for minerals and waste development which are likely to affect important heritage assets will only be granted planning permission following: (a) preliminary historic environment assessment, including field archaeological investigation where appropriate, to determine the nature and significance of the heritage assets; and (b) appropriate provision has been secured for preservation in situ, and/or archaeological excavation and recording and/or other historic environment recording as appropriate, including post-excavation analysis and reporting, archive deposition and access, and interpretation of the results for the local	This policy is unlikely to lead to significant effects on European sites.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
community, in accordance with the significance of the finds; and (c) agreement of mitigation of the impacts on the significance of the heritage assets, including their fabric, their setting, their amenity value and arrangements for reinstatement.	
DM7 – Safeguarding Mineral Resources & Importation Infrastructure Planning permission will only be granted for non mineral developments which are incompatible with safeguarding the mineral within a Mineral Safeguarding Area and/or importation infrastructure within a Safeguarded Wharf or Railhead identified on the Key Diagram, where: • the applicant can demonstrate to the satisfaction of the Mineral Planning Authority that the mineral is not of economic value; or • the mineral can be extracted satisfactorily prior to the incompatible development taking place; or • the incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or • In the case of a wharf or railhead the applicant can demonstrate that the wharf or railhead is no longer critical to the transport of minerals and additional/replacement capacity at another wharf or railhead is available in Kent which is similar or better than the facility that it is replacing in terms of accessibility, location in relation to the market, suitability and size of the berth for dredgers, barges or ships, suitability/size of adjacent available land for processing and stockpiling of minerals and there are no incompatible developments in close proximity which could jeopardise the operation of the replacement site; or • it constitutes development which is exempt from mineral safeguarding policy, namely householder applications; or development that is already allocated in an adopted local plan or it is infill development of a minor	Minerals Safeguarding Areas identify the locations of strategically important minerals reserves (i.e. those that are not ubiquitous) in order to ensure that these reserves are not sterilised (i.e. rendered permanently unavailable) through the granting of permission for inappropriate alternative development, by requiring consultation with the minerals authority before such permissions are granted. Minerals Safeguarding Areas do not identify sites where minerals operations will occur during the plan period; that is the purpose of the Site Allocations documents which will follow from the Minerals and Waste Local Plan. The purpose of Minerals Safeguarding Areas is to ensure that minerals remain available for future generations, long after this plan period. Bearing this in mind, this policy is unlikely to lead to significant effects on European sites as it merely sets out those circumstances under which development within a minerals safeguarding area would be acceptable but does not imply that such development will take place.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
nature in existing built up areas.	
DM8 - Extraction of Minerals in Advance of Surface Development Planning permission for mineral extraction that is in advance of permitted surface development will be granted where the reserves would otherwise be permanently sterilised provided that mineral extraction operations are only for a temporary period and that the proposal will not cause unacceptable harm to the environment or communities. Where planning permission is granted for the prior extraction of minerals, conditions will be imposed to ensure that the site can be adequately restored to a satisfactory after-use should the main development be delayed or not implemented.	By definition it is not possible to know exactly which development sites this policy may relate to and therefore site-specific analysis is not possible. However, '*unacceptable harm to the environment'* would clearly involve adverse effects on the integrity of European sites. Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
DM9 – The Water Environment Planning permission will be granted for minerals or waste development where it does not:- • result in the deterioration of physical state, water quality or ecological status of any waterbody; or • have an unacceptable impact on groundwater Source Protection Zones; or • exacerbate flood risk in areas prone to flooding and elsewhere, both now and in the future.	This policy is unlikely to lead to significant effects on European sites.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
All minerals and waste proposals must include measures to ensure the achievement of both 'no deterioration' and improved ecological status of all waterbodies within the site and/or hydrologically connected to the site.	
DM10 - Health and Amenity Minerals and waste development will be permitted if it can be demonstrated that they are unlikely to generate unacceptable adverse effects from noise, dust, vibration, odour, emissions, bioaerosols, illumination, visual intrusion, traffic or exposure to health risks and associated damage to the qualities of life and wellbeing to communities and the environment.	This policy is unlikely to lead to significant effects on European sites.
DM11 – Cumulative Impact Planning permission will be granted for minerals and waste development where it does not result in an unacceptable cumulative impact on the environment or on the amenity of a local community, either in relation to the collective effect of different impacts of an individual proposal, or in relation to the effects of a number of minerals or waste developments occurring either concurrently or successively.	This policy is unlikely to lead to significant effects on European sites. This policy seeks to provide protection to sites including European sites in addition to policy wording contained within policy DM2.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
DM12 – Transportation of Minerals and Waste Minerals and waste development will be required to minimise road miles except where there is no practicable alternative to road transport which would be environmentally preferable. Where new development will require road transport: • the proposed access arrangements must be safe and appropriate to the proposed development and the impact of the traffic generated would not be detrimental to road safety; and • the highway network is able to accommodate the traffic that would be generated and the impact of the traffic generated would not have an unacceptable impact on the environment or local community. In addition to the policy wording, the supporting text for this policy also incorporates a recommendation of the previous iteration of HRA which stems from Department for Transport and Environment Agency guidance on the assessment of air quality impacts. This states that: '*Any waste or mineral developments that are likely to result in an increase of more than 200 Heavy Duty Vehicles (HDVs)/day*[36] *on any road that lies within 200m of a European site will need to be subject to Habitat Regulations Assessment (HRA) screening to evaluate air quality impacts. It will be necessary for the applicant to demonstrate that either:-* • *The increased traffic will not lead to an increase in nitrogen deposition within all European Sites that lie within 200m that*	This policy is unlikely to lead to significant effects on European sites.

[36] Department for Transport 2007. Design Manual for Roads and Bridges Volume 11, Environmental Assessment: Section 3 Environmental Assessment Techniques – Part 1 (HA207/07) Air Quality identifies the thresholds for defining an 'affected road' (including the 200 HDV movements/day criterion) and concludes that '*If none of the roads in the network meet any of the traffic criteria* [as a result of the scheme] *... then the impact of the scheme can be considered to be neutral in terms of local air quality and no further work is needed*'.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
constitutes more than 1% of the critical load for the most sensitive habitat within the site[37]*; or* • *If the increase in deposition will be greater than 1% of the critical load it will nonetheless be sufficiently small that no adverse effect on the interest features and integrity of the European site will result'*.	
DM13 – Public Rights of Way Planning permission will only be granted for minerals and waste development that adversely affect a public right of way if satisfactory prior provisions for its diversion are made which are both convenient and safe for users of the PROW or there is provision for the creation of an acceptable alternative route both during operations and following restoration of the site. The opportunity will be taken wherever possible to secure appropriate, improved access into the countryside.	This policy is unlikely to lead to significant effects on European sites.

[37] Environment Agency guidance, to which Natural England also subscribe, sets 1% of the Critical Load or Level as the threshold below which emissions from a facility or changes in road emissions can be considered to be sufficiently small as to be essentially trivial whether alone or in combination with other projects and plans (it must be noted that exceedence of the '1% of the critical load' criterion does not imply that an adverse effect will occur, it rather means that the contribution of the facility is greater than trivial so further assessment is required). This is most clearly expressed in guidance document 'Appendix ASC 1 Environment Agency Stage 1 and 2 Assessment of New PIR Permissions under the Habitats Regulations' (2007) which states in paragraph 2.6.1 that '*Where the concentration within the emission footprint* [i.e. the change in concentration or deposition rate due to the project or plan in question] *in any part of the European site(s) is less than 1% of the relevant long-term benchmark (EAL, Critical Level or Critical Load), the emission is not likely to have a significant effect alone or in combination irrespective of the background levels'*. In other words, it is not relevant at that stage whether or not the background concentration/deposition rate in the European site already exceeds the Critical Level or Load.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
DM14 – Safeguarding of Transport Infrastructure Proposals for minerals and waste development will be permitted where development would not give rise to new or increased hazards to aviation, rail, river, sea, other waterways or road transport.	This policy is unlikely to lead to significant effects on European sites.
DM15 - Information Required In Support of an Application Planning applications for minerals or waste management development will only be considered favourably if they are supported by sufficient relevant drawings, plans and information, including the information specified in the documents, 'Waste Application Guidance Notes' and/or 'Mineral Applications Guidance Notes' or their replacement guidance documents. In addition to the policy wording, the background text includes important guidance which derives from recommendations from the previous iteration of the HRA. It states that '*European sites (including Special Protection Areas, Ramsar Sites and Special Areas of Conservation) are protected by European legislation. Habitat Regulation Assessments (HRAs) are required to be carried out where proposals may have a significant impact upon the European site. In order to assess whether a proposal will have likely significant effects upon a designated site, the following criteria are used to determine where a HRA will be required for a development project.* *Any proposal for an Energy from Waste facilities should undertake HRA screening with regard to all European Sites within 10km. It will be necessary for the applicant to demonstrate that either:-* • *The facility will lead to an increase in nitrogen deposition within all European sites that lie within 10km that constitutes less than 1% of the critical load for the most sensitive habitat within the site; or*	This policy is unlikely to lead to significant effects on European sites. As stated in the supporting text for this policy, one key aspect that can be considered in evaluating planning applications are the screening criteria cited earlier in this report and summarised for convenience below. These screening criteria should be used (alongside other data where relevant) to determine whether a Likely Significant Effect test will be required. While the presence of minerals and waste development within these zones does not necessarily mean that an adverse effect will occur, any minerals and waste site which falls within the distance criteria given below should be subject to HRA screening and, if necessary, appropriate assessment. *These distances should however be used as a guide and should not preclude sites outside these distances being subject to HRA screening if an impact pathway is identified connecting them to a European site*. The table is not intended to be a comprehensive list of all potential impact pathways, but rather identifies the main probable pathways associated with minerals and waste development. For some impacts (e.g. water quality) it is not possible to cite distance-based criteria.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
• *If the increase in deposition will be greater than 1% of the critical load it will nonetheless be sufficiently small that no adverse effect on the interest features and integrity of the European site will result.* *Any minerals or waste development that is likely to result in an increase of more Heavy Duty Vehicles on any road that lies within 200m of a European site should also be subject to HRA screening to evaluate air quality impacts within the context of the critical load or critical level and the 1% criterion cited above.* *The following table identifies screening distances from European sites associated with particular impact pathways; Development projects that will lead to these pathways and fall within these zones will require Habitat Regulations Assessment. The table does not preclude HRA being required in other circumstances.*	

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
Table 2 International Designated Sites, Special Areas of Conservation, Special Protection Areas and Ramsar Sites. Screening Distances for considering whether a Habitat Regulations Assessment is Required for a Development **Pathway** – **Screening Distance** Air Quality - Energy from Waste – 10km from a European Site Air Quality - Landfill Gas Flares – 1km from a European Site Air Quality - Biopathegens – 1km from a European Site Air Quality - Dust – 500m from a European Site Air Quality - Vehicle Exhaust Emissions – 200m from a European Site Water Quality and Flow – No standard distance (use source/pathway/receptor approach) Disturbance (noise/visual) – 1km from a European Sites supporting disturbance sensitive species/populations Gull/corvid (rooks and crows) predation – 5km from European site supporting sensitive ground nesting breeding species (eg terns) **Pathway** – **Screening Distance** Coastal Squeeze – No standard distance - evaluate on a case by case basis	
DM16 – Planning Obligations Planning obligations will be sought where appropriate to achieve suitable control over and to mitigate and/or compensate for the effects of minerals and waste development where such objectives cannot be achieved by planning conditions. Matters to be covered by such planning obligations may include those listed below as appropriate to the proposed development: • revocation and consolidation of planning permissions;	This policy is unlikely to lead to significant effects on European sites.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
• highways and access improvements; • traffic management measures including the regulation of lorry traffic; • provision and management of off-site or advance tree planting and screening • extraction in advance of future development; • environmental enhancement and the delivery of Local Biodiversity Action Plan Targets; • protection of locally, regionally and nationally important sites; • protection of locally, nationally, internationally notable and protected species. Long term management of mitigation or compensation sites and their protection from further development. • provision and long-term maintenance of an alternative water supply should existing supplies be affected; • archaeological investigation, analysis, reporting, publication and archive deposition; • establishment of a liaison committee; • long-term site management provision to establish and/or maintain beneficial after-use; • improvement of the rights of way network; • financial guarantees to ensure restoration and long-term maintenance is undertaken; • measures for environmental, recreational, economic and community gain in mitigation or compensation for the effects of mineral and waste development; • Codes of construction practice for large waste developments which incorporate the requirement for the majority of the construction workforce to be recruited locally. Opportunities for modern apprenticeships to be made available for a proportion of the construction workforce; and • The majority of the operational staff at large waste developments to be sourced from the local area and opportunities for modern	

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
apprenticeships and other nationally recognised training schemes to be available for a proportion of the workforce.	
DM17 – Land Stability Planning permission will be granted for minerals or waste development where it does not result in land instability. All minerals and waste proposals that could give rise to land instability must include a stability report and measures to ensure land stability.	This policy is unlikely to lead to significant effects on European sites.
DM18 – Restoration and Aftercare Planning permission for minerals and temporary waste management development will be granted where provision has been made for high standards of restoration and after-use of the site and where necessary for its long term management. Restoration plans should be submitted with the planning application and where appropriate include details of those matters that are set out below: • A site based landscape strategy for the restoration scheme; • the key landscape and biodiversity opportunities and constraints ensuring connectivity with surrounding habitats; • the geological, archaeological and historic landscape features; • the site boundaries and areas allocated for soil and overburden storage; • an assessment of soil resources and their removal, handling and storage; • an assessment of the overburden to be removed and stored; • the type and depth of workings and information relating to the water table; • significant waste material locations and quantities of waste involved;	This policy is unlikely to lead to significant effects on European sites.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
• proposed infilling operations and sources & types of fill material; • consideration of land stability after restoration; • directions and phasing of working and restoration and how they are integrated into the working scheme; • the need for additional screening taking account of degrees of visual exposure; • details of the proposed landform including pre- and post-settlement levels; • types, quantities and source of soils or soil making materials to be used; • a methodology for management of soils to ensure that the pre-development soil quality is maintained; • proposals for meeting targets or biodiversity gain in relation to the Kent Biodiversity Action Plan (or its replacement), the Kent Biodiversity Opportuntiy Areas and the Greater Thames Marshes Nature Improvement Area; • planting of new native woodlands; • removal of all buildings, plant, structures, accesses and hardstanding not required for long term management of the site; • installation of drainage to enable high quality restoration and after-use; • measures to incorporate flood risk mitigation opportunities; • details of the seeding of grass and planting of trees, shrubs and hedges; and • a programme of aftercare to include details of vegetation establishment; vegetation management; biodiversity habitat management; field drainage and irrigation/watering facilities.	

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
DM19 – After-use Proposals for the after-use of minerals and temporary waste management sites shall: • incorporate the pre-working or pre-developed character of the site and its landscape setting in the after use; and • employ restoration techniques that can ensure the land is retained as a long-term agricultural resource, where it is proposed to restore the land to agricultural or forestry uses; and • provide for the enhancement of the quality of the landscape, biodiversity interests, local environment or the setting of historic assets to the benefit to the local or wider community.	This policy is unlikely to lead to significant effects on European sites.
DM20 - Aggregate Recycling New aggregate recycling processing plant will be permitted when processing is contained within covered buildings or when it can be demonstrated that there would be no significant adverse effects from dust and/or noise upon communities or the environment.	It is noted that proposals will only be permitted if they do not cause '*significant adverse effects on the environment*', from dust or noise, which would clearly include adverse effects on the integrity of European sites. Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
DM21 – Ancillary Development Proposals for ancillary development within or in close proximity to mineral and waste development will be permitted provided that: • the proposal is necessary to enable the main development to proceed, and either • the proposal would not cause undue or overriding harm to communities or environment; or • it has been demonstrated that there are environmental benefits in providing a close link with the existing site which outweigh the environmental impacts. Where permission is granted, the operation and retention of the associated development will be limited to the life of the linked quarry or waste facility.	It is noted that proposals will only be permitted if they do not cause '*undue or overriding harm to…environment'* However, it is also noted that development may be permitted if '*it has been demonstrated that there are environmental benefits … which outweigh the likely environmental impacts'*. Nonetheless, developments associated with this policy would need to comply with the other policies in the Plan and safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.
DM22 – Incidental Minerals Extraction Planning permission for mineral extraction that forms a subordinate and ancillary element of other development will be granted provided that operations are only for a temporary period and will not cause unacceptable harm to the environment or communities. Where planning permission is granted, conditions will be imposed to ensure that the site can be adequately restored in accordance with Policy DM15 and Policy DM16 to an alternative after-use should the main development be delayed or not implemented.	It is noted that proposals will only be permitted if they do not cause '*unacceptable harm to the environment*' which would clearly include adverse effects on the integrity of European sites. Moreover, following the HRA of the Strategy and Policy Directions Consultation, safeguards have been included in policy wording in the form of over-arching development management policies that cover all instances in which specific sites are not identified in policy. These are provided in policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required). It is considered that those four policies would provide a suitable framework for assessing and avoiding adverse effects on the integrity of European sites from minerals and waste applications.

Proposed policy	Screening (green = screened out, amber = screened in for appropriate assessment)
DM23 – Enforcement The County Council will carry out its planning enforcement functions within the terms of its own Enforcement Plan/Protocols (and any subsequent variations) and specifically for waste-related matters, in light of the European Union Waste Framework Directive.	This policy is unlikely to lead to significant effects on European sites.

5. OTHER PLANS AND PROJECTS

There are several plans and projects in and around Kent that could (in the absence of mitigation) result in an adverse effect on the integrity of the European sites in the county.

Core Strategies and Local Plans for local authorities in Kent and Medway allow for over 100,000 new dwellings and accompanying employment space over the period of the MWLP. There is the potential for adverse effects on European sites through the pathways of recreational pressure and disturbance, air quality, loss of supporting habitat, water quality and water resource pathways particularly in the south-west of the County. Moreover, development within the Thames Gateway and East Kent may well lead to a significant increase in recreational pressure conceivably increasing disturbance of the migratory and breeding bird populations for which SPAs and Ramsar sites are designated. The Minerals and Waste Local Plan does have a general aim to increase transport of minerals by routes other than road. However, this is an aspiration, since it is for individual site operators to determine how to transport their minerals to the ultimate destination, Since so many factors (including any changes in financial viability over the Plan period and available shipping capacity throughout the plan period) will influence the use of water-borne transport, it is not possible to estimate at this stage whether there would be any change in the quantity of minerals actually be moved by water over the Plan period from each safeguarded wharf, or whether any change would involve additional shipping or rely on capacity in existing ships. It is for the wharf operators and shipping lines to ensure that they are able to meet demand and ensure that any change to their operations does not result in an adverse effect on any European sites. With regard to potential impacts of Lydd Airport in Shepway, survey and modelling data are available as part of the recently approved planning application. The submissions by the applicant indicated that there was predicted to be a negligible impact on the integrity of the Dungeness SPA as a result of disturbance, and the Inspectors Report conclusions to this effect were accepted by the Secretary of State in April 2013[38]. However it is recognised that this conclusion was not universally accepted in submission to Public Inquiry. Natural England contested that "*overall, it cannot be ascertained that the proposals will not have an adverse effect on the integrity of the SPA, pSPA and pRamsar sites, because the effects on the integrity are uncertain but could be significant. It cannot be said that no reasonable scientific doubt remains as to the absence of such effects. Ultimately the judgement on whether or not the integrity test is properly met in this case will be one for the Secretary of State. NE's formal advice is that the test is not satisfied*[39]*."*

Atmospheric nitrogen emissions from Lydd airport were predicted to have a negligible impact on the integrity of the Dungeness SAC in the short, medium or long term, in respect of nitrogen deposition impacts and the Inspectors Report conclusions to this effect were accepted by the Secretary of State in April 2013. Since the contribution of additional traffic as modelled for the Shepway Core Strategy is effectively inconsequential it makes a negligible contribution to any in combination effect.

The expansion of the Port of Dover was permitted in November 2011. The applicant proposes to construct four 'Roll On – Roll Off' ("Ro-Ro") ferry berths in the Western Docks of the Port of Dover. This will involve redevelopment of the Western Docks site including reclamation of land by infilling of the Granville Dock and Tidal Basin. Operational infrastructure to facilitate the operation of the new terminal will be created on the existing and reclaimed land. The loss of the existing marina facilities will be replaced by the creation of a new marina with facilities for up to 370 berths. To maintain navigational access to the Wellington Dock, a new channel will

[38] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/184834/Called-in_decision_-_London_Ashford_Airport__Lydd_-_runway_extension_and_passenger_terminal.pdf
[39] http://www.shepway.gov.uk/UserFiles/File/pdf/lydd-airport/laa-final/Natural%20England%20closings.pdf

be created to link the dock with the Outer Harbour via the new marina. Dredging of the Outer Harbour will also be undertaken and the Admiralty Pier quay wall will be extended by 100m, whereas the Prince of Wales Pier will be shortened by 80m. Signalised at-grade junction modifications at the Prince of Wales roundabout on the A20 will provide access to and from the new terminal. The Secretary of State was satisfied that the Environmental Impact Assessment undertaken for the project and the published Environment Statement have properly identified, assessed and addressed all significant environmental effects. The Secretary of State noted that the project does not directly impact upon any site designated as a SAC under the Habitats Directive and the Conservation of Habitats and Species Regulations 2010 ("Habitats Regulations"). The Secretary of State considered the EIA process, summarised for convenience at section 11 of the non-technical summary of the Environmental Statement, and was satisfied with its findings on the indirect impacts on three SAC sites identified in the area. This identified that the main way in which the SAC features could be affected is through increased nitrogen and acid deposition from increased traffic. It was noted that Natural England in their letter of 4 March 2010 stated they had no objection to the proposed project. It was their view that, either alone or in combination with other plans or projects, this development was unlikely to have a significant effect on these designated sites and permission may be granted under the terms of the Habitats Regulations. The Secretary of State accepted, for the purposes of the Habitats Regulations, their findings that negligible impacts are predicted to these SAC sites and that mitigation measures are not required.

During decommissioning of Dungeness A and B the fuel, plant and buildings associated with electricity generation are systematically removed. Dungeness A is already being decommissioned (boron dust decommissioning took place in 2009 and defueling was scheduled for completion by end of 2012 with the fuel taken to Sellafield for reprocessing, this will be followed by the 'Care & Maintenance Preparations'[40] phase scheduled for completion in 2027 and final site clearance will occur from 2087 to 2097). Therefore, the 'care and maintenance' activities for Dungeness A (including electrical overlay site reconfiguration, thermal insulation removal, reactor building and turbine hall demolition between 2022 and 2026 and construction of a weather envelope around the reactors themselves) will coincide with the Minerals and Waste Local Plan period. Dungeness B may start decommissioning soon after 2018. Demolition is already proceeding on site - the boron dust building, safety management building, general services buildings, flocculation tanks and administration annexe building for Dungeness A have all now been demolished[41] and therefore any future noise and associated demolition impacts must be considered against the baseline of active demolition works. The demolition processes will take place sequentially and it is unlikely that the scale or demolition operations or vehicle movements will increase above current levels during the Plan period.

There would be a theoretical potential for adverse effects on European sites through excessive abstraction associated with Water Resource Management Plans for water companies operating in Kent. However the adopted Water Resource Management Plans do not include increased abstraction (beyond the limit of existing licences) from European sites as part of the long-term solution for water supply in the County.

[40] The C&MP phase at Dungeness A is subdivided into 3 distinct phases as part of the Magnox Optimised Decommissioning Plan (MODP). The first of these is Optimised Care and Maintenance Preparations (OC&MP) phase during which hazard reduction works such as ILW passivation are to be undertaken, and will be 7 years in duration. This phase will be followed by an Interim Care and Maintenance (IC&M) period when no active decommissioning will be undertaken and staff levels will be reduced and the site will be maintained in a semi-quiescent state. This phase will last for 4 years. Following this phase, Remaining Care and Maintenance Preparations (RC&MP) will be undertaken, which will involve undertaking remaining decommissioning and demolition works. This phase will be completed in 2027, allowing the site to enter the fully quiescent C&M phase.

[41] Magnox Life Plan 2012

Shoreline Management Plans and associated Coastal Strategies – There will be coastal squeeze impacts on some sections of frontage as a result of Hold the Line policies but this is counterbalanced by Managed Realignment opportunities being explored as part of the Environment Agency Regional Habitat Creation Programme to ensure that losses to coastal squeeze will be balanced by a net increase in intertidal habitat from managed realignment.

Kent and East Sussex Local Transport Plans – there is a theoretical pathway, primarily through air quality, to pollution sensitive European sites if the LTPs promoted significant new road schemes. However, the LTPs concern themselves primarily with promoting sustainable transport initiatives.

Minerals and Waste Development plans for East Sussex and the London Plan – it is possible that development policy relating to minerals and waste provision in adjacent authorities could lead to effects on European sites within Kent. However, there is no proposal for significant transfer of materials between Kent and East Sussex, and, as identified in the draft Kent Minerals and Waste Local Plan, there is provision made (in policies CSW4 and CSW8) for a declining volume of waste from London.

The safeguards incorporated into Policies DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required), with amendments as recommended, would ensure that 'in combination' effects on European sites from policy within the Minerals and Waste Local Plan would not occur.

6. CONCLUSIONS

Based on the policy text included in the draft Minerals and Waste Local Plan, it has proven possible to screen out the entire Plan as being unlikely to result in significant effects on European sites due to the following safeguarding policies: DM2 (which provides the protection to European sites), DM11 (which stipulates the requirement for cumulative assessment of effects), DM12 (which stipulates the requirements for transport/air quality analysis of impacts) and DM15 (which identifies distances from a European site within which HRA will definitely be required).

In this HRA we have provided further guidance is provided regarding project-level measures for Policy CSW18 and Policy CSM3.

- Policy CSW18 - The Dungeness Power Stations are surrounded by coastal vegetated shingle which constitutes the key habitat of the Dungeness Special Area of Conservation; some of this is actually within the boundary of the power station site. Construction of the facilities must not have an adverse effect on the integrity of this habitat; this would therefore require new waste disposal/treatment facilities to located away from the shingle habitat and would require the use of existing access routes to the Power Stations by construction traffic. Environmental studies such as Habitat Regulations Assessment would be needed to confirm that the development of new waste storage/treatment facilities would not indirectly affect the SAC through air quality (principally from construction traffic associated with the waste storage facilities) or hydrological impacts. These studies are not possible until detailed designs of the facilities are prepared. The power stations are also approximately 600m from the Dungeness to Pett Level SPA/Ramsar site and proposed Dungeness, Romney Marsh and Rye Bay pSPA/pRamsar site. The potential for disturbance of SPA birds (and measures to avoid this) would therefore also need to be covered by the environmental studies and measures taken to ensure that no disturbance would occur (e.g. through careful routing of construction/demolition traffic and if necessary controls on overall Heavy Duty Vehicle flows (in terms of vehicles per day) associated with the power stations.

- Policy CSM3 (Cement Mineral Extraction and Manufacture in Kent) - it is considered imperative that a Dust Action Plan is devised for the site and contains adequate measures (e.g. standard controls such as wetting of dust generating activities, sheeting of trucks and spoil heaps as necessary etc.) to ensure that dust deposition outside the quarry is rendered negligible. There are a range of standard measures used throughout the minerals industry which are effective in eliminating dust dispersal; these include:

    - a tractor hauled water bowser is available at all time for use in the Site;
    - in order to control dust from internal traffic movements, as necessary, all haul roads within the Site are kept moist during periods of continuous dry weather;
    - if during adverse weather, conditions (e.g. strong winds combined with dry weather) create or have the potential to create a nuisance by way of dust being carried to nearby residential properties or the SAC as a result of soil movement and/or stone movement/placement then that activity shall be temporarily stopped; and
    - sheeting of stockpiles and open trucks, wetting of haul routes and extraction areas as necessary

- It is recommended that there should also be a 25m standoff between the SAC and the active quarry (unless subsequent analysis can prove this is not necessary). In addition, the Dust Action Plan should require dust deposition monitoring (e.g. using frisbee gauges) to confirm that the measures are effective and increase their application if necessary. Research has indicated that significant impacts on vegetation are unlikely to occur except at very high deposition rates of greater than 1000 $mg/m^2/day$; therefore monitoring could use a lower threshold (e.g. 750 $mg/m^2/day$) as the monitoring threshold – in the unlikely event that deposition on the edge of the SAC exceeded this threshold additional measures (e.g. additional use of wetting) would be introduced; works within 100m of the SAC would need to cease until such measures were devised and agreed.

APPENDIX 1 - BACKGROUND ON EUROPEAN SITES REFERENCED IN THIS DOCUMENT

Site	Area (ha)	Qualifying Features	Key Environmental Conditions to Support Site Integrity
Medway Estuary and Marshes SPA & Ramsar site	4684	• Avocet (*Recurvirostra avosetta*) with 6.2% of the breeding population in GB • Little tern (*Sterna albifrons*) with 1.2% of the breeding population in GB • Common tern (*Sterna hirundo*) with 0.6% of the breeding population in GB • Tundra swan (*Cygnus columbianus bewickii*) with 0.2% of the wintering population in GB • Avocet (*Recurvirostra avosetta*) with 24.7% of the wintering population in GB	• Minimal disturbance· • Maintenance of grazing / mowing regimes· • Sufficient freshwater inputs for birds (feeding, preening, drinking) • Sufficient space between the site and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze;· • Unpolluted water;· • Absence of nutrient enrichment;· • Absence of non-native species and control of cord grass encroachment;· • Balance of saline and non-saline conditions
The Swale SPA & Ramsar site	6515	• Dark-bellied Brent goose (*Branta bernicla*) with 0.7% of the wintering population of western Siberia/western Europe • Dunlin (*Calidris alpina*) with 2.3% of the wintering population of GB • Redshank (*Tringa totanus*) with 0.9% of the eastern Atlantic wintering population	• Minimal recreational disturbance· • Maintenance of grazing / mowing regimes· • Sufficient freshwater inputs for bird species (feeding, preening and drinking) • Sufficient space between the site and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze; • Unpolluted water; • Absence of nutrient enrichment; • Absence of non-native species; • Balance of saline and non-saline conditions
Dungeness SAC	3223	• Annual vegetation of drift lines • Coastal shingle vegetation outside the reach of waves • Great crested newt	• Low recreational pressure, especially from vehicles (erosion of shingle vegetation) • Suitable foraging and refuge habitat within 500m of newt breeding ponds • Maintenance of hydrological regime • Relatively unpolluted water of roughly neutral pH • Some ponds deep enough to retain water throughout February to August at least one year in every three • In a wider context, great crested newts require good connectivity of landscape features (ponds, hedges etc) as they often live as metapopulations in a number of ponds.

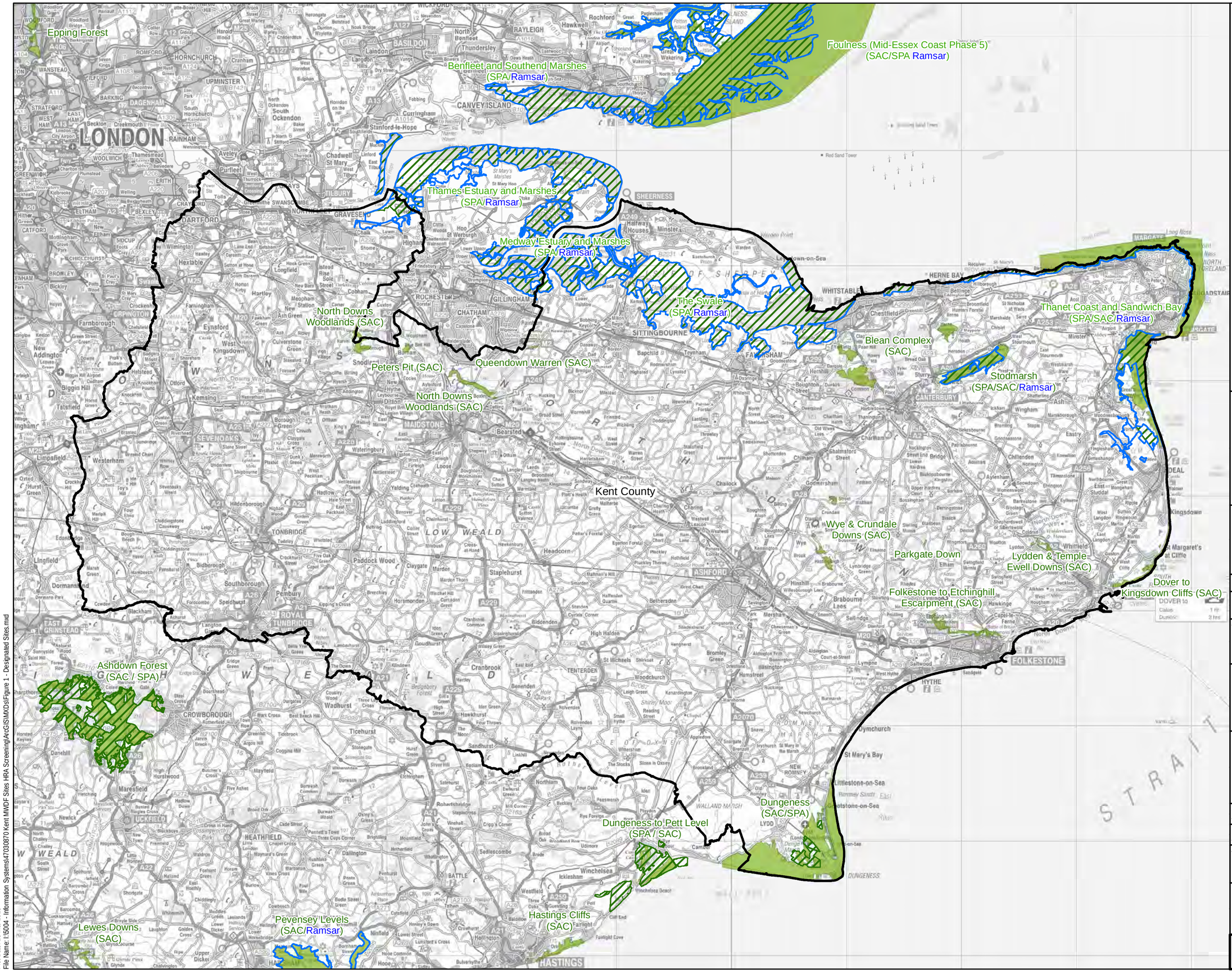
Site	Area (ha)	Qualifying Features	Key Environmental Conditions to Support Site Integrity
Dungeness to Pett Level SPA	1474	• Mediterranean gull (*Larus melanocephalus*) with 9.1% of the breeding population in GB • Little tern (*Sterna albifrons*) with 1.5% of the GB breeding population GB • Common tern (*Sterna hirundo*) with 2.2% of the breeding population in GB • Tundra swan (*Cygnus columbianus bewickii*) with 2.5% of the wintering population in GB • Northern shoveler (*Anas clypeata*) with 2.5% of the wintering population in GB	• Maintenance of grazing/mowing regimes • Freshwater inputs to provide a localised increase in prey biomass for certain bird species, specific microclimatic conditions and areas for preening and drinking • Sufficient space between the site and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze • Unpolluted water • Absence of nutrient enrichment • Absence of non-native species • Balance of saline and non-saline conditions • Control of predator numbers (e.g. fox, badger and mink) • Maintenance of suitable grassland on adjacent land for off-site grazing and roosting.

Site	Area (ha)	Qualifying Features	Key Environmental Conditions to Support Site Integrity
Dungeness, Romney Marsh & Rye Bay SPA and Ramsar site (proposed)		• The site regularly supports more than 1% of the GB populations of 12 species listed in Annex I of the EC Birds Directive • The site regularly supports more than 1% of the biogeographical population of one regularly occurring migratory species (shoveler - *Anas clypeata*). • The site regularly supports more than 20,000 waterbirds during the non-breeding season. • The site contains representative, rare, or unique examples of natural or near-natural wetland types such as vegetated annual drift lines, perennial vegetated stony banks, natural shingle wetlands, saline lagoons, freshwater pits and basin fens. • The site supports vulnerable, endangered, or critically endangered species or threatened ecological communities associated with wetland habitats. These communities include rich and diverse assemblages of bryophytes, vascular plants and invertebrates that are rare, threatened or specially protected.	• As for Dungeness to Pett Level SPA
Thames Estuary and Marshes SPA & Ramsar site	4839	• Hen harrier (*Circus cyaneus*) with 1% of the wintering population in GB • Avocet (*Recurvirostra avosetta*) with 28.3% of the wintering population in GB	• Minimal disturbance· • Maintenance of grazing / mowing regimes· • Sufficient freshwater inputs for bird species (feeding, preening and drinking) • Sufficient space between the site and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze;· • Unpolluted water; • Absence of nutrient enrichment; • Absence of non-native species; • Balance of saline and non-saline conditions

Site	Area (ha)	Qualifying Features	Key Environmental Conditions to Support Site Integrity
Thanet Coast and Sandwich Bay SPA & Ramsar site	1870	Populations of European importance of the following migratory species: • Turnstone (*Arenaria interpres*) • Golden Plover (*Pluvialis apricaria*) • Little Tern (*Sterna albifrons*)	• Sufficient space between the site and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze • No dredging or land-claim of coastal habitats • Unpolluted water • Absence of nutrient enrichment • Absence of non-native species • Maintenance of freshwater inputs • Balance of saline and non-saline conditions • Minimal disturbance • Minimal activities that alter sediment characteristics
Thanet Coast SAC	2804	• Reefs • Sea caves	• No dredging • Unpolluted water • Absence of nutrient enrichment • Absence of non-native species • Minimal disturbance • Minimal activities that alter sediment characteristics
Sandwich Bay SAC	1138	• Shifting dunes • Dune grassland • Dunes with creeping willow - • Humid dune slacks	• Sufficient space between the site and development to allow for managed retreat of intertidal habitats and avoid coastal squeeze • No land-claim of coastal habitats • Unpolluted water • Absence of nutrient enrichment • Absence of non-native species • Minimal disturbance
Stodmarsh SAC	565	• Desmoulin's whorl snail (*Vertigo moulinsiana*)	• Water quality for Desmoulin's whorl snail • Minimal recreational disturbance • Maintenance of grazing regime • Maintenance of water supply • Absence of nutrient enrichment
Stodmarsh SPA & Ramsar site	565	• Bittern (*Botaurus stellaris*), 2 individuals representing at least 2.0% of the wintering population in GB • Hen Harrier (*Circus cyaneus*), 9 individuals representing at least 1.2% of the wintering population in GB	• Maintenance of sufficient water to support marginal/marsh vegetation and high • Minimal recreational disturbance • Maintenance of grazing regime • Maintenance of water supply • Absence of nutrient enrichment
Wyre and Crundale Downs SAC	112	• Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (important orchid sites)	• Maintenance of grazing is critical to survival of interest features • Well-drained soils • Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification • Absence of direct fertilisation
Queendown Warren SAC	14	• Dry grasslands and scrublands on chalk or limestone, including important orchid sites	• Maintenance of grazing· • Minimal recreational trampling· • Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification· • Absence of direct fertilisation· • Well-drained soils

Site	Area (ha)	Qualifying Features	Key Environmental Conditions to Support Site Integrity
Lydden and Temple Ewell Downs SAC	62	• Dry grasslands and scrublands on chalk or limestone, including important orchid sites.	• Maintenance of grazing; • Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification; • Absence of direct fertilisation; and • Well-drained soils.
Folkestone to Etchinghill Escarpment SAC	182	• Dry grasslands and scrublands on chalk or limestone, including important orchid sites.	• Maintenance of grazing; • Low levels of trampling; • Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification; • Absence of direct fertilisation; and • Well-drained soils.
Blean Complex SAC	521	• Oak-hornbeam forests	• Low levels of trampling • Maintenance of coppice management • Minimal air pollution • Absence of direct fertilisation and • Well-drained soil
North Downs Woodlands SAC	288	• Beech forests on neutral to rich soils; • Yew-dominated woodland; and • Dry grasslands and scrublands on chalk and limestone.	• Low nutrient runoff from surrounding land - being steep and narrow, the Hanger woodlands are vulnerable to nutrient run-off leading to eutrophication; • Maintenance of grazing; • Minimal trampling of sensitive woodland ground flora; • Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification; • Absence of direct fertilisation; and • Well-drained soils.
Peter's Pit SAC	28	• Great-crested newt (*Triturus cristatus*)	• Maintenance of suitable aquatic and marginal habitat for breeding newts
Dover to Kingsdown Cliffs SAC	184	• Calcareous grassland - dry grasslands and scrublands on chalk or limestone including important orchid sites.	• Maintenance of grazing • Low levels of trampling • Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification • Adequate undeveloped land behind the cliffs to enable managed retreat of the SAC in response to erosion and avoid coastal squeeze • Absence of direct fertilisation and • Well-drained soils.
Parkgate Down SAC	7	• Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (important orchid sites)	• Maintenance of grazing is critical to survival of interest features • Well-drained soils • Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification • Absence of direct fertilisation

FIGURE 1. EUROPEAN SITES IN RELATION TO KENT



LEGEND

- Kent County
- Ramsar Sites
- Special Protection Areas
- Special Areas of Conservation

Revision Details	By / Check	Check Date	Suffix

Purpose of Issue: FINAL

Client: KENT COUNTY COUNCIL

Project Title: KENT MINERALS & WASTE LOCAL PLAN HABITAT REGULATIONS ASSESSMENT

Drawing Title: DESIGNATED SITES

Drawn	Checked	Approved	Date
JW	GD	GD	15/03/2013

URS Internal Project No. 47030870

Scale @ A3 1:300,000

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Drawing Number: FIGURE 1

Rev: 1

Plot Date: 15 Mar 2013
File Name: I:\5004 - Information Systems\47030870 Kent MWDF Sites HRA Screening\ArcGIS\MXD\s\Figure 1 - Designated Sites.mxd