

**FORD ENERGY RECOVERY FACILITY AND  
WASTE SORTING AND TRANSFER FACILITY,  
FORD CIRCULAR TECHNOLOGY PARK**



ENVIRONMENTAL  
STATEMENT  
**CHAPTER 9**  
COMMUNITY AND  
SOCIAL EFFECTS

## 9 Community and social effects

### Introduction

- 9.1 This chapter has been prepared by Terence O'Rourke Ltd to analyse the community and social effects arising from the proposals. West Sussex County Council advised in its scoping opinion that the assessment should examine the potential for effects on house prices and housing supply, education and local services, and tourism as a result of the operation of the proposed development. The potential for effects during construction was therefore scoped out of the assessment.

### Legislation and policy

- 9.2 The following documents were examined for policies that relate to community and social issues associated with waste management, and particularly energy recovery facilities (ERF) and waste sorting and transfer facilities (WSTF):
- National Planning Policy for Waste (2014)
  - National Planning Policy Framework (NPPF; 2019)
  - National Planning Practice Guidance: Waste (NPPG; 2015)
  - Waste Management Plan for England (2021)
  - Our Waste, Our Resources: A Strategy for England (2018)
  - West Sussex Waste Local Plan (2014)
  - Arun Local Plan 2011-2031 (2018)
  - Ford Parish Council Neighbourhood Development Plan 2017-2031 (2018)
- 9.3 Paragraph 5 of the *National Planning Policy for Waste* states that local planning authorities should take account of the cumulative impact of existing and proposed waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion, or economic potential. Paragraph 7 states that, when determining waste planning applications, waste planning authorities should consider the likely impact on the environment and amenity and the locational implications of any advice on health from the relevant health bodies.
- 9.4 The NPPF does not set out any specific waste policies, as national waste planning policy is contained in the above document. However, it states that, when determining applications for waste developments, authorities should have regard to the policies of the NPPF where relevant. The NPPF includes policies relating to promoting healthy and safe communities. The NPPG states that local planning authorities can ensure that waste is handled in a manner that protects human health and the environment by:
- Testing the suitability of proposed sites against criteria set out in the *National Planning Policy for Waste*
  - Putting in place suitable planning conditions and adequate enforcement and monitoring
  - Working closely with environmental health colleagues

- Consulting with Public Health England (PHE) and the EA for advice on public health matters and pollution control
- 9.5 The *Waste Management Plan for England* and *Our Waste, Our Resources: A Strategy for England* do not contain any specific policies relating to the community and social impacts of waste management. However, the former highlights the need to “*protect the environment and human health by preventing or reducing the generation of waste, the adverse impacts of the generation and management of waste, and by reducing overall impacts of resource use and improving the efficiency of such use*” and that waste should be managed “*in a way that guarantees a high level of protection of the environment and human health.*”
- 9.6 Policy W19 of the adopted West Sussex Waste Local Plan states that proposals for waste development will be permitted provided that:
- Lighting, noise, dust, odours and other emissions, including those arising from traffic, are controlled to the extent that there will not be an unacceptable impact on public health and amenity
  - The routes and amenities of public rights of way are safeguarded, or where temporary or permanent re-routing can be justified, replacement routes of comparable or enhanced amenity value are provided
  - Where necessary, a site liaison group is established by the operator to address issues arising from the operation of a major waste management site or facility
- 9.7 The Arun Local Plan and Ford Parish Council Neighbourhood Development Plan do not contain any policies relating to the potential community and social impacts of waste management facilities.

## Methodology

### Baseline

- 9.8 A desk-based study was undertaken by Terence O'Rourke Ltd to assess the community and social baseline conditions in the vicinity of the proposed development site. In addition, Terence O'Rourke Ltd undertook a literature review to examine the issues of public perception of waste management and the nature of the general public's concerns. The references and data sources used in the studies are set out in table 9.1.

Arun District Council, 2020, Authority Monitoring report 1 <sup>st</sup> April 2019 – 31 <sup>st</sup> March 2020
Arun District Council, 2016, Infrastructure Capacity Study and Delivery Plan
Burnley, S. and Parfitt, J., 2000, Public Attitudes to Waste and Waste Management
Callidus Transport and Engineering, 2018, CTP Ford Airfield, Alternative Site Access Transport Statement
Cluttons Estates Ltd, 2005, Evaluation of property and land values in the vicinity of three Hampshire ERFs
Defra, 2019, Local Authority Collected Waste Statistics – Local Authority data
Defra, 2014, Energy from waste: A guide to the debate
Defra, 2013, Incineration of Municipal Solid Waste
Defra, 2004, Review of Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes. Extended Summary

Environment Agency, 2009, Perceptions, attitudes and communication: their role in delivering effective environmental regulation for municipal waste incineration

Ford Parish Council, 2018, Ford Parish Council Neighbourhood Development Plan 2017-2031

Get information about schools website: <https://get-information-schools.service.gov.uk>

Grundon, 2018, Environmental Statement Addendum for Proposed New Access Road to Ford Circular Technology Park

Health Protection Agency, 2005, Municipal Solid Waste Incineration

Knight, Kavanagh & Page, 2016, *Arun District Council Open Space Assessment Report*

Land Registry website: [landregistry.data.gov.uk/app/standard-reports/report-design](http://landregistry.data.gov.uk/app/standard-reports/report-design)

MORI, 2002, Public attitudes towards recycling and waste management

National Atmospheric Emissions Inventory website: <https://naei.beis.gov.uk/data/data-selector?view=air-pollutants>

National Society for Clean Air, 2001, The public acceptability of incineration

NHS website: [www.nhs.uk](http://www.nhs.uk)

NHS Digital General Practice Workforce Interactive Dashboard:  
<https://app.powerbi.com/view?r=eyJrjoiNmY4NGNiMWQtMGVhZi00MzU2LThiZGMtMTFhZjY2NGE0NTZmliwidCl6ljUwZjYwNzFmLWJiZmUtNDAxYS04ODAzLTY3Mzc0OGU2MjllMlslmMiQjh9>

Phillips, K.J.O., Longhurst, P.J. and Wagland, S.T., 2014, 'Assessing the perception and reality of arguments against thermal waste treatment plants in terms of property prices'. *Waste Management*, Volume 34, Issue 1, January 2014, pp219-225

Public Health England, 2019, PHE statement on modern municipal waste incinerators (MWIs) study

Sussex Business Group, 2017, 2017: A Record Year for Arundel Castle

TEAM Tourism Consulting, 2018, South Downs National Park Visitor Market Proposition Final Report

The Planning Inspectorate, 2020, Appeal Decision by I. Jenkins BSc CEng MICE MCIWEM Appeal Ref: APP/P3800/W/18/3218965 Former Wealden Brickworks, Langhurstwood Road, Horsham, West Sussex, RH12 4QD

Tolvik Consulting, 2020, UK Energy from Waste Statistics - 2019

**Table 9.1: References and data sources**

- 9.9 Community and social receptors in this study identified through the scoping process include house prices and housing supply, education and local services, and tourism. The sensitivity of receptors is determined by their performance relative to local, regional and national averages and their capacity to adjust to change, and is considered with reference to the guidance in figure 9.1.
- 9.10 The baseline study examined the current community and social conditions in Yapton ward, within which the site lies, Ford village and Arun district as a whole. Information from the regional scale was also used for comparative purposes where appropriate.

### ***Impact assessment***

- 9.11 Prior to assessing the effect of the proposed development on the community and social environment, it is important to identify what constitutes a potential effect. In the context of this assessment, effects are related to the potential for the operation of the proposed development to lead to changes in demand for housing, education and local services and to affect tourism in the area by impacting on visitor numbers. Impact magnitude is categorised with reference to figure 9.2.

### ***Effect significance***

- 9.12 The significance of effects has been determined using criteria developed from best practice techniques and expert knowledge. Significance has been derived from measures of receptor sensitivity and the magnitude of change, as shown in figures 9.1 and 9.2. The sensitivity and magnitude criteria were combined to determine the degree of effect using the matrix shown in figure 9.3, which was then used to determine whether the effect was significant. Effects that are moderate or above are considered to be significant.

### ***Limitations and uncertainties***

- 9.13 The baseline house price data are from 2020 and may have been affected by restrictions and government financial incentives associated with the ongoing COVID-19 pandemic. The baseline tourism data used in the assessment are from prior to 2020 and the pandemic. It is not known at present to what extent the pandemic will affect the area's tourism industry and house prices longer term. Given this uncertainty, the assessment has not attempted to account for potential changes associated with this factor.

## **Background – public perception**

### ***Introduction***

- 9.14 This section is based primarily on the research carried out for the National Society for Clean Air (NSCA), reported in *The public acceptability of incineration* (2001), Defra's *Review of environmental and health effects of waste management: municipal solid waste and similar wastes* (2004) and the Environment Agency's (EAs) *Perceptions, attitudes and communication: their role in delivering effective environmental regulation for municipal waste incineration* (2009).

### ***Public perception of incineration / energy recovery***

- 9.15 Research conducted by the Open University in 2000 found several areas of misunderstanding about waste issues, including the following:
- Nature of local waste disposal and other industrial plants
  - Cost of waste collection and disposal
  - Amount of waste that can be recycled
  - Sources and effects on public health of dioxins
- 9.16 Change is often opposed because it causes uncertainty and is perceived as threatening. The public's broad dislike of change extends to every kind of waste treatment and disposal facility, as well as to other types of development such as housing estates, roads and shopping centres. Support for, or opposition to, all types of waste facilities can be split into two types: support / opposition in principle, and site-specific support / opposition (NSCA, 2001). The roles of pressure groups, the importance of the increasing availability of scientific evidence (often via the internet) and the role of non-mainstream scientific thinking are also key in influencing public perception (EA, 2009).

- 9.17 The EA's report identifies the following three points that are significant factors in discontent and opposition to waste disposal through incineration:
- Perception of lack of public involvement in the process
  - Distrust of expert opinions
  - Doubts over expert opinions relating to 'scientific uncertainty'
- 9.18 Concerns and distrust of expert opinions can take many forms, including:
- The intuitive feeling that experts are wrong
  - The existence of more than one expert opinion, resulting in the feeling that if the experts cannot agree then they obviously do not know the answer
  - The perception that experts have vested interests and are therefore biased
  - The perception that not all the relevant evidence has been considered, arising from the increased availability of information (such as on the internet)
- 9.19 The report concludes that consultation is key in alleviating issues surrounding energy recovery projects. It is recommended that this should be done at an early stage, and should involve local people and statutory consultees (often seen as guardians of public welfare).
- 9.20 Experience from public consultation undertaken by a number of local authorities has shown that the inclusion of informed debate in the consultation and discussion at strategic level has resulted in widespread acceptance of the need for energy recovery to form part of an integrated waste strategy. The NSCA report states that *"given factual background information about managing waste, and the alternatives available, most people reach similar conclusions to those of waste professionals in terms of what is theoretically the best way to deal with waste."*
- 9.21 However, the identification of sites for development of waste facilities leads to the support / opposition for a technology becoming a personal issue, rather than an 'in principle' opinion. Members of the public may oppose a site planned near their homes because it is perceived as a threat, even if they are not against energy recovery as part of an overall waste strategy. The NSCA report highlights that the public's anxiety is fed by campaign groups and the media. Concerned residents often form local lobby groups, which become the focus of media attention that attracts more support for their cause.
- 9.22 To manage the issue of local lobby groups and influence from campaign groups, the EA (2009) advises that applicants should undertake regular and early consultation, and deal with concerns and evidence in an even-handed way such that no points are suppressed or disregarded without due consideration.

### ***The basis of public concern***

- 9.23 There is no such thing as an ideal site, so a degree of compromise will almost always be necessary. Site selection for ERFs is the key focus of the majority of objections. Siting facilities away from housing reduces the potential for impacts on residents and thus the extent of opposition. However, this can lead to conflicts with countryside objectives and nature conservation and landscape designations, and may increase the traffic impacts associated with delivering

waste and removing residues. The NSCA notes that siting facilities in industrial areas appears to be preferable, but such sites are not always available and other occupants of industrial estates have been known to object.

9.24 In this context, it is important to note that planning permission was granted at the application site in 2015 for an ERF and a materials recovery facility (application reference: WSCC/096/13/F). While the approved facilities have not been built, the permission has been implemented and the site currently operates as a waste transfer station (WTS) that normally handles between 20,000 and 25,000 tonnes of waste per year. Paragraph 182 of the NPPF highlights that existing facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. It should also be noted that the site is identified in the adopted West Sussex Waste Local Plan as a strategic waste site.

9.25 The specific concerns often expressed about ERFs, as opposed to broad concerns regarding waste management as a whole, are summarised by the NSCA (2001) as follows:

- Emissions from the combustion process
- Health impacts
- Transport issues, including possible import of waste from other areas
- Conflict with materials recycling
- Local amenity issues
- Effects on property values
- Management and operational concerns, including odours
- Disposal of residues
- Outside company making a profit out of the community

9.26 There are no simple answers to these concerns, but all will be addressed during the planning and authorisation process. Each of these issues is considered in turn below.

#### ***Emissions from the combustion process***

9.27 The main concern expressed about ERFs is generally in relation to emissions to air. The European Industrial Emissions Directive (2010/75/EU), which replaced the Waste Incineration Directive (2000/76/EC), sets limits on emissions from waste incineration. These have recently been updated by new emissions limits set out in the Waste Incineration Best Available Techniques reference document (BREF). These limits are more stringent than those set out in the Industrial Emissions Directive for some pollutants.

9.28 The responsibility for enforcing these limits and the operating conditions of the facilities rests with the EA in England and Wales, under the terms of the Environmental Permitting Regulations 2016 (as amended). The regulation of ERFs is more comprehensive, and the limits tighter, than for most other industrial processes (NSCA, 2001). ERF emissions have reduced substantially over the past 25 years and most emissions are less than 10% of the level 25 years ago (Defra, 2013).

- 9.29 Operational permits for ERFs include site-specific emissions limits that take local conditions into account. In addition to announced and unannounced inspection visits, many facilities have online links to their local authority or EA office, which enables constant monitoring of the plant's performance on certain parameters. For those emissions that cannot be continuously monitored because techniques are not available, such as dioxins and furans, three to six monthly testing is generally undertaken by an independent assessor. No instruments are available to monitor dioxins in the minute concentrations in which they are emitted from ERFs (NSCA, 2001). Defra (2004) states that emissions from the incineration of municipal solid wastes are the most tightly controlled of all waste management processes.
- 9.30 Public concern in relation to incineration often centres on dioxins. These are widely present in the environment and are a family of approximately 200 chlorinated organic compounds, a few of which are known to be toxic. Dioxins are usually referred to in terms of the equivalent concentration (TEQ) of the most toxic form: 2,3,7,8-tetrachlorodibenzo para dioxin (TCDD). Dioxins are formed in all combustion processes where chlorine is present together with fuel and oxygen. Sources include power plants, buses, cars, cigarettes, crematoria, garden bonfires and barbecues.
- 9.31 Data from the National Atmospheric Emissions Inventory (2021) show that in 2018 all the municipal waste ERFs in the UK together produced 0.53 g TEQ of dioxins, equating to 0.3% of the UK's total annual emissions, while fireworks and bonfires on Bonfire Night alone produced 6.80 g TEQ. Travel in passenger cars produced 3.9 g TEQ of dioxins and burning fuel in residential properties produced 65.90 g TEQ. A number of other sources contribute to dioxin emissions, including accidental vehicle fires, small scale waste burning (for example on building sites), incineration of other wastes, and the iron and steel industry. There has been a 99.8% reduction in emissions of dioxins and furans from incineration in the UK since 1990, following limits imposed in EC directives, an increased understanding of the factors that lead to dioxin and furan emissions, and the development of improved ways of stopping their formation and removing them from flue gases.
- 9.32 ERF chimney gases also include other emissions that generate public concern, including particulates, heavy metals and acid gases. The permitted emission limits of these products are set at levels considered to protect public health. ERF plants are very small sources of these emissions when compared to sources such as road traffic (NSCA, 2001). Defra (2013) states that emissions from an ERF typical of those currently operating in the UK (230,000 tonnes per year) are approximately equivalent to:
- Oxides of nitrogen – emissions from a 7 km stretch of typical motorway
  - Particulate matter – emissions from a 5 km stretch of typical motorway
  - Dioxins and furans – emissions from accidental fires in a town the size of Milton Keynes
  - Cadmium – one-twentieth of the emissions from a medium-sized UK coal-fired power station
- 9.33 Data from the National Atmospheric Emissions Inventory (2021) show that in 2018 all the municipal waste ERFs in the UK together produced 0.12% of the



UK's emissions of particulate matter with a diameter of less than 0.1 µm, 0.16% of the country's emissions of particulate matter with a diameter of less than 1 µm, 0.10% of the emissions of particulate matter with a diameter of less than 2.5 µm and 0.09% of the emissions of particulate matter with a diameter of less than 10 µm. In comparison, Bonfire Night alone produced 1.1%, 1.1%, 1.5% and 1.4% of the emissions of the different sizes of particulate matter respectively.

- 9.34 Tolvik Consulting's (2020) *UK Energy from Waste Statistics – 2019* shows that, across all continuously monitored substances, on average emissions from 48 fully operational ERFs in the UK were 28.8% of the emissions limit value in 2019. Further details are provided in table 9.2.

Substance	Percentage of emission limit value
<b>Continuously monitored emissions</b>	
Hydrogen chloride	50%
Oxides of sulphur	27%
Oxides of nitrogen	79%
Total organic carbon	5%
Carbon monoxide	14%
Particulates	11%
Ammonia	15%
<b>Periodically monitored emissions (data only available from 42 ERFs)</b>	
Hydrogen fluoride	7%
Dioxins and furans	13%
Heavy metals	15%
Cadmium and thallium metals	4%
Mercury and compounds	4%

**Table 9.2: Summary of emissions levels from UK ERFs in 2019 (Tolvik Consulting, 2020)**

- 9.35 Tolvik Consulting (2020) also investigated abnormal operations during 2019, for which information was available from 42 of the 48 fully operational ERFs in the UK. An aggregated total of 96 hours of abnormal operations was reported, down from 130 hours in 2018. ES chapter 6: Air quality contains further details of the strict limits for emissions set by the Waste Incineration BREF.

**Health impacts**

- 9.36 ERFs emit a large number of different chemicals, the majority of which are already in the waste delivered to the plant. Humans are exposed to hundreds of thousands of chemicals daily through diet and in the air. It should be noted that the key factor in determining risk to health is the amount and toxicity of chemicals, not the number. All chemicals are toxic if the exposure is high enough and long enough. However, a threshold exists for most chemicals below which health impacts are very unlikely. When assessing exposure from an ERF, it is important to measure background levels already present in the air (NSCA, 2001).

- 9.37 The EA has estimated that 24,000 deaths are brought forward each year by air pollution, of which only three (0.01%) are caused by emissions of oxides of nitrogen from ERFs (NSCA, 2001). The estimates relate to deaths that occur earlier than would otherwise be the case, although the extent of the

advancement cannot yet be calculated. The Institute for European Environmental Policy (IEEP) found that environmental concerns other than health are more important in the debate over which waste management option, or mix of options, is appropriate for long term waste management. The IEEP went on to state that “*no waste management option should now be operated in a way that poses more than minimal risks to health.*”

- 9.38 The 2004 Defra report found that the weight of evidence from health studies indicates present day practice for managing municipal solid waste has at most a minor effect on health, particularly when compared with other health risks associated with ordinary day-to-day living. The total number of hospital admissions per year attributable to emissions to air from all facilities managing municipal solid waste in the UK is estimated as five, compared with 300,000 related to traffic accidents.
- 9.39 Defra’s (2014) *Energy from waste: A guide to the debate* states that the government is advised by PHE on the impact on health of emissions to air from ERFs. PHE (2019) has reviewed research undertaken to examine the suggested links between emissions from municipal waste ERFs and effects on health, and states that “*modern, well run and regulated municipal waste incinerators are not a significant risk to public health.*” PHE’s view is that, while it is not possible to rule out adverse health effects from these facilities completely, “*any potential effect for people living close by is likely to be very small.*” PHE adds that this view is based on detailed assessments of the effects of air pollutants on health and on the fact that these facilities “*make only a very small contribution to local concentrations of air pollutants.*”
- 9.40 The potential for effects on health from the proposed ERF is discussed in more detail in chapter 8.

#### ***Transport issues, including possible import of waste from other areas***

- 9.41 Concerns relating to the transport of waste include noise, dust and traffic congestion associated with lorries delivering to a site. These concerns are often greater in areas of poor road infrastructure or high existing congestion. Depending on the site, refuse collection vehicles may deliver directly to an ERF, or waste may be bulked and delivered in large container vehicles. A mixture of the two approaches is often adopted. The impact of transporting waste by road to a facility, and the subsequent removal of residues, should be compared with the transport impacts of alternative waste management scenarios.
- 9.42 Waste will be delivered to the site via the recently constructed access road that is already used to deliver waste to the existing WTS. The planning permission for the access road granted in August 2019 (application reference: WSCC/027/18/F) already allowed an increase in the number of HGV movements associated with the site. Previously, no more than 60 HGVs could enter and exit the site Mondays to Fridays and no more than 30 HGVs could enter and exit the site on Saturdays. The planning permission doubled these numbers to 120 HGVs entering and exiting the site Mondays to Fridays and 60 HGVs entering and exiting the site on Saturdays.
- 9.43 The EIA and transport statement submitted in support of the planning application for the access road assessed the effects associated with these

additional traffic movements, including as a result of increased noise, emissions and effects on the local road network, and concluded that all the potential effects would be negligible and not significant. The assessments of air quality, noise and traffic and transport effects in ES chapters 6, 14 and 15 respectively confirm that no significant effects are predicted as a result of the transport of waste to, and the removal of residues from, the proposed development.

- 9.44 The NSCA report highlights that waste imports are another frequently expressed concern. Residents living close to a proposed ERF may fear that neighbouring local authorities will contract to send their waste to the plant and thus increase the number of lorry movements. Local residents may find disposal of their own waste acceptable, or at least bearable, but resent the thought that waste from other areas may contribute to the provision of an ERF in their local area.
- 9.45 The site is allocated in policy W10 of West Sussex County Council's (2014) adopted Waste Local Plan as a strategic waste site to meet part of the county's identified shortfall in waste management capacity. It is therefore intended that the proposed ERF and replacement WSTF will manage waste from West Sussex.
- 9.46 Several consultations by waste disposal authorities have found that people express a preference for small scale local facilities over larger facilities serving a wider area, or transporting waste over long distances. With a capacity of up to 275,000 tonnes per year, the proposed ERF is in the middle of the scale. Its capacity would rank it 22<sup>nd</sup> out of the 48 ERFs currently operational in the UK, with the 21 larger plants all having a capacity of over 295,000 tonnes per year and the six largest plants having a capacity of over 600,000 tonnes per year (Tolvik Consulting, 2020).

### ***Conflict with material recycling***

- 9.47 Many people fear that waste incineration will discourage recycling. It is important to note, however, that there are practical limits to recycling and not everything potentially recyclable can realistically be recycled. The revised Waste Framework Directive allows for deviation from the waste hierarchy where it can be clearly demonstrated that there is a better environmental outcome from doing so. For some waste streams, energy recovery is the best option, especially where it is not possible to prevent, re-use or recycle.
- 9.48 Recycling levels in the UK have increased over time, but meeting the target for recycling 65% of municipal solid waste by 2035 set out in the government's (2018) *Our Waste, Our Resources: A Strategy for England* will still leave 35% of waste requiring an alternative form of management. In areas where landfill capacity is rapidly depleting, alternative proven and robust methods of managing residual waste are essential. The adopted West Sussex Waste Local Plan forecasts a shortfall in landfill capacity within the county over the plan period to 2031, and also highlights that the council has a target of zero waste to landfill by 2031. It states that *"there is insufficient capacity at existing waste management facilities in West Sussex to secure the maximum recovery of waste through such means as recycling, composting, or energy generation."*
- 9.49 Another common concern is that the local authority will take the easy option of sending all waste to an incinerator, rather than developing recycling. However,

all local authorities have statutory and locally adopted recycling targets, together with financial incentives and penalties aimed at landfill diversion. These factors work together to address this issue.

- 9.50 Defra (2014) states that *“Experiences in Europe show that high rates of recycling, composting and energy from waste can and do exist.”* The NSCA report notes that this is partly because some of the materials that are commonly recycled, such as metals and glass, are not combustible, while diverting wet organic wastes from kitchens and gardens for composting improves the calorific value of the remaining waste, despite reducing the mass.
- 9.51 Data from Defra’s local authority collected waste annual results tables show that West Sussex County Council had a relatively high rate of household waste recycling and composting in 2018/19, at 51.9%. This indicates that recycling and composting are well established in the area. In addition, Viridor currently holds the contract with West Sussex County Council to manage the area’s recyclable waste, meaning that it will be well placed to ensure that the proposed ERF does not compromise recycling in the county.
- 9.52 Qualitative work undertaken by MORI in 2002 found that incineration is felt to be more acceptable as part of a recycling-led strategy, where everything that can be recycled has been, because incineration is seen as preferable to landfill. Support for incineration is increased if people feel that the material to be burnt is controlled and strict operating guidelines are in place.

#### **Local amenity effects**

- 9.53 The physical bulk of an ERF and its effect on a local area are often concerns for the public, although this applies to many forms of development. Modern facilities are usually designed by specialist architects, who take account of operational, locational and environmental considerations, and as a result the buildings are not necessarily unattractive.
- 9.54 Research by the Open University in 2000 found that 55% of people living close to municipal waste ERFs were not aware of the fact. Conversely, some people erroneously believed they lived near to a municipal waste ERF, when in fact they lived near a different type of waste management facility, a closed incinerator or an industrial process.
- 9.55 Twenty-nine percent of those living near an ERF reported no negative effects, while 49% reported some negative effects. However, it should be noted that 34% of those who mistakenly believed that they lived near a municipal waste ERF also reported negative effects from the plant. The main negative impacts reported by people living near an ERF were smoke emissions (ERFs only produce steam plumes, not smoke) and bad smells (18% of respondents each). Of those who were correctly aware of living near an ERF, 82% said that they were ‘not at all’ or ‘not very’ worried about its proximity. Overall, the Open University survey found that 88% of respondents were either not aware of or not worried about a nearby ERF.
- 9.56 In relation to the proposed development, a number of measures to minimise amenity effects from dust and odour releases have been incorporated into the building design and operational procedures. These include taking combustion

air from above the waste pit to draw odours and dust into the incineration line, keeping the doors between the waste tipping area and the bunker closed when there are no deliveries occurring, bunker management procedures, limiting the amount of time that waste is stored at the WSTF, and regular dust and odour level checks in and around the facilities. Further details of these measures can be found in chapter 3 of the ES. The air quality assessment in chapter 6 concludes that there will be no significant effects on local amenity as a result of the generation of dust or odour.

- 9.57 The operational noise assessment in chapter 14 concludes that no sensitive receptors are predicted to experience significant effects as a result of the operation of the proposed development, either during the day-time or at night. A number of measures have been incorporated into the building design and operational procedures to minimise noise. These include enclosing noisy plant items within the buildings, the use of very high levels of noise insulation around the turbines and generator sets, as well as insulating other potentially noise equipment such as fans and motors, and regular maintenance of plant.
- 9.58 The site has been designed to provide sufficient distance between the low speed fans on the air-cooled condensers and surrounding noise-sensitive receptors. The air-cooled condensers are also located to take advantage of the barrier effects provided by the ERF and WSTF buildings, to minimise noise. In addition, a combination of landscaped bunding and 2.4-5 m high acoustic fencing will be installed between the operational area of the site and the site boundary. Noise level checks will be carried out on a regular basis in operational areas of the facilities where high noise levels may be present.
- 9.59 West Sussex County Council requested that the potential for lighting from the plant to affect local amenity be considered. The landscape and visual effects assessment in chapter 12 examined the potential for night time effects on views from a number of residential areas, including properties on Ford Lane, Rodney Crescent, Station Road, Ford Road, Horsemere Green Lane and Church Road, as well as in more distant settlements and in The Landings proposed development. The assessment concluded that much of the illumination will be screened by bunding and planting, and will be seen in the context of the surrounding built development and its existing lighting. It should also be noted that the windows of the administration wing of the ERF will be fitted with automated blackout blinds, which will automatically close during the hours of darkness and prevent light spill. Negligible to slight effects that will not be significant were predicted, so no significant effects are envisaged on local amenity as a result of increased lighting.
- 9.60 West Sussex County Council also requested that the potential for overshadowing from the plant to affect local amenity be examined. The design and access statement provides sun path modelling that illustrates the predicted overshadowing produced by the proposed development during the spring equinox and summer and winter solstices. This shows that the shadowing produced by the plant will be very limited during the spring and summer equinox. Neither existing properties nor the proposed residential development adjacent to the site will experience increased overshadowing during these times.
- 9.61 Existing properties are not predicted to experience increased overshadowing during the December solstice either, except late in the afternoon when a small

number of properties to the north east will experience a brief period of overshadowing as the sun sets. Proposed residential properties to the north west of the site will experience overshadowing in the morning, but this will pass by 11:00, except for a small section of the very thin shadow associated with the proposed stack, which will pass by 13:00. Given these extremely limited predicted periods of overshadowing, which will be restricted to winter when the sun is low in the sky, no significant effects are predicted overall on residential amenity.

### ***Property values / investment climate***

- 9.62 Many people fear that property values and the investment climate will be damaged if an ERF is built nearby. Experience has shown that, as with many major waste management facilities or other types of development, property values can be affected while a project is being discussed and during the construction phase, but they recover once the plant is operating (NSCA, 2001). It should be noted that property values are influenced by many variables, including interest rates, confidence in the economy, local supply and demand factors and accessibility to amenities and facilities, and it is difficult to isolate the effects of one project.
- 9.63 A survey of property and land values before, during and after the construction stages of ERF projects in Hampshire undertaken by Cluttons (2005) supported the NSCA's conclusion. The study also showed that major investment decisions on industrial, commercial, residential and community facilities have not stalled as a result of plant development in the vicinity. Similarly, a study undertaken by Cranfield University (Phillips et al, 2014) did not find any significant negative effect on property prices at any distance within 5 km from a modern operational ERF.
- 9.64 The potential for effects on property prices and local services and facilities from the proposed ERF is discussed in more detail later in this chapter.

### ***Management and operational concerns, including odour***

- 9.65 The public is often concerned about the perceived day-to-day operations of an ERF and that, where permitted, management standards of the facilities should be high. This was reflected in the study by MORI (2002), which found that people want strict operating guidelines for such facilities and are more likely to trust incineration in the hands of a local authority, rather than a private contractor. The requirement for the EA to oversee a plant's performance and emissions through the enforcement of the environmental permit condition does not necessarily reassure people fully that a plant will be safe.
- 9.66 The applicants will operate a 'good neighbour' culture at the proposed development. Ford EfW Limited and Grundon Waste Management Limited have already established a Local Liaison Committee and will continue to meet on a regular basis to discuss the proposed development. It is intended that the group will meet during all stages of the proposed development, including construction, commissioning and the start of operations and continue for as long as there is interest. The liaison committee will provide the opportunity for those in the local community to raise any potential issues or queries. It will also provide a forum for community stakeholders to be informed and consulted

regarding site operations and procedures. Liaison group members will include local parish councils, locally elected representatives of the community, as well as representatives of the Environment Agency, West Sussex County Council, Arun District Council and other stakeholders as appropriate.

- 9.67 The air quality assessment in chapter 6 was based on the conservative assumption that the proposed ERF will continually operate at the emissions limit values. In reality this is not likely to be the case; as discussed above, Tolvik Consulting (2020) found that on average emissions from 48 fully operational ERFs in the UK across all continuously monitored substances were 28.8% of the emissions limit value in 2019. However, even based on the conservative assumption, the air quality assessment concluded that there would be no significant effects on surrounding sensitive receptors as a result of emissions from the ERF.
- 9.68 Potential odours from prolonged storage of waste are sometimes a concern, but these can be easily addressed through technological means, good plant management and the imposition of conditions by the EA. Increased traffic congestion and noise are other concerns usually expressed by people when an ERF is proposed in their locality.
- 9.69 As discussed above, the traffic and transport assessment in chapter 15 concludes that there will be no significant increases in traffic congestion as a result of the proposed development. A range of measures to minimise operational noise and odour have been incorporated into the project design and operating procedures. No potentially significant effects have been predicted either as a result of operational noise or odour.

### ***Disposal of residues***

- 9.70 Incineration generally reduces waste to around 10% of its original volume. It should be noted that not all waste that is delivered to a plant is combusted. Mattresses, gas canisters and bicycle frames are among the materials occasionally removed from the waste before it is fed into the incinerator, as they are too big and could damage the equipment, or would not burn. The incidence of such items where the plant forms part of an integrated waste management strategy is likely to be relatively rare. About 10% by volume and 25-30% by weight typically remains of waste that is combusted (NSCA, 2001).
- 9.71 The main residue from the incineration process is bottom ash, approximately 10% of which is ferrous metal that can be separated magnetically for recycling. Bottom ash can be disposed of to landfill or used as an aggregate substitute in road building or construction. Tests on processed ash from a number of UK ERFs show that the levels of dioxins are similar to those in urban soils (NSCA, 2001).
- 9.72 The other main residue is ash from the emissions clean-up process. This includes airborne ash particles that are removed from the exhaust gases and the spent lime, activated carbon and other reagents that are used to clean the gases. These are collectively called flue gas treatment (FGT) residues. Disposal of the FGT residues is a tightly controlled process and FGT residue is classified as hazardous waste.

- 9.73 It is proposed that both the bottom ash and FGT residues from the ERF will be recycled. The bottom ash will be sent off-site to make aggregates suitable for construction projects and asphalt for road surfacing. The FGT residues will be sent off-site to be used to create a carbon negative aggregate that will be used to make carbon negative building blocks. The metals from the process will also be recycled.

### ***Outside company making a profit out of the community***

- 9.74 The final key concern identified by the NSCA report is resentment that an outside company is coming into the area to make a profit at the expense of the residents by charging large fees to handle their waste. The Environmental Protection Act 1990 effectively privatised waste management, requiring waste disposal authorities to form arm's length private sector companies (local authority waste disposal companies) to deal with waste. Successive changes have resulted in an almost entirely private sector-run waste management system.
- 9.75 Private waste management companies need to make profits to cover the cost of their investments and operations and to satisfy investors. In the case of ERFs, a private sector company provides a service to the community that the local authority could not normally provide because of spending constraints and lack of specialist knowledge (NSCA, 2001). In addition, the proposed development will process both municipal and commercial / industrial waste.
- 9.76 It should be noted that the existing WTS pays business rates annually to Arun District Council, which provides an economic benefit to the area. The new WSTF also be required to pay such rates and the addition of the ERF will increase the overall amount paid. In addition, the 24 full time jobs provided by the existing plant contribute to the local economy. These will be retained, although it is envisaged that the 20 HGV drivers will be redeployed to another site within the local area, and a further 54 jobs will be created directly by the proposed ERF development. In addition, up to 496 workers will be employed during the construction of the plant, many of whom are likely to be from the local area. The management of local waste at the ERF will also benefit the area, as some of West Sussex's residual waste is currently exported to Surrey for disposal to landfill and to Europe for combustion in ERFs in Germany and Holland, at a cost to the council.

### **Baseline**

#### ***House prices and housing supply***

- 9.77 According to Land Registry records, average house prices in the Ford area are higher than those in the district of Arun as a whole for some types of property, but lower than those in West Sussex and the South East of England for all property types (table 9.3). In 2020, the overall average house price in the Ford area was 107% of the district average, 91% of the county average and 88% of the regional average.



Area	Detached	Semi-detached	Terraced	Flat / maisonette	Overall average
Ford*	£517,776	£290,263	£254,719	£640,000	£353,628
Arun	£493,783	£304,108	£264,324	£176,500	£331,269
West Sussex	£590,624	£365,765	£308,766	£209,825	£389,693
South East	£610,798	£375,855	£311,418	£226,118	£399,662

**Table 9.3: Average house prices in 2020**

\*Based on the area's postcode sector of BN18 0

9.78 Arun District Council's (2020) *Authority Monitoring report 1<sup>st</sup> April 2019 – 31<sup>st</sup> March 2020* shows that the council only has a 3.3-year supply of deliverable housing sites. As discussed in ES chapter 5, the Ford strategic housing allocation (site SD8 in policy H SP2c of the adopted local plan) surrounds the application site and is likely to provide up to 1,500 dwellings. In addition, there are three other consented large scale residential developments in the vicinity of the site: Land West of Church Lane and South of Horsemere Green Lane, Climping (up to 300 dwellings), Land at Bilsham Road, Yapton (up to 250 dwellings), and Land East of Drove Lane, Yapton (up to 300 dwellings), as well as several consented smaller residential schemes: Land to the South of Ford Lane and East of North End Road, Yapton (100 dwellings), Land off Burndell Road, Yapton (108 dwellings), Land at Stakers Farm North End Road, Yapton (70 dwellings), Clays Farm North End Road, Yapton (33 dwellings), Land North of Yapton Church of England Primary School North End Road, Yapton (38 dwellings), Land at Street Buildings North End Road, Yapton (45 dwellings), and Land South of Burndell Road, Yapton (45 dwellings).

9.79 As house prices in the Ford area differ from those in the wider district, county and region, and as the district has less than a five-year deliverable housing land supply, house prices and housing supply are considered to be of high sensitivity to change.

### **Education and local services**

9.80 The nearest primary schools to the site are St Mary's Church of England Primary School in Climping and Yapton Church of England Primary School, while the nearest secondary school is The Littlehampton Academy. St Mary's Church of England Primary School is currently at capacity, with 101 pupils on the roll and a capacity of 105, while Yapton Church of England Primary School has some spare capacity (278 pupils on the roll and a capacity of 315). The Littlehampton Academy currently has considerable spare capacity, with 1,328 pupils on the roll and a capacity of 1,900<sup>(1)</sup>.

9.81 The SD8 allocation discussed above includes land for a primary school and Arun District Council is currently supporting a site to the immediate west of the SD8 allocation as the preferred option for a 10-form entry secondary school to support the local plan strategic housing allocations (see ES chapter 5).

9.82 There is no GP surgery in Ford, but two practices are based in Yapton. The Meadowcroft Surgery is part of a practice group that has six GPs and 11,632 patients. Yew Tree Surgery is part of a practice group that has 15 GPs and 10,852 patients. It should be noted that not all the GPs are full-time. Adjusting

<sup>1</sup> <https://get-information-schools.service.gov.uk> (viewed January 2021).

for part-time working, The Meadowcroft Surgery and Yew Tree Surgery have 4.8 and 6.4 full-time equivalent GPs respectively (NHS Digital, viewed January 2021). This gives an average of 2,423 patients per full-time equivalent GP at The Meadowcroft Surgery and 1,696 patients per full-time equivalent GP at Yew Tree Surgery. The Department of Health standard for GP provision is 1,800 patients per full-time equivalent GP. Yew Tree Surgery is currently accepting new patients, but The Meadowcroft Surgery is not ([www.nhs.uk](http://www.nhs.uk), viewed January 2021).

- 9.83 Arun District Council's (2016) *Infrastructure Capacity Study and Delivery Plan* identifies that existing GP services in the district cannot expand or cope with any more growth in existing facilities. The SD8 allocation discussed above includes for either the provision of new healthcare facilities for Ford, Yapton and Climpton or a contribution towards new or expanded facilities.
- 9.84 The Arun Sports Arena at Ford Airfield provides four indoor 3G pitches. Ford and Yapton share a community hall, which is located in Yapton. There are several small areas of public open space in Ford, as follows:
- Land south of Rodney Crescent – 0.25 ha
  - Rodney Close Green Space – 0.25 ha used for recreation
  - Wills Close Green Space – 0.04 ha that links to a children's play area
  - Sproule Close Playground – 0.26 ha formal children's play area serving the residents of the Peregrines Estate
  - The Memorial Gardens – 0.06 ha
- 9.85 In addition, the parish has an allotment with 80 plots (Ford Parish Council, 2018). The SD8 allocation includes a community hub, two new sports pitches and changing facilities, a new 3G pitch facility and informal public open space. Knight, Kavanagh & Page (2016) found that public open space provision in the district is generally good, although a shortage of allotments was identified.
- 9.86 The provision of education and local services in the area is generally good, although capacity issues have been identified in some areas. Overall, therefore, education and local services are considered to be of medium sensitivity to change.

### **Tourism**

- 9.87 The Arun Local Plan (2018) highlights that Arun is an established visitor destination and its visitor economy is a major asset to the district. The northern half of the district lies within the South Downs National Park, which is approximately 2.2 km to the north of the site at its closest point. There were 18.8 million visits to the national park as a whole in 2016 (TEAM Tourism Consulting, 2018). Arundel is an important visitor destination within the district and Arundel Castle, approximately 4.2 km to the north east of the site, had over 180,000 visitors in 2017 (Sussex Business Group, 2017). The seafront at Littlehampton, another important visitor destination in the district, is approximately 3.8 km to the south east of the site.
- 9.88 The importance of tourism to the district's economy means that it is considered to be of high sensitivity to change.

### ***Future baseline***

- 9.89 In the absence of the proposed development, the site will remain in its current use. However, the community and social baseline will still change in the future. House prices can be affected by a number of factors, including the health of the local and national economies, the balance of demand and supply, and the type and condition of properties on the market. It is likely that the allocated developments mentioned above will come forward in future, increasing the local supply of housing, schools, healthcare facilities, recreational facilities and public open space. Tourism can also be affected by a number of factors, including the weather, the performance of the economy and prevailing trends.

### **Assessment of effects post-construction**

#### ***House prices and housing supply***

- 9.90 In 2005, Cluttons researched the impacts of three operational ERFs on property prices in the surrounding areas, as part of a study into the potential impacts of a proposed ERF at Newhaven in East Sussex. The first facility considered was the Chineham ERF, which is located on the edge of the residential suburb of Chineham, approximately three miles north east of Basingstoke town centre. The facility is partly screened by mature trees and surrounded by fields on three sides, although it is adjacent to a large wastewater treatment works. The second facility was the Marchwood ERF, which was being commissioned at the time of the study. It is situated in the Marchwood Industrial Park, to the north of Marchwood village centre, close to large aggregate and concrete batching plants. The final facility considered was the Portsmouth ERF, which is located opposite an industrial estate in the Hilsea area. It is adjacent to a materials recovery facility and WTS and there is a shopping centre and a secondary school nearby.
- 9.91 Average house prices in the areas surrounding all three ERFs, based on actual sales for different house types, rose significantly since late 1998 when the Hampshire, Portsmouth and Southampton Minerals and Waste Local Plan was adopted and during the planning application and construction phases of the facilities.
- 9.92 Values in Chineham continued to rise following the commissioning of the facility in January 2003. At the time of the Cluttons study, a new residential development of 800 homes was under phased construction approximately half a mile north of the Chineham plant. The plant's stack is clearly visible from this development. A number of major national house builders have constructed new schemes in the local area.
- 9.93 Marchwood has a small residential centre and a limited stock of property. At the time of the study, Bellwinch Homes had recently completed a new development of 26 three- and four-bedroom houses in Marchwood, 21 of which had been sold. The on-site sales office advised that market conditions had hindered sales, but no applicants expressed concern about the proximity of the ERF and the sales office did not believe this was an important factor. Planning consent was granted for the housing scheme after the ERF. A number of new housing developments have taken place in the vicinity of the Portsmouth plant since the

adoption of the waste local plan. The Drum Housing Association bought a nearby site for residential development in 2000.

- 9.94 It is clear from the above that the development of the ERFs has not had any noticeable or lasting detrimental effects on residential property prices at any of the locations during the planning process, construction or since commissioning. Values have continued to rise in line with other areas in their local markets. It has also not deterred investment in these areas by major national house builders.
- 9.95 Another examination of the potential effects of ERFs on residential property prices was undertaken by Cranfield University in 2014 (Phillips et al, 2014). This also considered the Marchwood and Chineham facilities, as well as an ERF in Kirklees. The latter is in an inner-city location, within a heavy industrial zone adjacent to a railway line. All the facilities had been in operation for at least seven years at the time of the study, which compared local property sale prices at five distance zones from 0-5 km from the sites before and after the facilities became operational. No significant negative effects were found on property prices at any distance within 5 km of the ERFs and the study concluded that the perceived negative effect of thermal processing of waste on local property values is negligible.
- 9.96 The findings of these studies suggest that the proposed ERF is not likely to have an adverse effect on property prices in the local area, either in relation to existing properties or the proposed residential development adjacent to the site at Ford Airfield. This conclusion is supported by the Inspector's appeal decision on the proposed ERF at the Former Wealden Brickworks in Horsham (appeal reference: APP/P3800/W/18/3218965), in which the Inspector states that *"there is no evidence before me to demonstrate that other energy from waste developments within or adjacent to a developing urban area have adversely affected either house prices or the demand for housing in an area."*
- 9.97 Given the above, it is considered that the proposed development will have a negligible effect on house prices and housing supply in the local area that will not be significant, both in terms of existing properties and future developments.

#### ***Education and local services***

- 9.98 The research undertaken by Cluttons in 2005 also examined the potential for effects on community facilities and services, such as schools, health centres, public open space and leisure facilities. The residential development that was under phased construction approximately half a mile north of the Chineham ERF at the time of the study included a school and a medical centre. A new leisure development, comprising a sports ground, health and fitness centre and bar, has been constructed near the Portsmouth ERF. In addition, the Admiral Lord Nelson School lies approximately one-third of a mile from the Portsmouth ERF and has continued to expand since the ERF was commissioned. A new community leisure complex, comprising an astro turf pitch, sports hall, multi-use games area, dance studios and bar, has also opened at the school.
- 9.99 The above research indicates that ERFs do not affect the provision of education, healthcare facilities, recreational facilities and public open space in the area around the plant. As a result, it is considered that the proposed development

will have a negligible effect on education and local services in the area that will not be significant, both in terms of existing services and facilities and future developments.

### ***Tourism***

- 9.100 The landscape and visual effects assessment in chapter 12 considered the potential for effects on views from the South Downs National Park, Arundel Castle and the coastline to the south. The assessment found that the proposed ERF building will be visible in some views and will be of a larger scale than most buildings in the landscape. It will be a noticeable feature in views from the national park, although it will occupy a small part of the view. Other existing large scale structures, such as high rise buildings at Littlehampton and Bognor, and a large gas holder at Littlehampton, are already present in some views.
- 9.101 The assessment concluded that the overall effect will be that the composition and nature of the views from the national park and the coast will remain largely as currently experienced, but with an additional large structure in the views from the national park and the introduction of an industrial element to the distant skyline in views from the coast. The proposed development will be seen partially against the sea in views from Arundel Castle and will therefore be more noticeable than the existing buildings on site, which are currently visible. The assessment noted that the form, materials and colours of the structures have been designed to minimise visual impact and the landscape measures will help to assimilate the development within the landscape .
- 9.102 Therefore, while the proposed development will be visible from the national park, Arundel Castle and the coast, it will be seen in context with other large scale built features. As these existing features do not appear to affect visitors to these areas, it is considered that the proposed development will not significantly alter the overall visitor experience. No significant effects are therefore predicted on tourism as a result of the proposed development.

### **Mitigation and monitoring**

- 9.103 As no potential significant adverse effects are identified, no mitigation or monitoring is required.

### **Residual effects**

- 9.104 No significant residual community and social effects are predicted as a result of the proposed development.

### **Cumulative effects**

- 9.105 As set out in chapter 5, the potential for cumulative effects with a number of other consented and proposed developments needs to be considered. There is the potential for some of these developments to affect house prices by increasing supply in the local area and to affect education and local services by increasing both demand and local provision. However, the proposed ERF and WSTF were predicted to lead to negligible effects on all receptors assessed, which will not be significant. There is therefore no potential for significant

cumulative effects, as any significant effects would be solely as a result of the other projects and not associated with the proposed development.

### **Fall-back position**

- 9.106 The 2013 ES did not assess the potential for effects on house prices and housing supply, education and local services, or tourism. As these were scoped out of the 2013 assessment, it is assumed that no significant effects were envisaged as a result of the consented scheme.
- 9.107 The 2013 ES largely focused on the potential economic effects of the consented scheme and concluded that the temporary creation of approximately 200 jobs during construction and the long term employment of approximately 60 staff on site post-construction would be moderate beneficial effects. The ES also concluded that the regeneration of the site would be a minor beneficial effect, and that the sustainability benefits associated with the consented development would be a moderate beneficial effect. It also identified a moderate beneficial effect from the potential for educational site visits and training opportunities.
- 9.108 The potential economic effects of the proposed development were scoped out of the assessment as not likely to be significant, which was confirmed in West Sussex County Council's scoping opinion. However, as set out in chapter 3, it should be noted that the proposed development will employ up to 496 workers during construction and will create 54 new permanent jobs, in addition to retaining the 24 staff already employed on the site (although it is envisaged that the HGV drivers will be redeployed to another site in the local area).
- 9.109 It is not considered good practice to assess sustainability effects in an EIA, but it should be noted that the proposed development will lead to similar beneficial effects in terms of site regeneration, waste management and electricity generation as were assessed in 2013 for the consented scheme. Similarly, the new facilities will be available for visits by local interested parties, as discussed in chapter 3.
- 9.110 The 2013 ES also concluded that the consented development would not give rise to any unacceptable effects on local amenity. This is consistent with the conclusions of the assessment for the current proposals.

### Sensitivity of receptor – Community and social

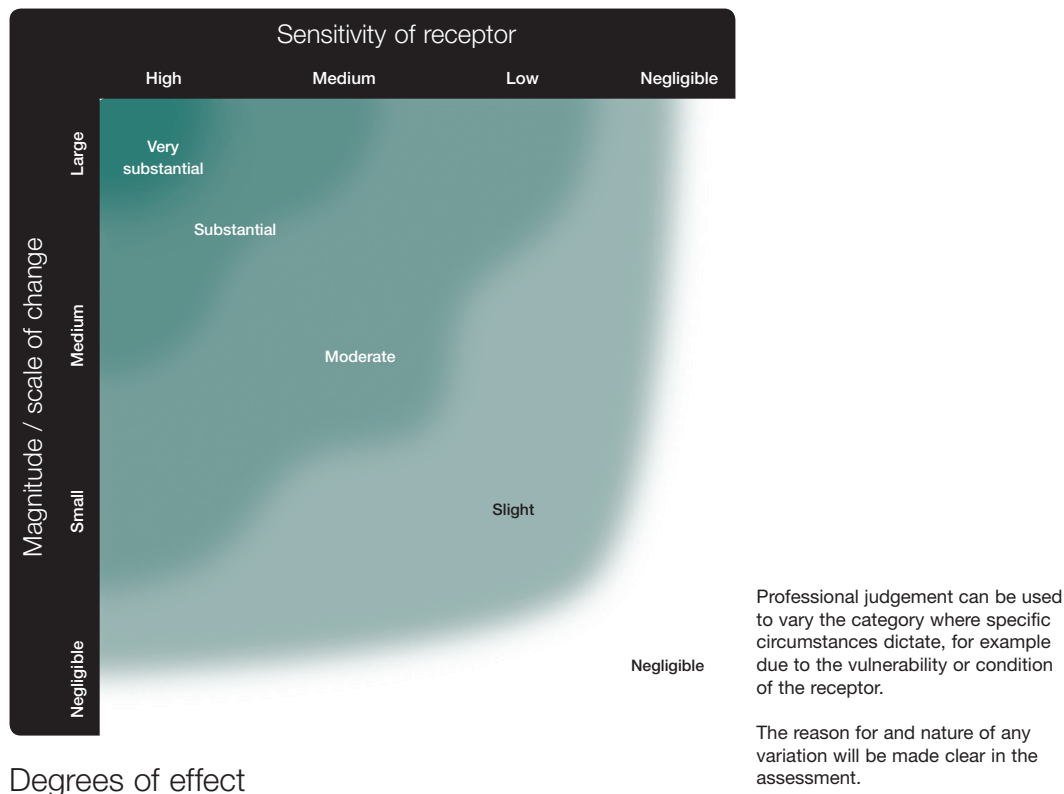


## Magnitude of change – Community and social





## Determination of significance matrix – Community and social



### Degrees of effect

**Very substantial:**

Large changes in population, demand for / supply of local services / facilities or retail provision, jobs for local people, market / affordable housing provision, deprivation or amenity; in areas with high unemployment, or where the demand for existing services and retail provision is exceeding capacity, demand for housing exceeds supply, deprivation is high or amenity is poor.

**Substantial:**

A large change in population, demand for / supply of local services / facilities or retail provision, jobs for local people, market / affordable housing provision, deprivation or amenity; in areas with medium unemployment, or where the demand for / supply of existing services and retail provision is at / approaching capacity, demand for housing is similar to supply, deprivation is average or amenity is medium.

**Moderate:**

A large change in population, demand for / supply of local services / facilities or retail provision, jobs for local people, market / affordable housing provision, deprivation or amenity; in areas with low unemployment, spare capacity for demand for existing services and retail provision, housing supply exceeds demand, low deprivation or high amenity.

A medium change in population, demand for / supply of local services / facilities or retail provision, jobs for local people, market / affordable housing provision, deprivation or amenity; in areas with medium unemployment, or where the demand for / supply of existing services and retail provision is at / approaching capacity, demand for housing is similar to supply, deprivation is average or amenity is medium.

A small change in population, demand for / supply of local services / facilities or retail provision, jobs for local people, market / affordable housing provision, deprivation or amenity; in areas with high unemployment, or where the demand for existing services and retail provision is exceeding capacity, demand for housing exceeds supply, deprivation is high or amenity is poor.

**Slight:**

A medium change in population, demand for / supply of local services / facilities or retail provision, jobs for local people, market / affordable housing provision, deprivation or amenity; in areas with low unemployment, spare capacity for demand for existing services and retail provision, housing supply exceeds demand, low deprivation or high amenity.

A small change in population, demand for / supply of local services / facilities or retail provision, jobs for local people, market / affordable housing provision, deprivation or amenity; in areas with low to medium unemployment, spare capacity for demand for existing services and retail provision or where this demand is at / approaching capacity, demand for housing exceeds or is similar to supply, deprivation is low to average or amenity is average to high.